HPQ – SILICON
RESOURCES

Becoming the World's Leader in Producing Low Cost Green Solar Grade Silicon Metal

TSX-V: HPQ

DISCLAIMERS

This presentation includes certain "forward-looking statements"

All statements, other than statements of historical fact, included herein, including, without limitation, statements regarding future plans and objectives of the company, are forward-looking statements that involve various risks, assumptions, estimates and uncertainties, and any or all of these future plans and objectives may not be achieved. The terms SGSI, Solar Grade Silicon and Polysilicon are used interchangeably and refer to high purity silicon used in the solar panel industry, with 99.999% purity, also referred to as "5N".

These statements reflect the current expectations or beliefs of HPQ-Silicon Resources Inc. ("the Company") and are based on information currently available to the Company. There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such statements. All of the forward looking statements contained in this presentation are qualified by these cautionary statements and the risk factors described above. Furthermore, all such statements are made as of the date this presentation is given.

An investment in the Company is speculative due to the nature of the its business. The ability of the Company to carry out its plans as described in this confidential presentation is depending on obtaining the required capital. There is no assurance that the Company will be able to successfully raise the capital required or to complete each of the growth initiatives described. Investors must rely upon the ability, expertise, judgment, discretion, integrity and good faith of the management and Board of the Company.

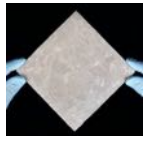
Investment Proposition

HPQ IS DEVELOPING THE Disruptive Technology in GREEN Solar Grade Silicon Metal

Present Day Processing - Followed by Downstream Manufacturing

30 % of the costs of new Photovoltaic system					70 % of the costs of new Photovoltaic system, (100% of cost reductions)								
Silica Quartz SiO2	PROCESS #1 Smelter	Metallurgical Grade Silicon Metal MG Si	PROCESS #2 Refining	Solar Grade Silicon Metal SG Si	PROCESS #3 Crystallisation	Polysilicon Brick / Ingots Wafer	Step 1	Solar Cell	Step 2	Solar Module	Step 3	Solar System
99.5% SiO2		98.5 to 99.5 % Si		99.999 % Si and Higher		99.999 % Si and Higher						



HPQ PUREVAP™ QRR a one step Carbothermic Process expected to reduce production cost of Solar Grade Silicon Metal by as much as 80%

Silica Quartz SiO2	PROCESS #1 & 2 *PUREVAP QRR*	Solar Grade Silicon Metal SG Si	PROCESS #3 Crystallisation	Polysilicon Brick / Ingots Wafer	Step 1	Solar Cell	Step 2	Solar Module	Step 3	Solar System
99.5% SiO2		99.999% Si and Higher		99.999 % Si and Higher						

SiO_2 99.0+%

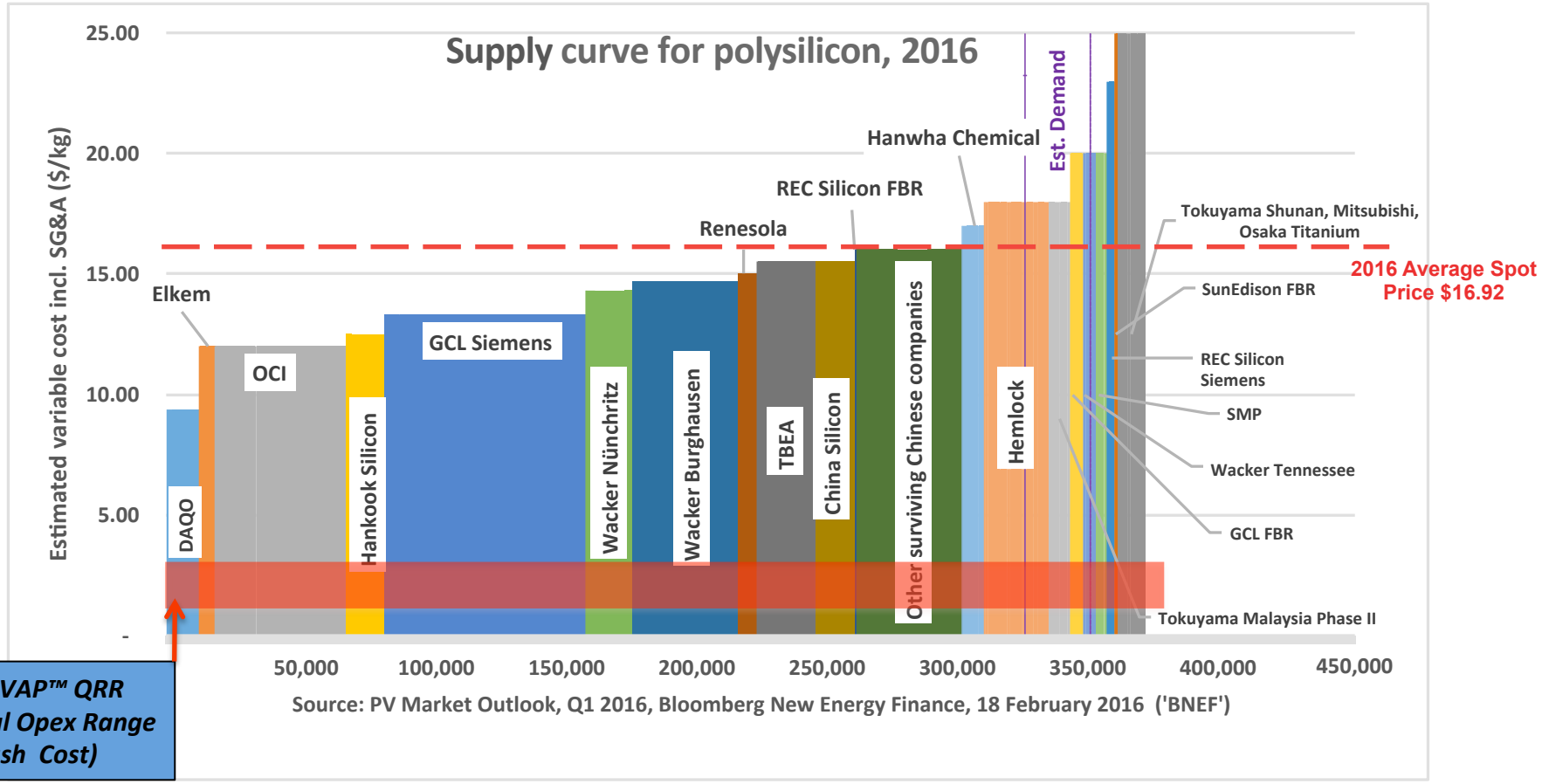
Carbon


The results are radical but the science is simple!

PUREVAP™ DISRUPTIVE POTENTIAL
Cash Cost Analysis

Polycrystalline Silicon Market 2016 – 2025 | © AMMS | Updated: 2 November 2016

The cost curve for SG SI (polysilicon) suggest that long-term solar-grade polysilicon price below USD 15/Kg is not feasible. HPQ and the *PUREVAP™* will challenge that.



