

Company presentation

### Disclaimer

#### Important information

This presentation (the "Presentation") has been produced by REC Silicon ASA (the "Company" or the "Issuer") with assistance from SpareBank 1 Markets (the "Manager") solely for use at the presentation to investors held in connection with a potential private placement by the Company (the "Offering").

This Presentation is strictly confidential and may not be reproduced or redistributed, in whole or in part, to any other person. This Presentation has not been reviewed by or registered with any public authority or stock exchange and does not constitute a prospectus. This Presentation must be viewed in context with the Company's stock exchange announcements and periodic filings and to the best of the knowledge of the Company and its board of directors, the information contained in this Presentation is in all material respect in accordance with the facts as of the date hereof, and contains no material omissions likely to affect its import. This Presentation contains information obtained from third parties. As far as the Company is aware and able to ascertain from the information published by that third party, such information has been accurately reproduced and no facts have been omitted that would render the reproduced information to be inaccurate or misleading. Only the Company and the Manager are entitled to provide information in respect of matters described in this Presentation. Information obtained from other sources is not relevant to the content of this Presentation and should not be relied upon.

This Presentation has been prepared for information purposes only. This Presentation does not constitute an offer to sell or a solicitation of an offer to buy any securities in any jurisdiction to any person to whom it is unlawful to make such an offer or solicitation in such jurisdiction, including the United States. Distribution of the Presentation in or into any jurisdiction where such distribution may be unlawful, is prohibited.

This Presentation contains certain forward-looking statements relating to the business, financial performance and results of the Company and/or the industry in which it operates. Forward-looking statements concern future circumstances and results and other statements that are not historical facts, sometimes identified by the words "believes", "expects", "predicts", "intends", "projects", "plans", "estimates", "aims", "foresees", "anticipates", "targets", and similar expressions. The forward-looking statements contained in this Presentation, including assumptions, opinions and views of the Company or cited from third party sources are solely opinions and forecasts which are subject to risks, uncertainties and other factors that may cause actual events to differ materially from any anticipated development. None of the Company, the Manager or any of their parent or subsidiary undertakings or any such person's officers or employees provides any assurance that the assumptions underlying such forward-looking statements are free from errors nor does any of them accept any responsibility for the future accuracy of the opinions expressed in this Presentation or the actual occurrence of the forecasted developments. None of the Company or the Manager assumes any obligation, except as required by law, to update this Presentation, including any forward-looking statements or to conform any forward-looking statements to our actual results.

AN INVESTMENT IN THE COMPANY INVOLVES RISK, AND SEVERAL FACTORS COULD CAUSE THE ACTUAL RESULTS, PERFORMANCE OR ACHIEVEMENTS OF THE COMPANY TO BE MATERIALLY DIFFERENT FROM ANY FUTURE RESULTS. PERFORMANCE OR ACHIEVEMENTS THAT MAY BE EXPRESSED OR IMPLIED BY STATEMENTS AND INFORMATION IN THIS PRESENTATION, INCLUDING, AMONG OTHERS, RISKS OR UNCERTAINTIES ASSOCIATED WITH THE COMPANY'S BUSINESS, SEGMENTS, DEVELOPMENT, GROWTH MANAGEMENT, FINANCING, MARKET ACCEPTANCE AND RELATIONS WITH CUSTOMERS, AND, MORE GENERALLY, GENERAL ECONOMIC AND BUSINESS CONDITIONS, CHANGES IN DOMESTIC AND FOREIGN LAWS AND REGULATIONS, TAXES, CHANGES IN COMPETITION AND PRICING ENVIRONMENTS. FLUCTUATIONS IN CURRENCY EXCHANGE RATES AND INTEREST RATES AND OTHER FACTORS. SHOULD ONE OR MORE OF THESE RISKS OR UNCERTAINTIES MATERIALISE, OR SHOULD UNDERLYING ASSUMPTIONS PROVE INCORRECT, ACTUAL RESULTS MAY VARY MATERIALLY FROM THOSE DESCRIBED IN THIS PRESENTATION. NONE OF THE COMPANY OR THE MANAGER INTEND, NOR DO THEY ASSUME ANY OBLIGATION, TO UPDATE OR CORRECT THE INFORMATION INCLUDED IN THIS PRESENTATION.

The Manager has not independently verified any of the information contained herein through due diligence procedures or other investigations. No representation or warranty (express or implied) is made as to, and no reliance should be placed on, any information, including projections, estimates, targets and opinions, contained herein, and no liability whatsoever is accepted as to any errors, omissions or misstatements contained herein, and, accordingly, none of the Company or the Manager or any of their parent or subsidiary undertakings or any such person's officers or employees accepts any liability whatsoever arising directly or indirectly from the use of this document. By attending or receiving this Presentation you acknowledge that you will be solely responsible for your own assessment of the market and the market and the market position of the Company and that you will conduct your own investigations and analysis and be solely responsible for forming your own view of the future performance of the Company's business and its current and future financial situation.

