A New Breed of Battery

Investor Deck

December 2021
Disclaimer

Forward – Looking Statement

This presentation and the oral statements made in connection herewith (together, this “Presentation”) include “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including Solid Power’s expectations, hopes, beliefs, intentions or strategies regarding the future. All statements, other than statements of present or historical fact included herein, regarding Solid Power’s business and operations, including Solid Power’s path to commercialization, expected product design capabilities, product safety benefits and projected addressable market, as well as the company’s strategy, future operations, estimated financial position, estimated revenues and losses, projected costs, prospects, plans and objectives of management, are forward-looking statements. When used herein, the words “could,” “should,” “will,” “may,” “believe,” “anticipate,” “intend,” “estimate,” “expect,” “project,” the negative of such terms and other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain such identifying words.

These forward-looking statements are based on management’s current expectations and assumptions about future events and are based on currently available information as to the outcome and timing of future events. Except as otherwise required by applicable law, Solid Power disclaims any duty to update any forward-looking statements, all of which are expressly qualified by the statements in this section, to reflect events or circumstances after the date hereof. All forward-looking statements speak only as of the date of this Presentation. Solid Power cautions you that these forward-looking statements are subject to numerous risks and uncertainties, most of which are difficult to predict and many of which are beyond Solid Power’s control. In addition, the forward-looking statements contained herein are subject to the following factors: (i) changes in applicable laws or regulations, (ii) rollout of Solid Power’s business plan and the timing of expected business milestones, (iii) the effects of competition on Solid Power’s business, (iv) supply shortages in the materials necessary for the production of Solid Power’s products, (v) risks related to original equipment manufacturers and other partners being unable or unwilling to initiate or continue business partnerships on favorable terms, (vi) the termination or reduction of government clean energy and electric vehicle incentives, (vii) delays in the construction and operation of production facilities, (viii) Solid Power’s ability to protect amount its intellectual property, (ix) changes in domestic and foreign business, market, financial, political and legal conditions, and (x) the possibility that Solid Power may be adversely affected by other economic, business, and/or competitive factors. Should one or more of the risks or uncertainties described herein, or should underlying assumptions prove incorrect, actual results and plans could differ materially from those expressed in any forward-looking statements. Additional information concerning these and other factors that may impact the operations and projections discussed herein can be found in the “Risk Factors” section of Solid Power’s proxy statement. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Solid Power gives no assurance that it will achieve its expectations.

Trademarks and Trade Names

Solid Power owns or has rights to various trademarks, service marks and trade names that it uses in connection with its operations. This Presentation also contains trademarks, service marks and trade names of third parties, which are the property of their respective owners. The use or display of third parties’ trademarks, service marks, trade names or products in this Presentation is not intended to, and does not imply, a relationship with Solid Power, or an endorsement or sponsorship by or of Solid Power. Solely for convenience, the trademarks, service marks and trade names referred to in this Presentation may appear with the ®, TM or SM symbols, but such references are not intended to indicate, in any way, that Solid Power will not assert, to the fullest extent under applicable law, its rights or the right of the applicable licensor to these trademarks, service marks and trade names.

Industry and Market Data

Although all information, opinions and other information expressed in this Presentation, including market data and other statistical information, were obtained from sources believed to be reliable and are included in good faith, Solid Power has not independently verified the information and makes no representation or warranty, express or implied, as to its accuracy or completeness. Some data is also based on the good faith estimates of Solid Power, which are derived from its review of internal sources as well as the independent sources described herein.
Solid Power is the Leader in Solid-State Battery Technology

**Solid Product**

- **$300bn+ Market**
  - OEMs committed to EV growth
  - Market has room for multiple winners

- **Superior Performance vs. Li-ion**
  - Longer range, extended life and improved safety

- **Clear Path to Lowering Battery Costs**
  - Ability to reduce most expensive component of EVs
  - Simpler design, higher energy density

- **Validation from Industry Leaders**
  - JDAs and investment from Ford and BMW
  - Partnership and investment from Tier-1 Li-ion producer SK Innovation

**Solid Business Model**

- **Multiple Shots on Goal**
  - Cell manufacturing through licensing
  - Electrolyte sales to partners

- **Capital Light Business Model**
  - No need to construct capital intensive gigafactories