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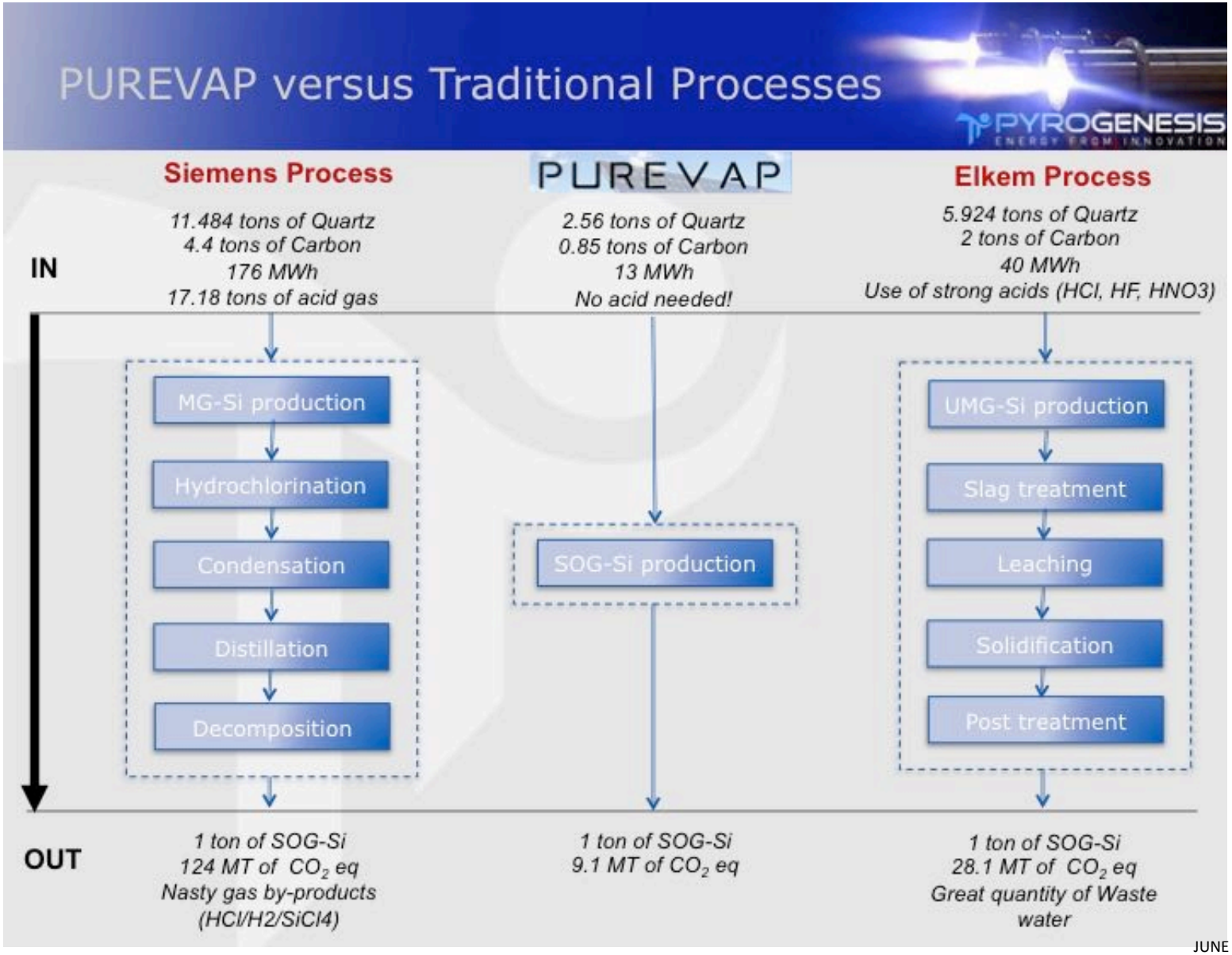
PUREVAP™
The Only Environmentally Friendly Option



HPQ – SILICON RESOURCES

Corporate and Capital Summary

Share Price (May 29, 2017)	**$0.135**	**Cash and equivalent in hand**	**$900,000**	
52 Week Low	**$0.105**	**Cash value of warrants in the money**	**$2,298,679**	
52 Week High	**$0.305**	**Breakdown of warrants Outstanding**	**#**	**$**
Shares Outstanding:	**169,469,434**	**$0.07 Strike Price Warrants - Dec. 17**	**6,325,000**	**$442,750**
		$0.07 Strike Price Warrants - Feb. 18	**1,800,000**	**$126,000**
Warrants:	**66,465,139**	**$0.07 Strike Price Warrants - Jun. 18**	**3,915,750**	**$274,103**
		$0.07 Strike Price Warrants - Aug. 18	**5,959,000**	**$417,130**
Options:	**11,650,000**	**$0.07 Strike Price Warrants - Dec. 18**	**7,006,000**	**$490,420**
		$0.10 Strike Price Warrants - Jul 17	**232,769**	**$23,277**
Fully Diluted:	**247,584,573**	**$0.12 Strike Price Warrants - Feb. 19**	**4,375,000**	**$525,000**
		$0.25 Strike Price Warrants - Jul. 18	**6,200,000**	**-**
		$0.25 Strike Price Warrants - Dec. 18	**6,448,211**	**-**
Market Capitalization:	**$22,878,374**	**$0.25 Strike Price Warrants - Feb. 19**	**9,411,766**	**-**
		$0.25 Strike Price Warrants - March. 19	**2,488,234**	**-**
		$0.30 Strike Price Warrants - Jan. 20	**8,000,000**	**-**
Market Capitalization (FD):	**$33,423,917**	**$0.30 Strike Price Warrants - Oct. 18**	**2,840,909**	**-**
		$0.35 Strike Price Warrants - March 18	**1,462,500**	**-**

Management

Bernard J Tourillon, BAA, MBA
Chairman, CEO and Director

Patrick Levasseur
President, COO and Director

Noelle Drapeau, LLL, MBA, PMP
Corporate Secretary and Director

Francois Rivard
CFO

Independent Director (*)

Richard Mimeau, B.Sc.
Director

Peter Smith, PhD, P. Eng.
Director

Robert Robitaille, B.A., L. Ph., MBA
Director

Daryl Hodges H. BSc, M.Sc..
Director

Auditors

Raymond Chabot Grant Thornton

Transfer Agent

Computershares

Consultants

Marcel Drapeau, BA, B.Sc. Comm, LLL
Company Lawyer

Marc Richer-Laflèche, P. Geo, PhD
Technical Advisor (INRS- ETE)

Major Investors

Management & Board	≈ 15%	≈ 22% (FD)
Key Investor Group	≈ 14%	≈ 15% (FD)
Fancamp	≈ 3%	≈ 5% (FD)
Institutions	≈ 4%	≈ 5% (FD)
Taiwanese Group	≈ 2%	≈ 3% (FD)
PyroGenesis	≈ 2%	≈ 2% (FD)
TOTAL	≈ 39%	≈ 51% (FD)