This Presentation is confidential and is being communicated in the United Kingdom to persons who have professional experience, knowledge and expertise in matters relating to investments and are "investment professionals" for the purposes of article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 and only in circumstances where, in accordance with section 86(1) of the Financial and Services Markets Act 2000 ("FSMA") the requirement to provide an approved prospectus in accordance with the requirement under section 85 FSMA does not apply. Consequently, the Investor understands that the Offering may be offered only to "qualified investors" for the purposes of sections 86(1) and 86(7) FSMA, or to limited numbers of UK investors, or only where minima are placed on the consideration or denomination of securities that can be made available (all such persons being referred to as "relevant persons"). This presentation is only directed at qualified investors and investment professionals and other persons should not rely on or act upon this presentation or any of its contents. Any investment or investment activity to which this communication relates is only available to and will only be engaged in with investment professionals. This Presentation (or any part of it) is not to be reproduced, distributed, passed on, or the contents otherwise divulged, directly or indirectly, to any other person (excluding an investment professional's advisers) without the prior written consent of the Company or the Manager.

IN RELATION TO THE UNITED STATES AND U.S. PERSONS, THIS PRESENTATION IS STRICTLY CONFIDENTIAL AND IS BEING FURNISHED SOLELY IN RELIANCE ON APPLICABLE EXEMPTIONS FROM THE REGISTRATION REQUIREMENTS UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED. THE SHARES HAVE NOT AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF ANY STATE SECURITIES LAWS, AND MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES, OR TO OR FOR THE ACCOUNT OR BENEFIT OF U.S. PERSONS, UNLESS AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE U.S. SECURITIES ACT IS AVAILABLE. ACCORDINGLY, ANY OFFER OR SALE OF SHARES WILL ONLY BE OFFERED OR SOLD (I) WITHIN THE UNITED STATES, OR TO OR FOR THE ACCOUNT OR BENEFIT OF U.S. PERSONS, ONLY TO QUALIFIED INSTITUTIONAL BUYERS ("QIBs") IN OFFERING TRANSACTIONS NOT INVOLVING A PUBLIC OFFERING AND (II) OUTSIDE THE UNITED STATES IN OFFSHORE TRANSACTIONS IN ACCORDANCE WITH REGULATION S. ANY PURCHASER OF SHARES IN THE UNITED STATES, OR TO OR FOR THE ACCOUNT OF U.S. PERSONS, WILL BE DEEMED TO HAVE MADE CERTAIN REPRESENTATIONS AND ACKNOWLEDGEMENTS. INCLUDING WITHOUT LIMITATION THAT THE PURCHASER IS A QIB.

This Presentation speaks as of 9 April 2019. There may have been changes in matters which affect the Company subsequent to the date of this Presentation. Neither the delivery of this Presentation nor any further discussions of the Company with any of the recipients shall, under any circumstances, create any implication that there has been no change in the affairs of the Company since such date. and the Company does not intend, and does not assume any obligation, to update or correct any information included in this Presentation. This Presentation is subject to Norwegian law, and any dispute arising in respect of this Presentation is subject to the exclusive jurisdiction of Norwegian courts with Oslo District Court (Nw: Oslo tingrett) as exclusive venue.



### Risk factors (1/4)

#### Macroeconomic, geopolitical and industry risk

- The development of the global energy market prices are of key importance to the PV industry's and declining electricity prices could potentially significantly reduce the PV industry's demand for the Group's products.
- Changes in the legislation and regulatory framework in any of the jurisdictions in which the Group is active might have a significant negative impact on the Group.
- Trade barriers, trade restrictions and unfair trade practices has had a significant negative impact on the Group's ability to sell its products at attractive terms. In particular, the Company's access to polysilicon markets in China continues to be restricted by the solar trade war between China and the United States. The Company continues to work to obtain a favorable resolution. The Company remains focused on identifying sales opportunities to mitigate the impact of the trade war. The timing or outcome of any potential resolution remains uncertain.
- Limited capital availability for financing PV installations could have a significant negative impact on the demand for the Group's products.
- An increase in interest rates could significantly reduce the profitability of PV plants and reduce the demand for PV systems.
- The PV industry, including suppliers such as the Group, may not be able to be competitive against other sources of renewable or conventional energy, adversely affecting demand for the Group's products.
- Significant developments in technologies and changes in market structure supply and demand could significantly alter the Group's competitive situation.
- Overcapacity in parts or all of the markets in which the Group operates could lead to a reduction in average selling prices and difficulties in keeping high capacity utilization resulting in a significant deterioration of profitability.
- Significant changes in competitive dynamics, end user demand or technology could have a significant adverse effect on the Group business, prospects, financial results and results of operations.

#### Risks relating to the Group and the Business

- Key customers defaulting or going into bankruptcy, or renegotiation of contracts with key customers could have a significant negative impact on the Group's operating results.
- The Group has limited long-term agreements with its customers and accordingly is subject to short term fluctuations in demand, which could have significant negative impacts on its operating results.
- There are significant risks associated with joint ventures.
- There are significant risks associated with the growth of the Group. The Group may not succeed in securing the necessary financing for future investments, and future expansion projects may be significantly affected by cost overruns, schedule delays, technology risks and defects.
- The Group currently takes advantage of tax agreements and preferential tax treaties in certain territories. Such agreements and treaties are liable to change and renegotiations, which typically are outside the Group's control, that may remove some or all of the benefits the Group currently enjoys.
- The Company previously received notices of reassessment from the Norwegian Central Tax Office (CTO) regarding tax returns for tax years 2009 through 2011. The CTO questioned the deductibility of losses on loans and quarantees provided to subsidiaries and affiliates. The timing and amount of any potential outcome is subject to substantial uncertainty. The matter is presented in note 31 to the Company's 2017 annual report.