- **Proven Manufacturing Process**
  - Pilot production facility operational since 2019
  - Validation from OEMs, commercialization partners

- **Fully Funded Business Plan**
  - Through vehicle SOP (2026E)

*The only pure play solid-state battery public investment opportunity*

1. Based upon BNEF’s estimates of global electric and non-electric vehicle production in 2035. Battery opportunity assumes 70 kWh pack sizes and $85 / kWh.
2. Assumes no redemption by DCRC’s public stockholders. Based on current financial projections.
The Electric Vehicle Transition is Underway

In coming years, the EV market is expected to grow significantly

### Annual Global Passenger EV Sales
(Millions of Vehicles Sold)

### EV Battery Total Addressable Market
($ in Billions)

Source: Bloomberg NEF.

1. Based upon BNEF’s estimates of global electric and non-electric vehicle production in 2035. Battery opportunity assumes 70 kWh pack sizes and $85 / kWh.
Key Challenges of Current Lithium-Ion Technology

1. Limited Drive Range
   - Lithium-ion battery technology does not provide enough energy density to support extended drives before requiring recharging.

2. Cells Must Be Kept Cool
   - On average, current EV batteries are estimated to last 8 years, almost 4 years shorter than the car lifespan.¹

3. Elevated Safety Risk
   - Liquid electrolyte used in traditional lithium-ion battery cells is the enabler of thermal runaway and fire risk.

4. Expensive Pack Systems
   - Complex battery packs represent the single most expensive part of an electric vehicle.³

¹ Company estimate. ² Image source: Cherokee County Fire Department. ³ Bloomberg. “The battery pack is the single most expensive part of an electric vehicle, accounting for about 30 percent of the total cost to consumers.”
Solid Power's All-Solid-State Platform is a Revolutionary Advancement

A liquid and gel-free battery cell provides unique advantages over lithium-ion and other next-gen solutions

**Range**
- Solid electrolyte enables high temperature stability
- High-energy electrode materials deliver range comparable to ICE vehicles
- 482 vs 266 miles\(^1\)

**Battery Life**
- Non-volatile, 100% solid-state
- Could allow for the removal of expensive and extensively engineered battery pack cooling

**Safety**
- Safety
- Removal of flammable liquids and gels greatly reduces risk of battery fires

**Next Gen**
- Next Gen cathodes
- Enables next gen cathodes
- Potential to remove expensive nickel and cobalt

**Cost**
- Lower material and pack system costs
- Result of energy density, safety improvements, pack improvements and ability to utilize Lithium-ion equipment

---

Note: Solid Power cell performance metrics are initial commercialization design targets for Lithium Metal EV Cell.

1. Comparison based on a 77 kWh lithium-ion pack with cylindrical cells (i.e. Tesla Model 3 Pack) with a system volume of 329 L. Solid Power mileage assumes a constant 329 L system volume delivering 138 kWh with a pack mass of 481 kg utilizing Lithium Metal EV Cell design.
## All-Solid-State vs. Lithium-Ion vs. Hybrid Solutions

All-Solid-State expected to deliver significant benefits over current and other emerging solutions

<table>
<thead>
<tr>
<th>Feature</th>
<th>All-Solid-State</th>
<th>Traditional Lithium-Ion(^1)</th>
<th>Hybrid (Liquid + Solid)(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Energy</td>
<td>✔</td>
<td>✗</td>
<td>✔</td>
</tr>
<tr>
<td>Superior Safety</td>
<td>✔</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Long Calendar Life</td>
<td>✔</td>
<td>✗</td>
<td>?</td>
</tr>
<tr>
<td>Low Cost</td>
<td>✔</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

**All-Solid-State also enables future low-cost, high-energy cathodes not suitable in liquid or liquid/gel systems**

1. Company estimates based on today’s commercially available cells. 2. Company estimates based on hybrid cell developments.
Two Product Groups

### Sulfide Solid Electrolytes
- Proprietary sulfide-based solid electrolytes tuned for high conductivity and lithium metal stability
- Best all-around performing solid electrolyte materials
- Low-cost and scalable
- Capital light with attractive margins
- Can be sold to entire universe of companies pursuing their own sulfide-based all-solid-state batteries

### Energy Dense Pouch Cells
- Proprietary design and production of industry leading all-solid-state cells
- Intend to utilize top tier cell manufacturers as licensed commercialization partners
- Low-cost and scalable
- Third-party produced cells expected to be sold to Ford and BMW and compete for other Auto OEMs