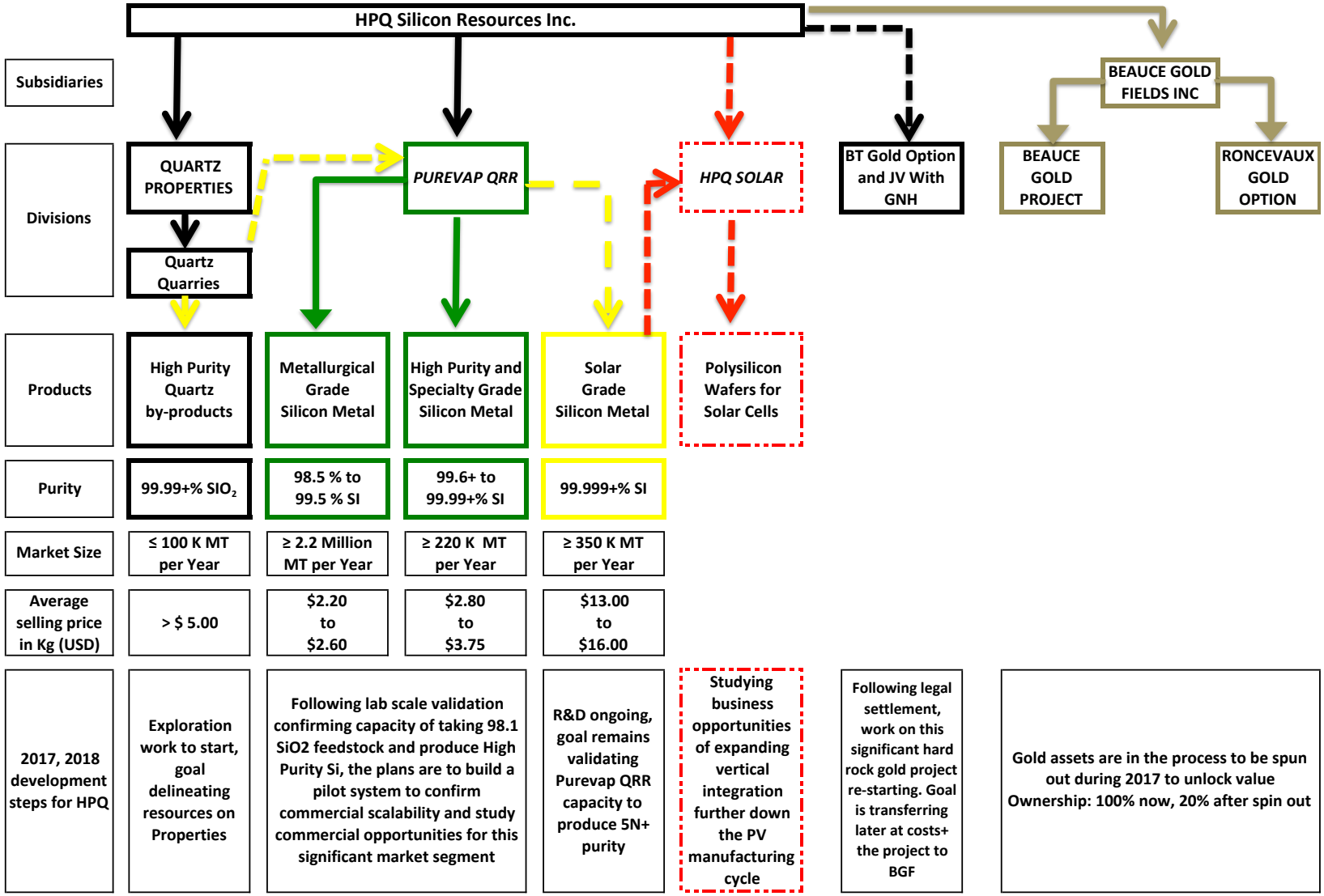
Debt free after gold spinout

*** Independent directors may receive additional compensation for project work.**

HPQ – SILICON RESOURCES

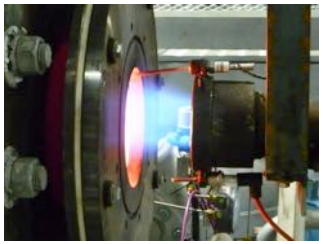
Corporate Structure and Businesses

HPQ Silicon plans to become a vertically integrated *Silicon Metal* Company

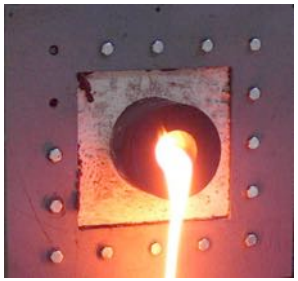


Outsourcing R&D And Partnering With The Industry Leader

PYROGENESIS



INNOVATIVE TECHNOLOGY	Patented Technology – 18 innovations, covered by 49 patents (issued or pending) worldwide. *USING **PLASMA** LIKE NO ONE ELSE*
INTERNATIONAL REPUTATION	Montreal based with Industry credibility established through continued relationship with the US Navy and the US Air Force, and cutting edge research credibility with universities around the world
UNSURPASSED EXPERTISE	Largest concentration of **plasma experts** in the world make up our team of 50 employees, with more then 25 engineers dedicated to technologies development.
CULTURE	Proven leadership since 1991, ISO 9001:2008 certified since 2007, 2 facilities including a 38,000 ft^2 manufacturing facility in Montreal, TSX-V:PYR, OTCQB:PYRNF



STRATEGIC DEVELOPMENT AGREEMENT WITH PYROGENESIS

- PyroGenesis is developing for HPQ-Silicon's exclusive use the ***PUREVAP™ QRR*** (Patent Pending) a 1 Step, Clean Tech process for making SG Si directly from Quartz, using a plasma submerged arc
- HPQ has acquired the intellectual property rights to the ***PUREVAP™ QRR*** process and will finance the development as it relates exclusively to the production of silicon metal from quartz **(*)**
- PyroGenesis is building and will oversee production from a 200 TPY SG Si R&D pilot plant (Press releases August 2, 2016, September 30, 2015)

* PyroGenesis retains a royalty-free, exclusive, irrevocable worldwide license to use the process for purposes other than the production of silicon metal from quartz

HPQ PUREVAP™ SCALING UP: Making Rapid Progress

Proof of Concept Metallurgical Tests Program, Scaling up results

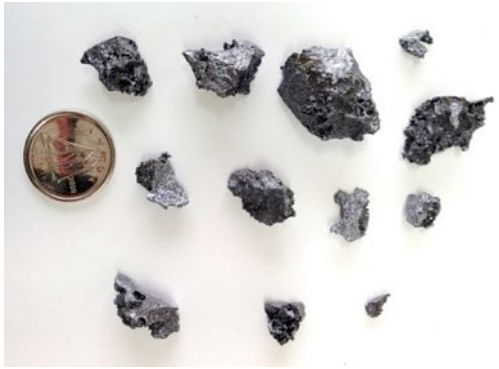
Thin layer of material produced during first tests

15 tests later

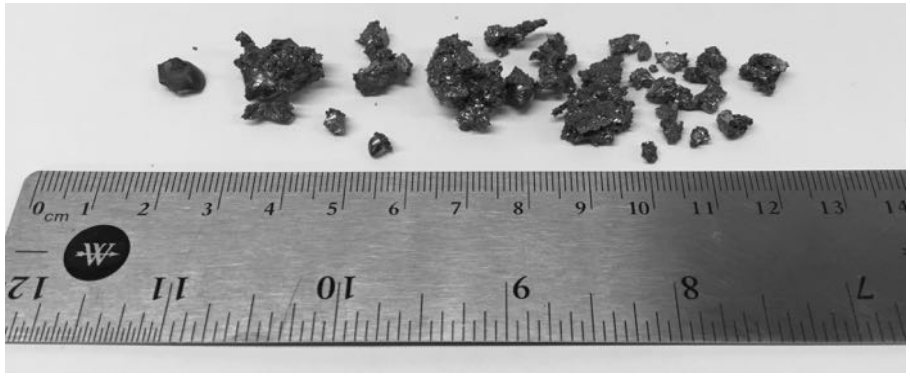
First nugget of Si (99.97% SI) produced during final proof of concept test (About 0.1 g)

Process Characterization Testing Phase, Scaling up results

Small bead produced during test #24



Series of chunks of 99.93 % Si produced during test #32 (8.8 g)



Series of chunks of 99.97 % Si produced during test #51 (8.67 g)

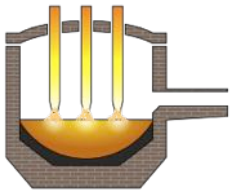
Modification done to the PUREVAP™ QRR have made it possible for test 51 to produce the same quantity of Si as in test #32, while using smaller batch sizes (55 wt% less)

This represent a 531% increase in Yield !

HPQ – SILICON RESOURCES

COMPARISON of TODAY'S PROCESS and PUREVAP™

SiO_2 99.5%
Coal - Wood Chips

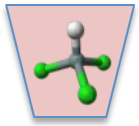


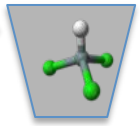
Electric Arc Furnace

MG Silicon Metal
98.0% to 99.5% Si

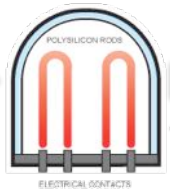
15 % of MG Si Produced Further Refined

MG Silicon Metal Is Dissolved In Hydrochloric Acid To Form Trichlorosilane (HSiCl3)





Trichlorosilane (HSiCl3) is Further Refined



SIEMENS Type Reactor have 90 % Market Share

Solar Grade Silicon Metal
99.999+% Si

MG SI Key Matrix (98% to 99.5% Si)

Market Size (Ton)	≈ 2.2 Million Tons
Market Size (US$)	≈ 6 Billion
Demand Growth	≈ 6% CAGR
Price (US$/kg)	2.4 to 2.8
Cash Cost (US$/kg)	1.75 to 2.25
Capex Cost (US$/kg)	7 to 14

2015 Data (Sources CRU, Ferroglobe, Bloomberg, Viridis.oq, Roskill)

Solar Grade SI Key Matrix (5N and Higher)

Market Size (Ton)	≈ 350 K Tons
Market Size (US$)	≈ 5 Billion
Demand Growth	≈ 15% CAGR
Price (US$/kg)	12.80 to 15.67
Cash Cost (US$/kg)	12.0 to 17.0
Capex Cost (US$/kg)	75 to 100