### Risk factors (2/4)

#### Risks relating to the Group and the Business

- The Company has contested Grant County Washington's valuations of taxable property. On November 8, 2018 the Thurston County Superior Court issued a ruling affirming Board of Tax Appeals (BTA) revised valuation of the Company's property for assessment year 2012. On December 4, 2018 the Company appealed this ruling to the Washington Court of Appeals. The ruling does not affect amounts reflected in the Company's financial statements and the Company will not be required to pay the disputed tax amounts until all appeals are exhausted. Assessments for the years 2013 through 2015 have also been appealed. The timing and outcome of these appeals is subject to uncertainty. The matter is presented in note 31 to the Company's 2017 annual report.
- Global economic downturn and dislocation in the financial markets may expose the Group to liquidity risk.
- Impacts of the solar trade war between China and the United States, uncertain market conditions, and reduced demand for the Company's solar grade polysilicon have increased the Company's liquidity risk. Current market conditions and the continued operation of the FBR facility in Moses Lake at 25 percent capacity utilization place substantial risks on the Company's liquidity and its ability to meet operating cash flow requirements. Accordingly, management and the board of directors have formulated a plan to curtail the operation of the FBR facility on May 15, 2019 unless trade negotiations between China and the United States yield tangible indications that REC Silicon's access to markets in China will be restored or other significant positive developments occur in the marketplace. Depending on the results of trade talks, REC Silicon will execute plans to temporarily curtail operation of the FBR facility in order to maintain the liquidity necessary to maintain the operation of the semiconductor materials segment.
- The Company has an indemnification loan related to the bankruptcy of a former subsidiary in 2012. Once the loan is called, outstanding amounts will bear interest at a rate of NIBOR plus 0.5 percent. Although the indemnification loan was callable in February 2016, this loan has not been called and the due date is uncertain. The matter is presented in note 17 to the Company's 2017 annual report.
- The Company's bond agreement contains liquidity covenants that the Company shall meet. If risks presented in this section on risk factors materialize, including that conditions surrounding the call of the indemnity loan or the outcome of tax examinations are negative, the liquidity risk for the Company will increase.
- Changes in the interest rates affect cash flows and the estimated fair values of assets and liabilities.
- The Group is exposed to exchange rate risks, and exchange rate changes might significantly influence the relative cost position of the Group and the estimated fair values of assets and liabilities.
- The Group will from time to time be involved in disputes and legal or regulatory proceedings.
- The continued operation in and intended expansion of the activities of the Group into additional foreign markets involves significant risks.
- The Group is dependent on a limited number of third party suppliers for key production raw materials, supplies, components and services for its products and any disruption to supply could negatively impact its business significantly.
- The Group is relying on external subcontractors and suppliers of services and goods to meet agreed or generally accepted standards.
- The Group's results of operations may be significantly adversely affected by fluctuations in energy prices.
- If the Group does not achieve satisfactory yields or quality in manufacturing its products, the Group's sales could decrease significantly and its relationships with its customers and its reputation may be harmed significantly.
- The Group relies upon intellectual property and trade secret laws and contractual restrictions to protect important proprietary rights, and, if these rights are not sufficiently protected, its ability to compete and generate revenue could suffer significantly.
- The Group may not obtain sufficient patent protection on the technology embodied in its products and production processes, which could significantly harm its competitive position and increase its expenses significantly.

### Risk factors (3/4)

#### Risks relating to the Group and the Business

- The Group's intellectual property indemnification practices may adversely impact its business significantly.
- The Group could get involved in intellectual property disputes that could be time-consuming and costly and could result in loss of significant rights and/or penalties.
- The Group may incur significant costs to comply with, or as a result of, health, safety, environmental and other laws and regulations.
- Because the markets in which the Group is active are highly competitive and many potential competitors may have greater resources, the Group may not be able to compete successfully and may lose or be unable to gain market share.
- The Group depends on certain executive officers and other key employees particular in the area of research and development and other qualified personnel in key areas.
- The Group could be seriously harmed by catastrophes, natural disasters, consequences of climate change, operational disruptions or deliberate sabotage.
- The Group could be seriously harmed by incidents resulting in damages not covered by insurance.
- The Group's insurance policies need regular renewal and the Group cannot guarantee that these renewals can be made on the same terms as existing policies or that the Group will be able to obtain insurance on normal and acceptable terms.
- There are risks related to unanticipated technology problems and deliberate attacks to the Group's telecommunications and information technology systems.
- There are risks related to estimation uncertainty, as the assumptions used as basis for management's estimations are inherently uncertain and unpredictable and, as a result, future estimates and actual results may differ from the current estimates.
- The Group's assets may be subject to further impairment of asset values.
- The Company has debt commitments, and it may not be able to service such debt commitments in the future.

#### Risks relating to the Shares

- The Shares may not be a suitable investment for all investors. An investment in the Company's shares involves risk of loss of capital. The market value of the shares may fluctuate significantly in response to a number of factors beyond the Company's control.
- The Company may in the future decide to offer additional Shares or other securities in order to finance its operation or service its debt, in connection with unanticipated liabilities or expenses, or for any other purposes. Depending on the structure of any future offering, certain existing shareholders may not have the ability to subscribe for or purchase additional equity securities. If the Company raises additional funds by issuing additional equity securities, holdings and voting interests of existing shareholders could be diluted.
- Beneficial owners of the Shares registered in a nominee account (through brokers, dealers or other third parties) could be unable to exercise their voting rights for such Shares, unless their ownership is re-registered in their names with the VPS prior to any general meeting of shareholders. There is no assurance that beneficial owners of the Shares will receive the notice of any such general meeting in time to instruct their nominees to either effect a re-registration of their Shares or otherwise vote their Shares in the manner desired by such beneficial owners.