2015 Data (Sources CRU, GTW, IEEE JOURNAL OF PHOTOVOLTAICS, VOL. 5, NO. 2, MARCH 2015, Bloomberg)

PUREVAP™ Quartz Reduction Reactor

A Proprietary (Patent Pending) One-step Process To Make Solar Grade Silicon Metal

SiO_2 99.5%
Carbon

"ELEGANT IN ITS SIMPLICITY"

Solar Grade Silicon Metal
"Polysilicon"
99.999 + % Si

PUREVAP Process Key Working Matrix

Combine Market Size (Ton)	>2.7 Million Tons
Combine Market Size (US$)	> 11 Billion
Demand Growth	> 10 % CAGR
Cash Cost (US$/kg)	1.75 to 2.25
Capex Cost (US$/kg)	7 (2 K TPY Reactor)
Capex Cost (US$/kg)	4 (10 K TPY Reactor)

Capex Cost Sources from PyroGenesis Canada Rough Order of Magnitude Study, (Capex and Opex numbers to be refine after Pilot Plant start operation)

PUREVAP™ DISRUPTIVE POTENTIAL
Capex Analysis

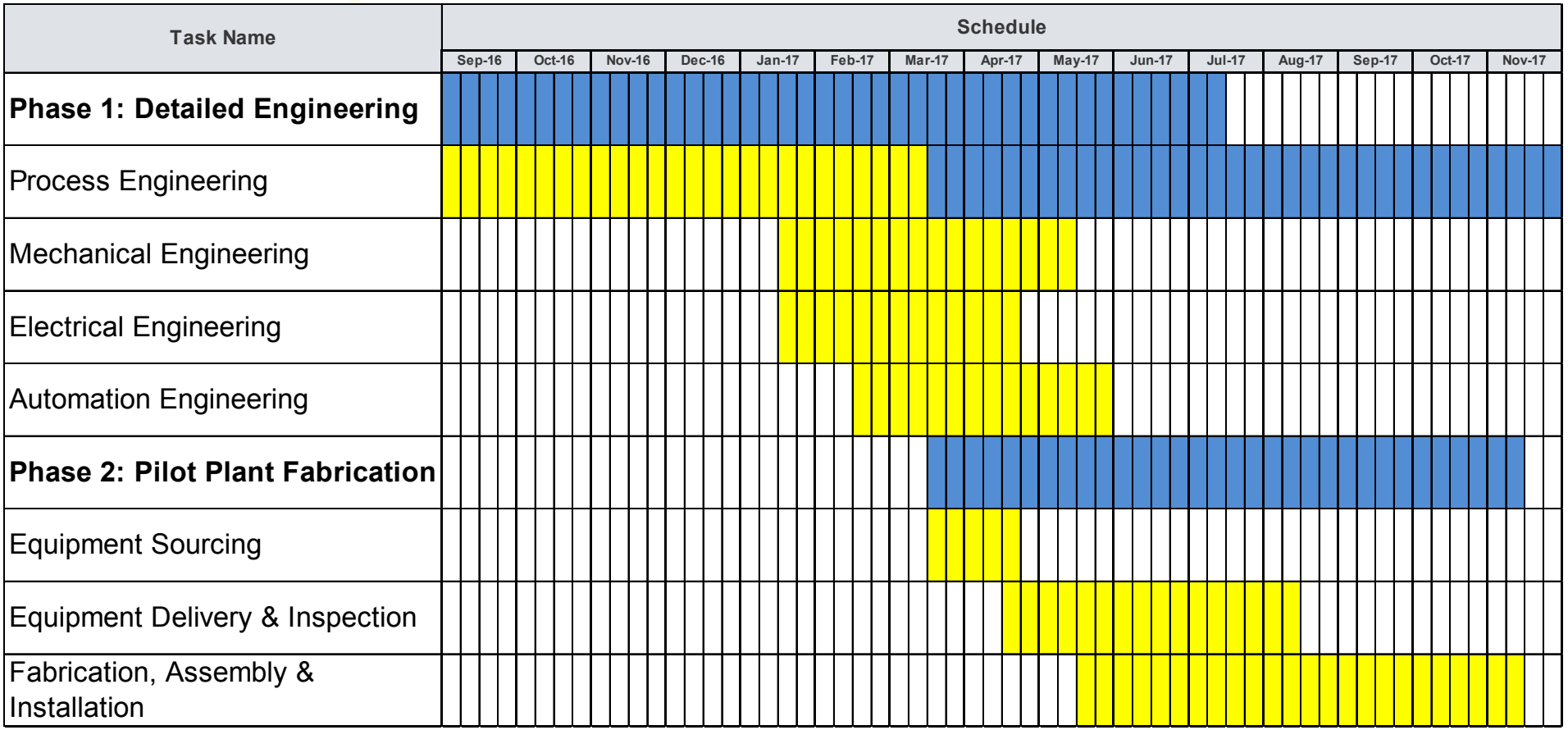
PUREVAP™ QRR US$18.5 CapEx per kg of annual capacity matrix at Pilot Plant phase demonstrate ***the disruptive potential of the technology***

		Capital Cost Per Technologies Available To Produce SG Si Material (all $ values in USD)					
		EXISTING TECHNOLOGY			NEW TECHNOLOGY	HPQ TECHNOLOGY	
Technologies	Feed Material	Siemens HC	Siemens Hyper Pure	FBR Reactor with Silane	Silicor Aluminum Solvent Refining	PUREVAP QRR R&D Pilot Plant	PUREVAP QRR Commercial plant
Capable of Transforming	Si02 to					Solar Grade Si	Solar Grade Si
Capable of Upgrading	MG Si to	Solar Grade Si (4N - 6N)	Electronic Grade Si (8N - 9N)	Solar Grade Si (5N - 6N)	Solar Grade Si (6N - 7N)		
Number of effective competitors		7			1	1	
Key Capex matrix							
Minimum Capacity Requirement (MT)		6,500			19,000	200	10,000
Cap Ex per Kg of annual installed capacity (US$/kg)		70 (U.S.) 45 (China)	100 (U.S.) 75 (China)	100 (U.S.) 75 (China)	35	18	4
Capital Cost requirements (US$ million)		455 (U.S.) 292 (China)	650 (U.S.) 488 (China)	650 (U.S.) 488 (China)	665	4	38
SOURCES:		IEEE JOURNAL OF PHOTOVOLTAICS, VOL. 5, NO. 2, MARCH 2015			Silicor Materials	PyroGenesis Canada Inc (PR August 2, 2016)	Rough Order of Magnitude Study by PyroGenesis

Following Pilot Scale Validation of the *PUREVAP™ QRR* process;

- The goal will be to move to a commercial phase, with an objective of building capacity capable of producing 20,000 TPY of SG Si within 5-7 years

Design and Pilot Plant Fabrication Schedule



Phase 3: Hot commissioning of Pilot Plant schedule from Nov 2017

Phase 4: Testing and Operating Pilot Plant schedule from March 2018

PUREVAP™ PILOT PLANT: CAPITAL NEEDS, TIMING

The total cost to purchase and commission the *PUREVAP™ QRR* Pilot Plant and related Intellectual Property is CDN$8,260,000 to be invested between 08/2016 en 12/2018:

- $ 1,000,000 for purchase of the related Intellectual Property **(Completed)**
- $ 4,430,000 for design, fabrication, assembly, and testing **($3,190,200 Completed, $1,239,800 by Nov-2017)**
- $ 520,000 for hot commissioning of the pilot system **(To be paid From Dec-2017 to Feb-2018)**
- $ 2,310,000 for testing and operating the pilot system during 10 months **(To be paid From March to Dec-2018)**

The Projected Cash call over the next 24 months are:

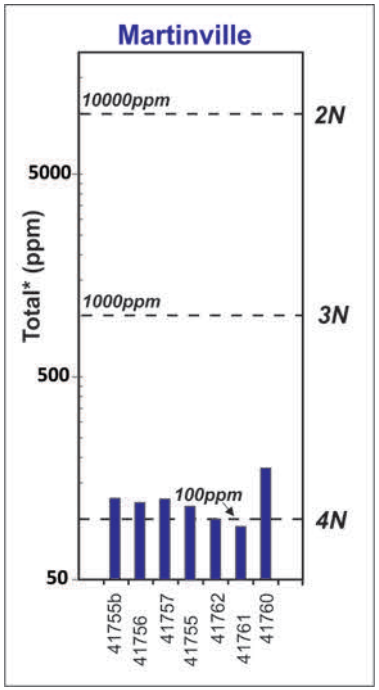
- $1,499,800 for 2017, (To be paid From October 2017 to December 2017)
- $2,570,000 for 2018

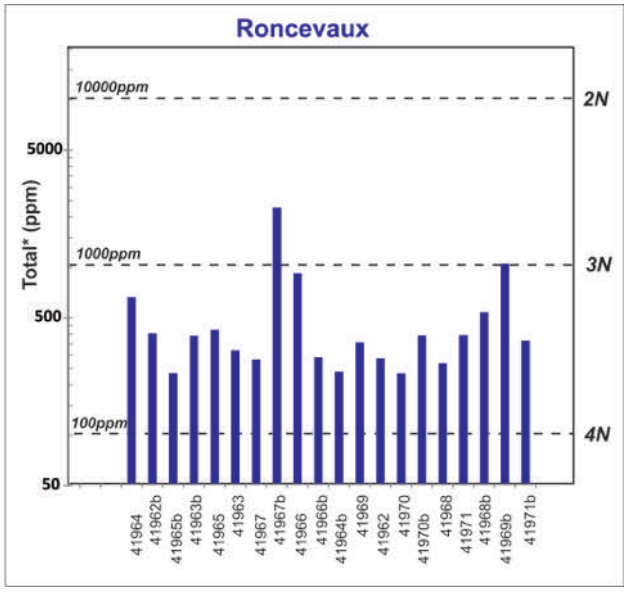
HPQ Silicon funding advantages:

- The project is eligible for government funding (Provincial and Federal) for 55% to 80% of the cost
  - Discussion with both levels of Government are ongoing, but approvals are only expected during Q3 2017
- Over CDN$ 2,300,000 worth of warrants are in the money, majority in friendly hands
- The acquisition of PUREVAP™ Intellectual property opens up additional options for financing because investors want to see direct control over the key intellectual property
- Management is exploring several likely non – dilutive paths for financing the Pilot Plant
  - If the shares prices exceed $C0.40, then over CDN$ 11,2 Million could be raised via warrant exercises
- HPQ will be entitled to R&D research credits worth about 14% of the CDN$7,260,000 investment

HPQ – PUREVAP™ RAW MATERIAL

- ***HPQ-Silicon* is the largest holder of High Purity Quartz properties in Quebec**, with over 3,500 Ha under claims
- The Roncevaux High Purity Quartz, with it up to 3N purity (99.9% SiO_2) samples is in high demand, and has successfully passed rigorous testing protocols of a major silicon metal producer
- The Martinville High Purity Quartz is unique and rare with samples up to 4N purity (99.99% SiO_2)



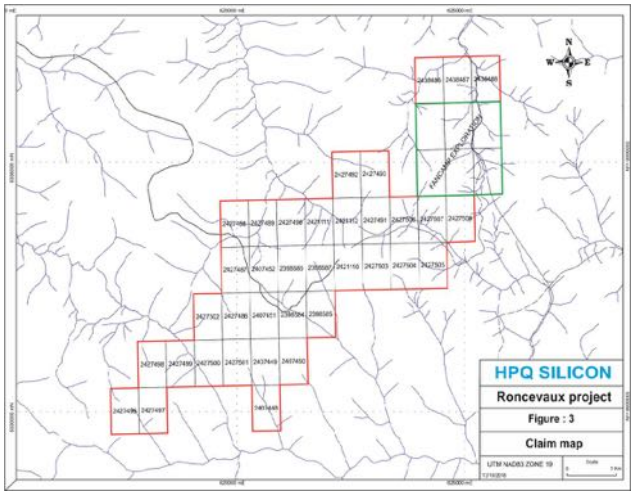


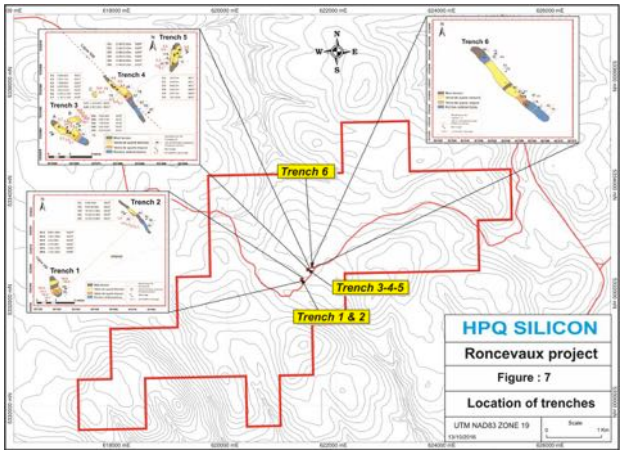
INRS Test 2016 Results

HPQ VERTICAL INTEGRATION STRATEGY

Plans Are To Establish HPQ Quarry Operations in order to meet our Raw Material Requirement For Future *PUREVAP™ QRR* Plants.

- For 2017, HPQ plans on developing the Roncevaux Quartz Potential:
  - **Key goal, delineating a significant resource**
- A Preliminary Economic Assessment (PEA), based on the fact that the PUREVAP™ QRR process is the only process in the world that can transform 98.1% SiO_2 into 99.9+% Si will be undertaken in 2018
- Until its completion, all our financial models will be based on purchasing the raw High Purity Quartz required for the plants, in the open market at market prices
- Upon successful start of quarry operations on Roncevaux, HPQ Silicon will be a fully integrated Silicon Metal Producer





Why Invest in HPQ Now?

HPQ Is Canada's Only Public Pure Play Investment In the Lucrative Solar Grade Silicon Market

HPQ Silicon proven bench test success now graduating to Pilot Plant

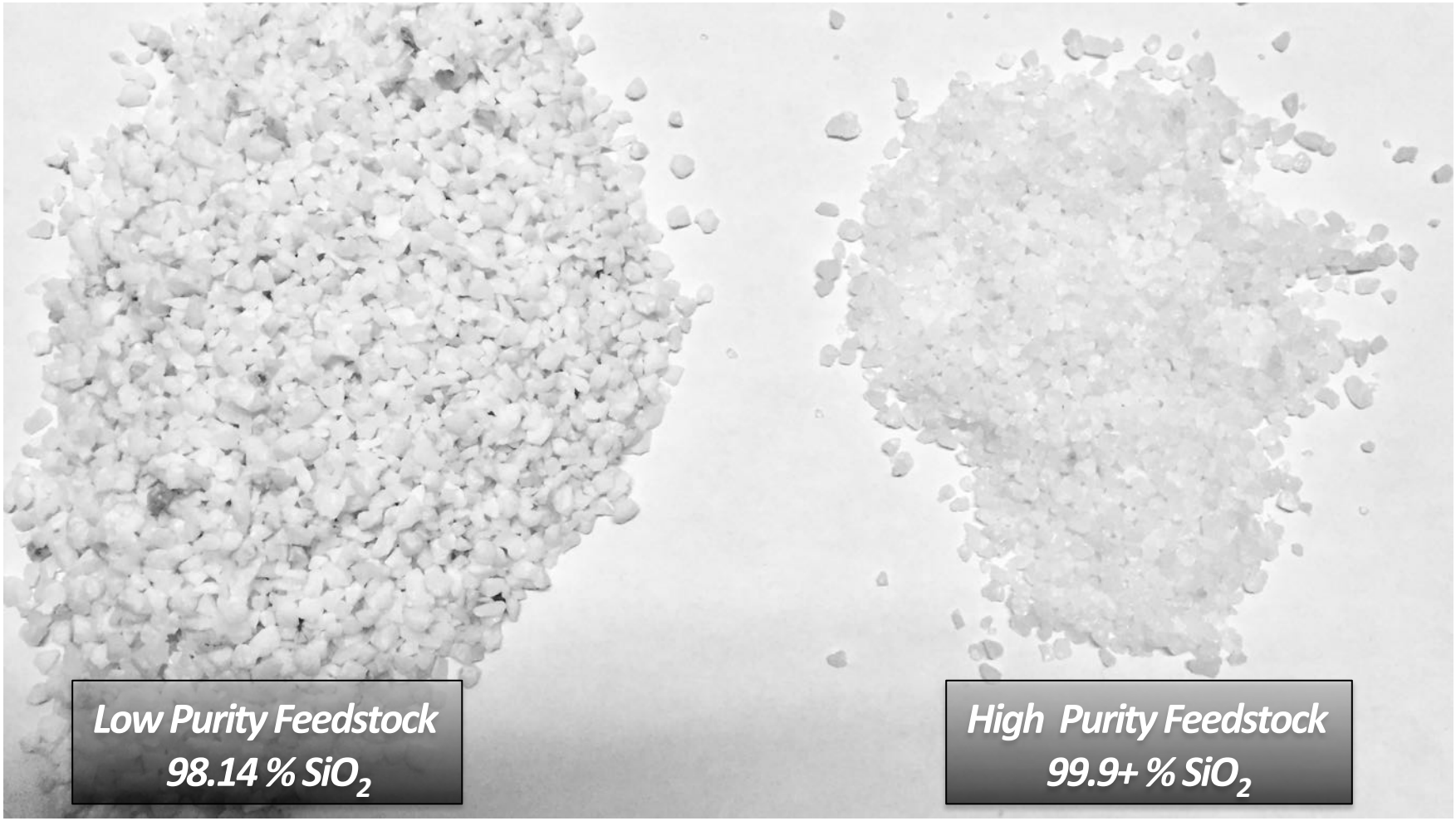
***HPQ PUREVAP™ Proprietary disruptive technology*:**