### Risk factors (4/4)

#### Risks relating to the Shares

- The Company is a public limited liability company organised under the laws of Norway. The members of the Company's Board of Directors and Management reside in Norway. As a result, it may not be possible for investors to effect service of process in other jurisdictions upon such persons or the Company, to enforce against such persons or the Company judgments obtained in non-Norwegian courts, or to enforce judgments on such persons or the Company in other jurisdictions.
- U.S. holders of the Shares may not be able to trade or exercise pre-emptive rights for new Shares unless a registration statement under the U.S. Securities Act is effective with respect to such rights or an exemption from the registration requirements of the U.S. Securities Act is available. The Company is not a registrant under the U.S. securities laws. If U.S. holders of the Shares are not able to trade or exercise pre-emptive rights granted in respect of their Shares in any rights offering by the Company, then they may not receive the economic benefit of such rights. In addition, their proportional ownership interests in the Company will be diluted. Similar restrictions may apply to other foreign holders of Shares, including, but not limited to shareholders in Australia, Canada, Hong Kong, Japan and Switzerland.
- Norwegian law provides that any declaration of dividends must be adopted by the shareholders at the Company's general meeting of shareholders. Dividends may only be declared to the extent that the Company has distributable funds and the Company's Board of Directors finds such a declaration to be prudent in consideration of the size, nature, scope and risks associated with the Company's operations and the need to strengthen its liquidity and financial position.
- The Shares may be subject to purchase and transfer restrictions.
- Shareholders may face currency exchange risks or adverse tax consequences by investing in the Shares denominated in currencies other than their reference currency.
- The Company's bond agreement contains restrictions in the Company's ability to declare dividends.
- The insolvency laws of Norway may not be as favorable to Shareholders as insolvency laws of other jurisdictions and may preclude the holders of the Shareholders from recovering payments due on the Shares

### REC Silicon – leading producer of advanced silicon materials

- Manufactures high quality polysilicon and silicon gases for the solar and electronics industries
- Best-in-class proprietary technology
- 30 years' experience
- Headquartered in Fornebu, Norway
- Listed on the Oslo Stock Exchange

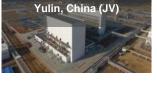
#### World class manufacturing plants



The largest granular solar grade polysilicon production plant in the world



The largest supplier of silicon gases in the world. **Produces highest quality** FZ polysilicon for the semiconductor industry



Semiconductor capable FBR polysilicon production. Also capable of producing silane gas and FZ/CZ polysilicon





#### **REC Silicon product range**

**Products** 

**Applications** 



Semiconductor / consumer electronics

**Customers** Semiconductor wafer manufacturers



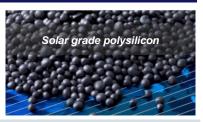
Semiconductor / high voltage applications

Semiconductor wafer manufacturers



Flat panel displays, semiconductors, photovoltaics

Industrial and specialty gas distributers



**Photovoltaics** 

Solar wafer manufacturers

### Transaction summary

#### **Settlement** Summary of offering details The Offer Shares will be settled with existing and unencumbered shares in the Company that are already listed on the Oslo Stock Exchange, pursuant to an **Contemplated Private Placement** agreement (the "Agreement") between SpareBank 1 Markets AS, the transaction Company and Umoe AS. The shares delivered to the subscribers will thus be listed and tradable upon delivery, expected 10 May 2019 Subject to approval by the general meeting, Umoe AS has undertaken to use the full proceeds received from the settlement of the Private Placement to Up to approx. 9.9% of acquire new A-shares in the Company. All of the new A-shares will be Offer size outstanding shares converted into ordinary shares as soon as practically possible, which conversion is expected to take place within eight (8) weeks from the settlement date. Until such conversion takes place, the new A-shares will rank pari passu with the other shares in the Company To be determined through Offer price Transaction timeline book building April Mav Minimum **NOK** equivalent of EUR April 9th Start of bookbuilding subscription 100.000 April 10th Board approval of the transaction based on the May 9th Annual General Meeting **Conditions** authorization to issue shares from the annual Settlement and delivery of general meeting May 10th tradable shares

### Business plan update

- Curtail Moses Lake FBR production on May 15, 2019
  - Long-term shutdown by June 30, 2019 if access to China market not restored
  - Preserve option value at minimal cost
- Continue to operate highly stable and profitable Butte facility
  - Annual EBITDA contribution of USD ~50M
  - Minimal capex requirements to maintain facility consistent cash flow contribution
- Long term neutral cash flows in current market conditions while actively pursue the re-opening of the China market for US polysilicon

Liquidity situation contained until Chinese market re-opens

### Preliminary Q1 2019 highlights

#### Revenues of USD 45.0M (7.9% decrease vs. Q4'18)

- Silicon gas sales of 829MT
  - (9.8% decrease vs. Q4'18)
  - 3.3% Silane gas price decrease vs. Q4'18
  - Guidance of 850MT
- Total polysilicon sales of 2,004MT
  - (18.6% increase vs. Q4'18)
  - 0.6% price decrease in prime granular polysilicon
  - Polysilicon inventory decrease by 496MT