- **Low Opex, Low Capex, Minimal Carbon Footprint and Environmentally friendly**
  - **Less than 20% of the Industry's cash cost,**
  - **5% of Industry Capex, and**
  - **Estimated 75% reduction in carbon footprint**
  - **No Nasty by-products (Hydrochloric acid(HCl)/H2/Silicon Tetrachloride (SiCl4))**
- **200 TPY Pilot Plant almost completed and talking to potential industry partners**
- **The only one step process in the world that can take low quality feedstock (98.1% SiO_2) and produce High Purity Silicon Metal (99.97% Si)**

HPQ – SILICON RESOURCES

Appendix: Supporting Slides

(slides 17 - 23)



PUREVAP™

"Feedstock Flexibility: A Visible Advantage"

SIMPLE PUREVAP™ 1-STEP PROCESS

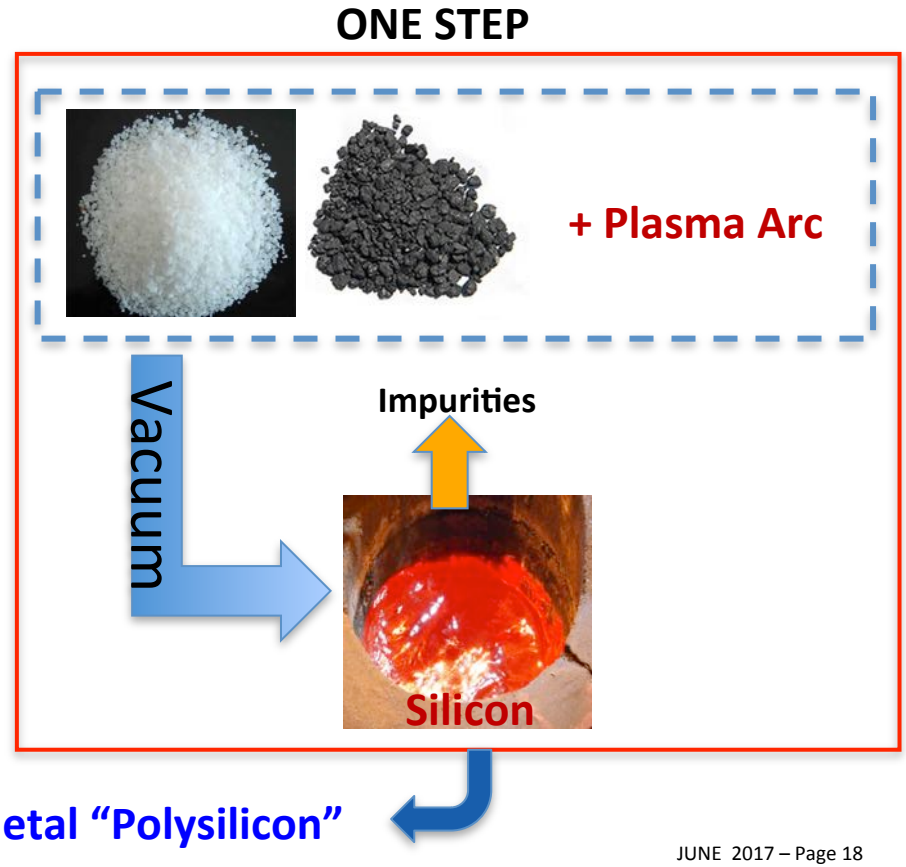
"ELEGANT IN ITS SIMPLICITY"

Quartz Reduction Reactor

- Quartz reduction with carbon using plasma submerged arc
- Silicon refining under vacuum to remove impurities

Vacuum Arc Furnace

- **Reaching very low air pressure level**
  - ✓ (m bar)
- **Very high temperature plasma arc**
  - ✓ +3500 degC
- **Resulting in vaporized impurities before Si can vaporize**
  - ✓ P, K, Mg, Zn, Ca, Mn, Pb, Al, Fe, etc



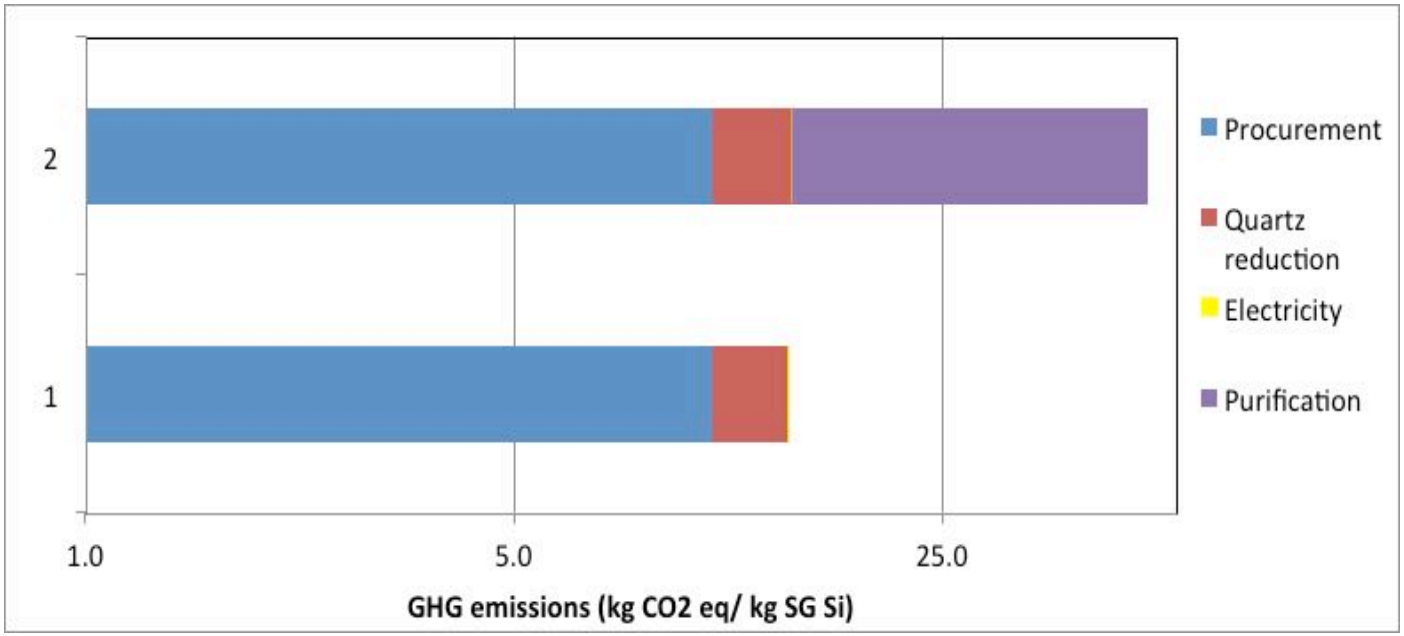
PUREVAP™
The Only Environmentally Friendly Option

Carbon Footprint 75% Lower Than Conventional Process.

The *PUREVAP™ QRR* process is estimated to generate 14.1 kg CO2 eq/Kg SG Si;

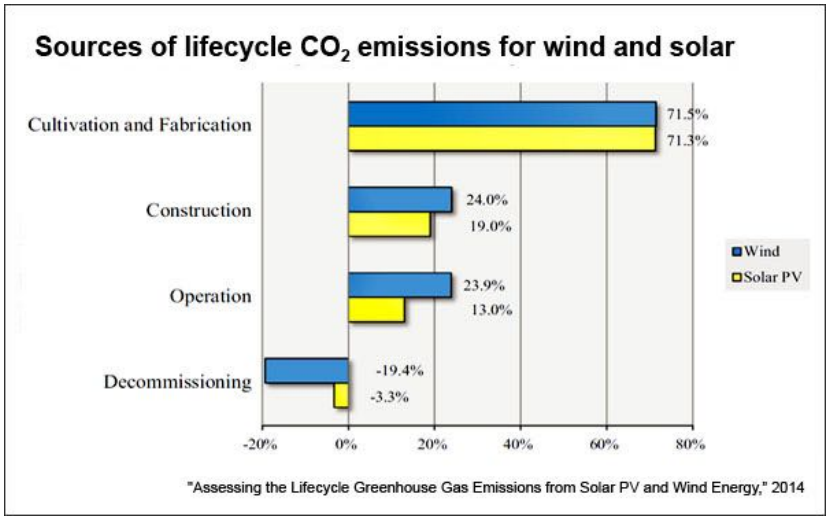
The Siemens process (the industry standard) normally generates 54.0 kg CO2 eq/ Kg SG Si of emissions.*

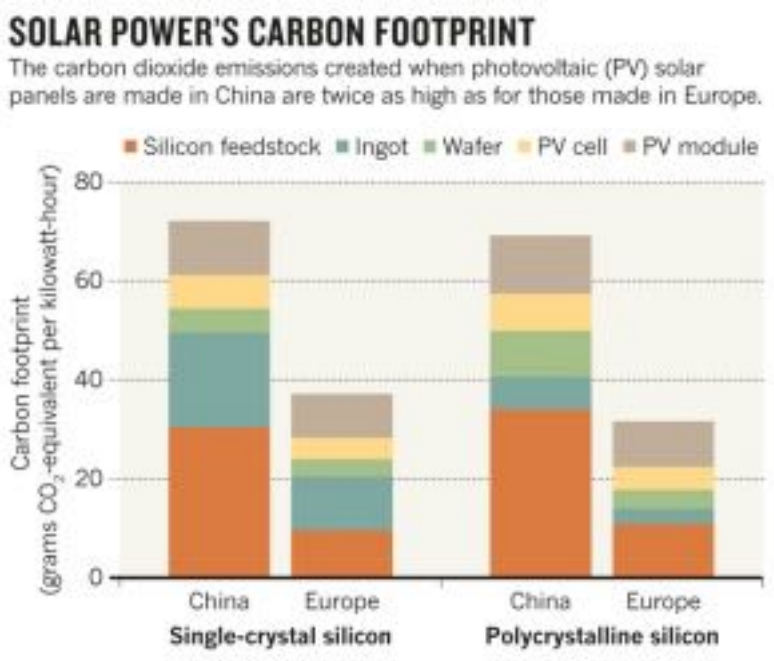
- This represents 75% fewer greenhouse gas emissions, which is justified by elimination of the emissions emanating from the use of chemicals, as well as, energy consumption from the additional purification step.



* Source: R. Glöckner. M. de Wild-Scholten. *Energy payback time and carbon footprint of Elkem Solar silicon*. 27th European Photovoltaic Solar Energy Conference and Exhibition

PUREVAP™
Environmentally Competitive Advantage





Traditional process of transforming quartz in solar grade silicon metal represent the biggest contributing source to the lifecycle of CO_2 emissions for solar energy

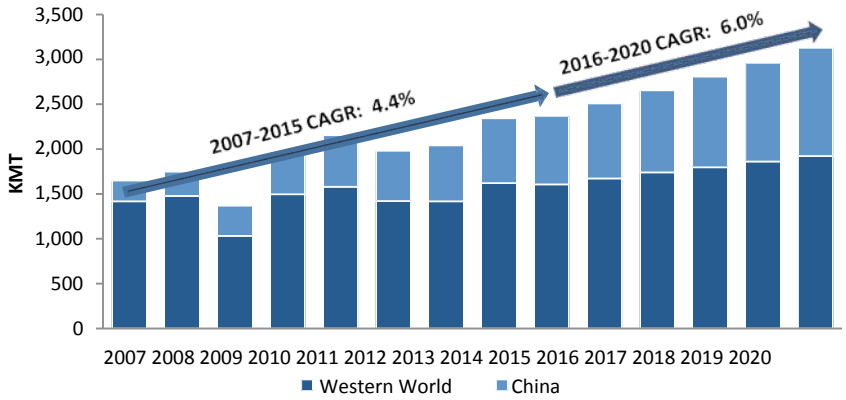
China's coal intensive electricity grid means that making silicon solar panels there – although Cheaper – leaves a carbon footprint almost twice as large as that making it in Europe.

Source: Study led by Fengqi You at Northwestern University (Nature V 510, 19 June 2014)

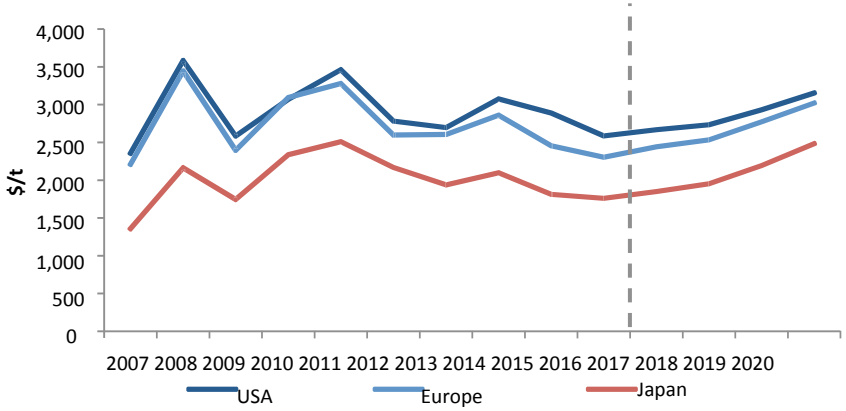
ADVANTAGE *PUREVAP™ GOING FORWARD, AS MORE AND MORE SOLAR PRODUCER WILL BE ASK TO CONSIDER THE LIFECYCLE* CO_2 FOOTPRINT OF THEIR PROJECTS