#### **EBITDA of USD (8.1)M loss**

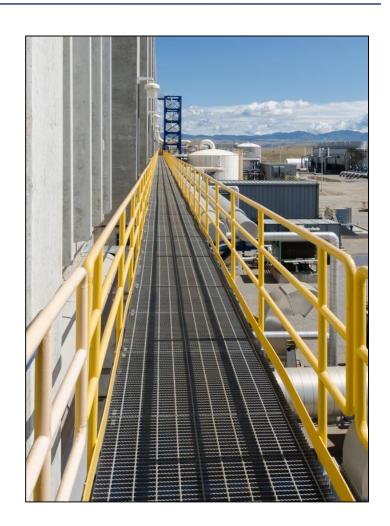
Butte EBITDA contribution of USD 7.5M despite historically high electricity costs in January and February 2019

#### March 31, 2019 cash balance of USD 25.4M

- Cash decrease of USD (6.4)M
- Cash outflows from operations USD (6.3)M
- Capex of USD (0.1)M

#### FBR production costs of USD 15.1/kg

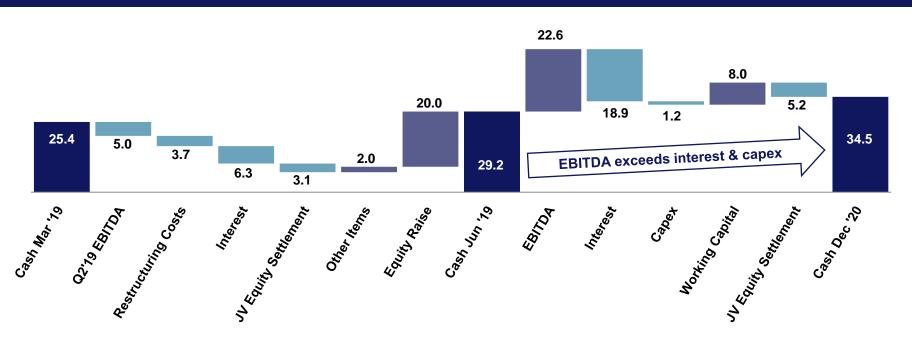
- FBR capacity utilization ~25%
- FBR production volume of 1,091MT



Note: EBITDA and FBR production costs reflect operating results prior to the adoption of IFRS 16 leases in order to maintain comparability

### Current business plan contains liquidity position

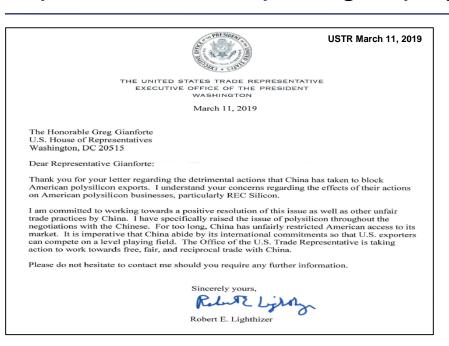
#### Liquidity development through December 2020 (USDM)



- If market access to China is postponed, REC Silicon will retain sufficient liquidity
- Moses Lake solar polysilicon inventory depleted in Q3 2019
- Stable Butte business will carry cash flow requirements for the group
- A non-recurring restructuring charge of USD 3.7M to be incurred in Q2 2019
- Remaining JV equity settlement payments of USD 3.1M in Q2 2019 and 5.2M in Q1 2020

Note: EBITDA reflects operating results prior to the adoption of IFRS 16 leases in order to maintain comparability

### Optimism for re-opening of polysilicon market in China





- Ongoing high level meetings between China and the US with indications of progress
  - March 28th 29th Beijing
  - Washington April 3rd 5th
- Withdrawal of China's tariffs on US polysilicon has been widely reported to be a key priority of the US, but uncertainty on the outcome remains
- Signing meeting between President Xi and President Trump in May or latest at G20 meeting in Osaka in June is rumored
- The US Trade Representative (USTR) has publicly indicated a commitment to work towards a positive resolution which includes US polysilicon

Vast value unleashed when China market re-opens

- Option value extended indefinitely with FBR curtailment and shutdown
- Historical FBR investment of USD 1.7B limited capex requirements
- Option to increase ownership in China JV from 15% to 49%

Investment down-side protected by consistent **Butte cash flows** 

- Dominant silane market share and significant barriers to enter industry
- Historical Butte investment of USD 457M limited capex requirements
- Benefit from global economic megatrends (technology/mobility/communication)

**Highly experienced** management with proven operational track record

- Highly experienced management CEO and CFO with 20+ years at REC
- Proven track record of improving efficiency of operations
- Success in reducing costs FBR cost of USD 9.4/kg at 60% utilization

Product portfolio to leverage macro economic megatrends

- Pace of change and adoption of new technologies drive product demand
- Significant R&D on use of silicon in battery technology, with optimistic results
- PV has become the fastest growing source of new power generation globally
- Unmatched CO<sub>2</sub> footprint low energy usage by FBR and hydropower access



## Moses Lake, Washington – proprietary FBR technology

#### **Plant characteristics**

- Original construction in 1984
- Large scale silane units and FBR reactors constructed beginning in 2006, operational from second half of 2009
- ~18,000 MT FBR-A Capacity
- Proprietary FBR technology
  - Lowest cost of producing solar grade polysilicon