GROWING METALLURGICAL GRADE SILICON METAL MARKET

Growth in MG Si Consumption Expected to Accelerate from Historical Levels



Rising MG Si Demand Expected to Drive Price Recovery in 2017-2020

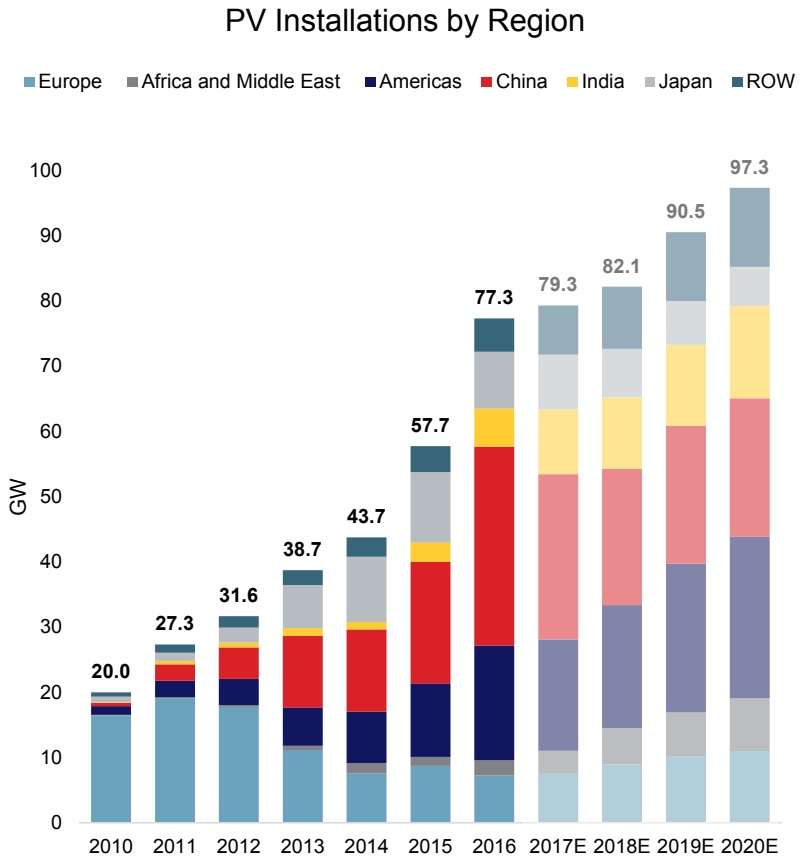


Source: CRU 2015, Ferroglobe
Note: Silicon consumption, pricing, and capacity data are from CRU.

- MG Si 2015 consumption was 2.2 Million Tons;
  - > $US 6 billion in worldwide sales
- Demand is expected to grow at 6.0% CAGR from 2016 – 2020
- CRU forecasts a 2017-2020 price recovery for MG Si driven by rising MG Si demand
- **In 2015, 15 % of Global MG Si (98.5% Si) production was further refined to Solar Grade Si (SG Si, or "Polysilicon") at 99.999% (5N) purity**
  - 350 K Tons of SG Si was sold in 2015 (≈ $US 5Billion)
- Growth will be largely driven by the growing demand for Solar Grade (SG) Si (Polysilicon) material to be used in Photovoltaic (PV) solar panels
- Each Watt (W) of energy produced by a PV solar system demands ≈ 5 gr of SG Si
- GTM Research estimates that Installed PV demand to growth 15 % - 23 % annually, representing about 10 Gigawatt (GW) per year
- Significant SG Si Deficit are forecast from 2017 on as Gigawatt (GW) produce with Solar panels increases

Very Strong Growth in PV Demand

- China still most important market, but reduced installations in coming years
- India and other emerging markets continue to grow
- Long term market outlook is increasingly geographically diversified



Results based on IHS Markit, Technology Group, PV Demand Market Tracker, Q4 2016. This data is not an endorsement of REC Silicon. Any reliance on the results are at the third party's own risk. Visit www.technology.ihs.com for more details.

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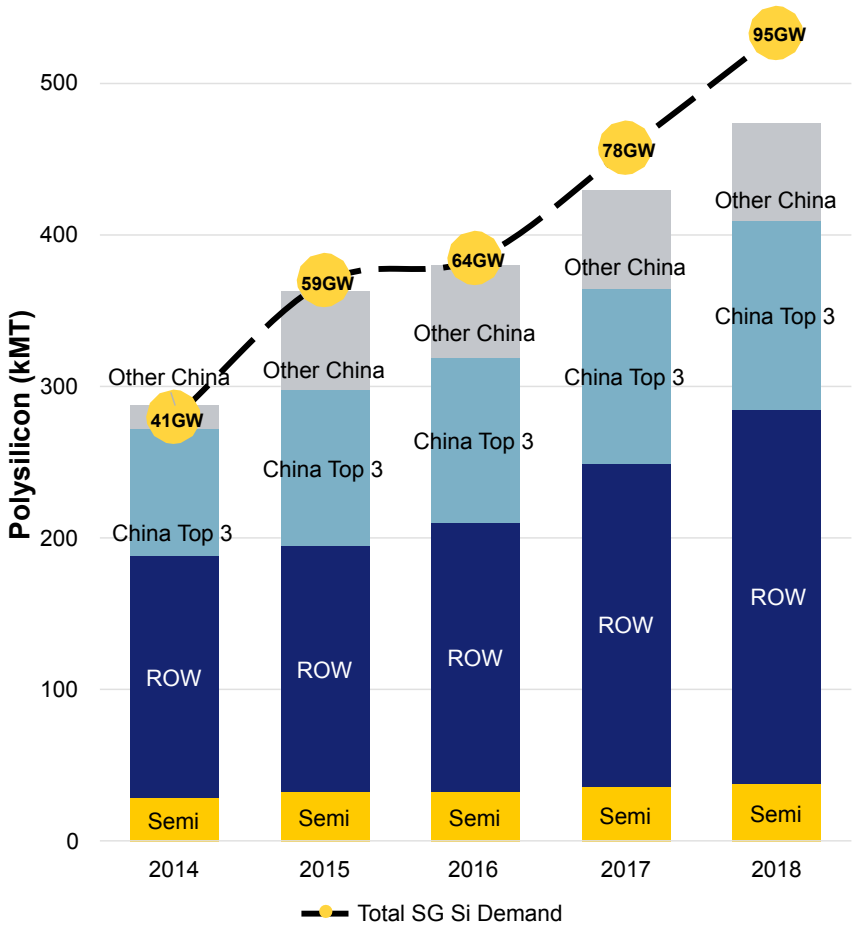
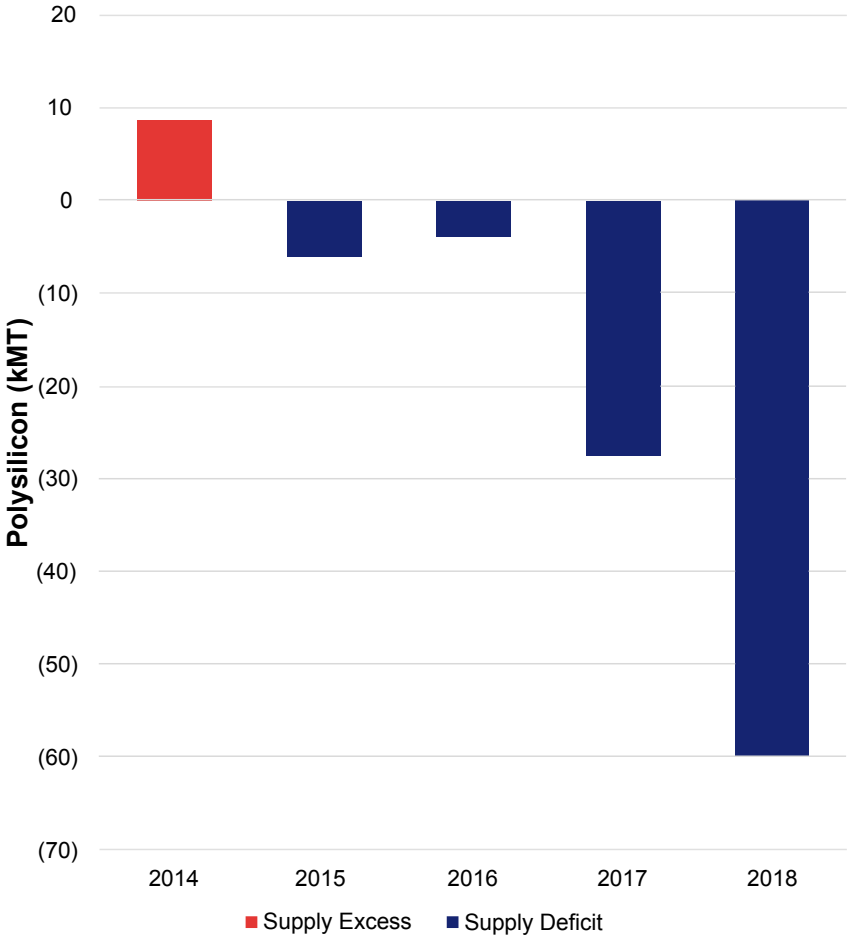
Low SG Si (Polysilicon) Production Limiting PV Growth

SG Si (Polysilicon) Supply/Demand Forecast



SG Si (Polysilicon) Market Balance Forecast



Source: Demand Data Installations: GTM Research, PV Pulse, January 2016
Supply Data: Competitor releases, industry analysts, REC Market Intelligence

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