#### Re-opening China market releases option value

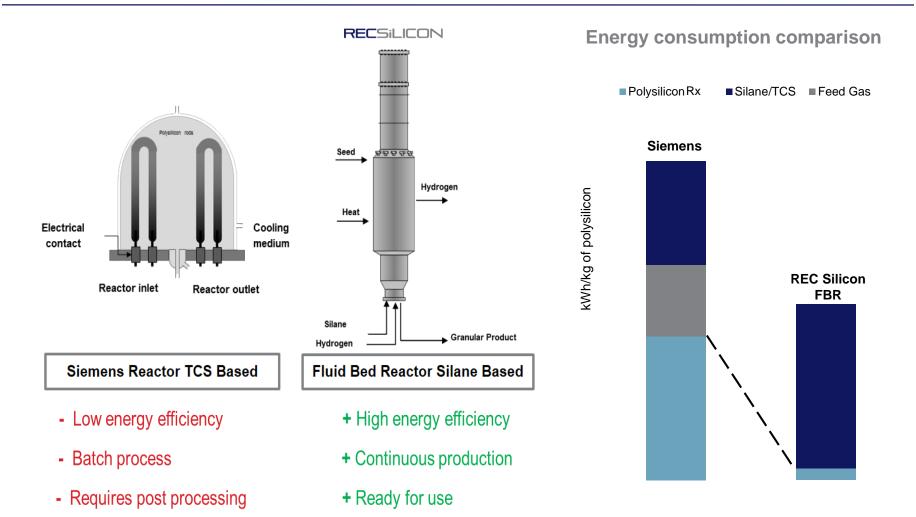
- Currently operating at 25% capacity, plan to curtail from May 15
- Full capacity utilization with re-gained China market access
- High growth potential due to PV adoption:
  - Push for clean energy
  - Solar highly cost competitive

#### Fluidized Bed Reactor (FBR)

Silane gas (SiH4) FBR technology SIGNATURE SILAN RECSILICON



### FBR technology uses ~50% less energy vs. competitors

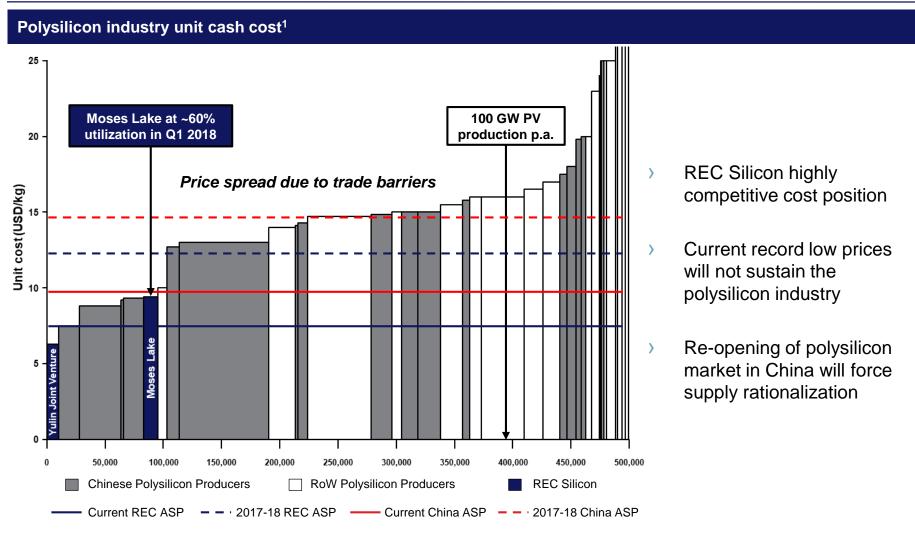


Note 1 REC silicon data based on 2014 measured energy consumption and actual production. This includes consumption for operations, maintenance, and analytical functions. Note 2 REC data includes the buildings (lights/HVAC) along with processing, packaging, treatment, and support equipment.

Note 3 Competitive technology data appears to be based on simulations of power consumption for only the process equipment to manufacture Polysilicon when it is operating at 100% utilization)



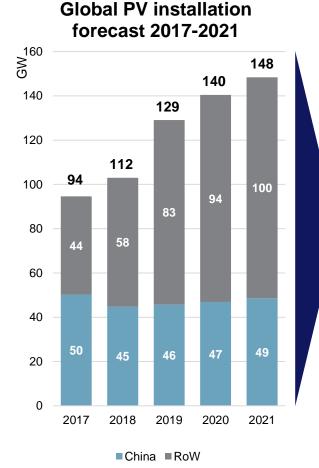
## Industry leading cost position

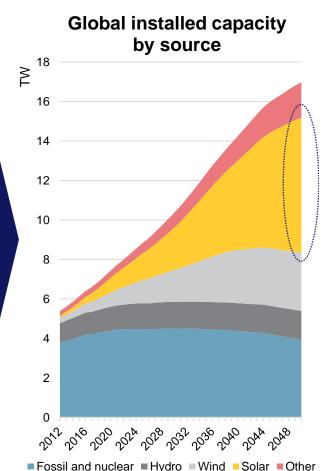


<sup>1)</sup> Analysis carried out on 2018 data. Analysis does not include idle capacity

# Massive long term growth for solar PV

- PV has become the fastest growing source of new power generation globally
- Robust global PV demand growth in 2018 despite reduction of solar incentives in China
- Rapid growth expected to continue as solar has become the cheapest source of power in solar rich regions
  - Growth consistently outpaces analyst expectations
- Long term demand growth supports option value of Moses Lake FBR facility





Source: IHS, Bloomberg NEF



# Butte, Montana – high quality silicon for electronics industry

#### **Plant characteristics**

- Commissioned in 1998, acquired in 2005
  - USD 457M historical asset cost
- World's largest supplier of silicon gases
  - Distributor centric marketing model
  - Silane ISO Module container fleet
- Produces high quality semiconductor grade polysilicon (FZ and CZ)

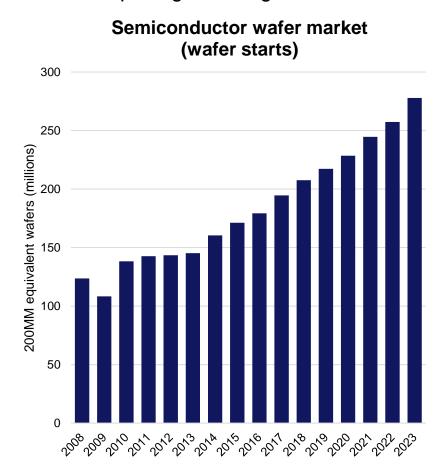
#### Butte protects investment down-side

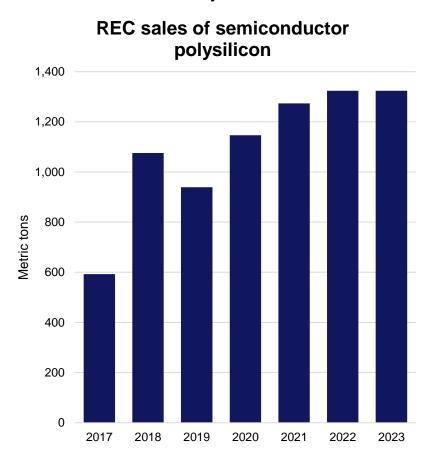
- Consistent cash generation over time
  - USD ~50M EBITDA p.a., limited capex
- Dominant silane market share and significant barriers to entry secure market position
- Butte to benefit from global economic megatrends
  - Technology, mobility and communication



## Consistent growth for semiconductor polysilicon

- Semiconductor polysilicon used in a wide range of microelectronic devices
- REC outpacing market growth in the short term due to market re-entry



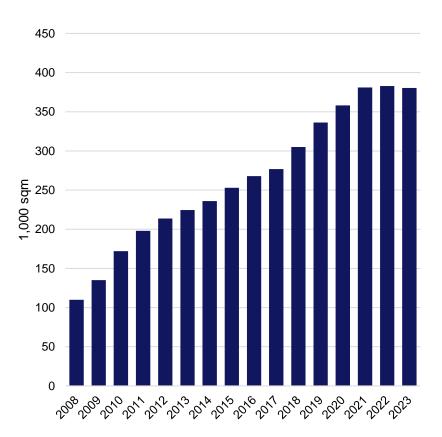


Source: The McClean report 2019 - by IC Insights, Inc.

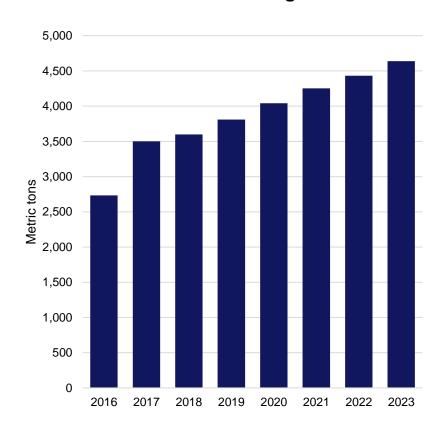
## Consistent growth for high margin silicon gases

- Silicon gases used in flat panel display (FPD), semiconductor, and PV applications
- Dominant position in consistent high growth/margin semiconductor and FPD applications

### Flat panel display capacity



### **REC** sales of silicon gases



Source: IHS Supply/Demand Tracker Q3/2018



### Yulin, China – REC Silicon presence in primary market

#### Plant characteristics

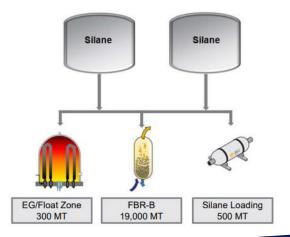
- Construction completed in 2018
- Start-up underway
- Large scale silicon manufacturing facility with:
  - 19,000MT FBR-B solar polysilicon
  - 300MT Siemens semiconductor grade polysilicon
  - 500MT silane gas loading



#### Positioned to capitalize on growing PV industry

- Located in principal market China
- FBR-B is semiconductor grade capable which is optimal for monocrystalline PV applications
- Current REC ownership of 15%, attractive option to increase exposure to 49% from January 2021
- Fits with China long-term technology goals

#### Second generation fluidized bed reactor (FBR-B)



## Long-term debt and contingent liabilities

### Nominal net debt of USD 107.9M

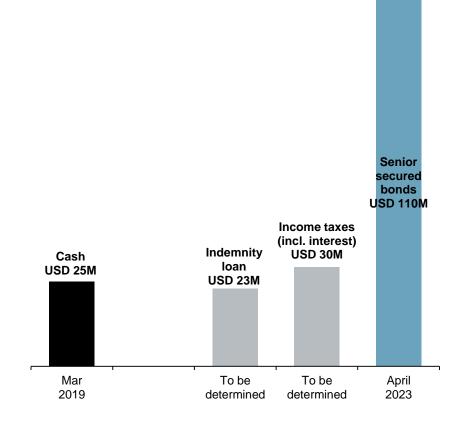
- Increase of USD 6.7M in Q1 2019
  - USD 6.4M decrease in cash
  - USD 0.2M increase in nominal debt due to weaker USD

### Indemnity loan of USD 23M

- Callable beginning in February 2016
- Has not been called
- Due date is uncertain

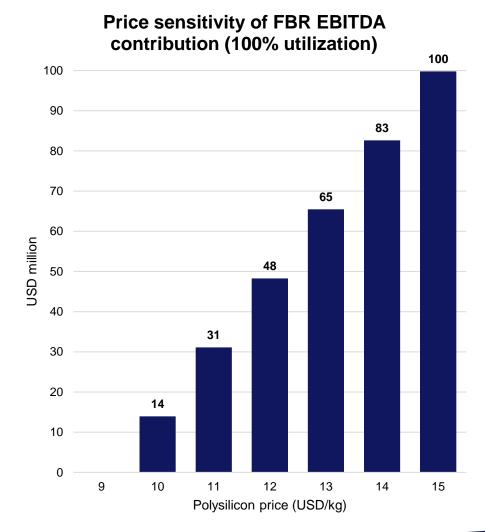
### Reassessment of tax – USD 30M

- Uncertain timing and outcome
- Recent court decisions support REC's tax position



# Significant FBR cash generation with Chinese market access

- Vast upside in REC Silicon value for small increases in polysilicon price
- When China market is re-opened, REC Silicon will recommission FBR facility
- Estimated time from a complete shut down to first production is ~9 months
- Estimated investment of USD ~50M to recommission the FBR facility



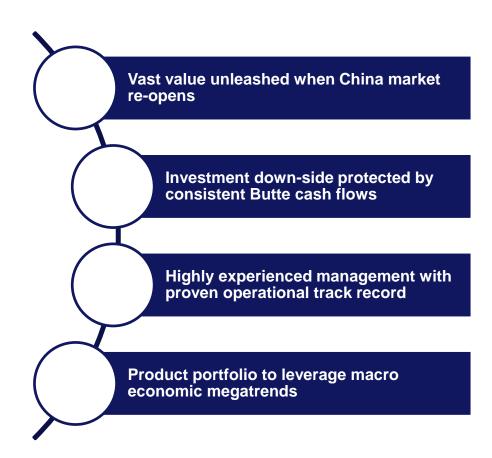
Note: EBITDA contribution reflects operating results prior to the adoption of IFRS 16 leases in order to maintain comparability

## Summary

#### **Business plan**

- Curtail Moses Lake FBR production on May 15, 2019
  - Long-term shutdown by June 30, 2019 if access to China market not restored
  - Preserve option value at minimal cost
- Continue to operate highly stable and profitable Butte facility
  - Annual EBITDA contribution of USD ~50m
  - Minimal capex requirements to maintain facility - consistent cash flow contribution
- Long term neutral cash flows in current market conditions
- Actively pursue the re-opening of the China market for US polysilicon

### Key investment highlights





Appendix

# Current business plan contains the liquidity position

	(USD millions)									
	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	<b>Q2-20</b>	Q3-20	Q4-20		
<u>Revenues</u>										
Solar materials	12.9	15.6	6.4	-	-	-	-	-		
Semiconductor materials	32.2	36.4	40.2	42.5	38.3	42.9	42.5	45.4		
Other (eliminations)	0.0	0.6	0.1	0.1	0.1	0.1	0.1	0.1		
Total	45.0	52.5	46.8	42.7	38.5	43.0	42.6	45.5		
EBITDA <sup>*</sup>										
Solar materials	(9.2)	(8.0)	(4.8)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)		
Semiconductor materials	7.5	9.0	12.7	12.6	12.6	13.9	12.9	15.8		
Other (eliminations)	(6.5)	(6.0)	(5.0)	(4.9)	(5.1)	(5.1)	(5.1)	(5.0)		
Total	(8.1)	(5.0)	2.9	3.1	2.9	4.3	3.2	6.2		
Restructuring costs	-	(3.7)	-	-	-	-	-	-		
Asset sale	-	1.2	-	-	-	-	-	-		
Interest	-	(6.3)	-	(6.3)	-	(6.3)	-	(6.3)		
Changes in assets & liabilities	1.8	1.0	4.0	4.0						
Net cash flows from operations	(6.3)	<u>(12.9</u> )	6.9	0.8	2.9	(2.0)	3.2	(0.1)		

<sup>\*</sup> EBITDA reflects operating results prior to the adoption of IFRS 16 leases in order to maintain comparability

# Current business plan contains the liquidity position

	(USD millions)								
	Q1-19	<u>Q2-19</u>	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20	Q4-20	
Net cash flows from operations	(6.3)	(12.9)	6.9	8.0	2.9	(2.0)	3.2	(0.1)	
JV equity settlement payments  Net cash flows from total operations	(6.3)	<u>(3.1)</u> (16.0)	6.9	0.8	(5.2) (2.3)	(2.0)	3.2	(0.1)	
Cash flows from investing (capex)	(0.1)	,	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	
Cash flows from financing (private placement)		20.0							
Change in cash	(6.4)	3.8	6.7	0.6	(2.5)	(2.2)	3.0	(0.3)	
Beginning cash balance	31.8	25.4	29.2	35.9	36.4	33.9	31.7	34.7	
Ending cash balance	25.4	29.2	35.9	36.4	33.9	31.7	34.7	34.5	

<sup>\*</sup> Cash flows reflect results prior to the adoption of IFRS 16 leases in order to maintain comparability