#### Potential Customers

**Sulfide Solid Electrolytes**

- SK
- Toyota
- Hyundai
- LG
- Panasonic
- Samsung

**Energy Dense Pouch Cells**

- Other OEMs and Tier-1s
One Flexible All-Solid-State Platform

Solid Power’s solid electrolyte can accommodate existing and prospective cathode and anode materials

Core Technology: Solid Electrolyte

Unique variants tuned as electrolyte, catholyte and anolyte products

Flexible platform allows use of alternative anode + cathode materials to suit specific performance requirements

Silicon Based Anodes
- High charge rates and lower temperature capability

Lithium Metal Anodes
- High energy

Intercalation-Type Cathodes
- Industry-standard and commercially mature

Conversion-Type Cathodes
- Low cost and high specific energy

Electrolyte advancements through R&D are expected to benefit all anode and cathode chemistries
Path to Leadership in Electrolyte Supply and All-Solid-State Cell Design

Unique model creates dual path to initial commercialization

<table>
<thead>
<tr>
<th>Year</th>
<th>Electrolyte Production</th>
<th>Cell Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>Electrolyte produced to feed pilot cell line</td>
<td>Internal production of prototype cells</td>
</tr>
<tr>
<td>2022</td>
<td>Electrolyte production scaled to feed 100 Ah cell line</td>
<td>Internal production of 100 Ah Silicon EV Cells</td>
</tr>
<tr>
<td>2024</td>
<td>Electrolyte production scaled to feed internal and commercial partner 100 Ah cell production</td>
<td>External production of 100 Ah Silicon EV Cells, Internal production of 100 Ah Lithium Metal EV Cells</td>
</tr>
<tr>
<td>2026+</td>
<td>Endeavor to be world leader in sulfide electrolytes supplying all sulfide-based solid-state battery platforms</td>
<td>External production of all EV Cells, Continued internal R&amp;D and prototype production</td>
</tr>
</tbody>
</table>
Electrolyte Production is Capital-Light

Transferring cell production to commercial partners allows Solid Power to focus on core strengths and lower capex needs

**Capex per GWh of Production Capacity**

- $4.6 million$^1 for Electrolyte Materials
- $88.4 million$^2 for Cell Manufacturing

$^1$ Assumes 80 GWh of production equivalent sulfide-based solid electrolyte. 
$^2$ Ford and SK Innovation’s September 27th announcement of $11.4bn investment for 129 GWh production capacity.

**Cell Production Capacity By Manufacturer**

- Fully Commissioned
- Under Construction
- Announced

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Fully Commissioned</th>
<th>Under Construction</th>
<th>Announced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATL</td>
<td>660</td>
<td>257</td>
<td>165</td>
<td>61</td>
</tr>
<tr>
<td>LG Chem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BYD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SK Innovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAMSUNG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Global Capacity (GWh)**

- Fully Commissioned: 676
- Under Construction: 962
- Announced: 1,948
- Total: 3,586

**Capex per GWh of Production Capacity**

- ~19x more capital intensive$^1$ for Electrolyte Materials

**Manufacturing cells in-house would require ~$6.5bn$ of additional capital to deliver on Solid Power’s 2028 production forecast**

**Well capitalized players have developed significant scale and expertise**

**Competition is expected to be fierce**

1. Assumes 80 GWh of production equivalent sulfide-based solid electrolyte. 2. Ford and SK Innovation’s September 27th announcement of $11.4bn investment for 129 GWh production capacity. 3. Assumes $88.4 million x 80 GWh less $593 million of pro forma net cash assuming no redemptions. 4. Source: Bloomberg NEF.
Solid Power Product Roadmap

Sustaining a product roadmap with continuous performance improvements across three unique chemistries

Multi-product roadmap specifically geared to satisfy Auto OEM objectives of early and sustained success

Note: Lithium metal anode portrayed in the fully-charged state. Solid Power cell performance metrics are initial commercialization design targets. 1. Solid Power estimates.
Nearly Identical Production Process to Lithium-Ion

Solid Power is positioned to bring superior cells to market at scale through compatibility with lithium-ion processes.

Solid Power utilizes industry standard lithium-ion production processes and equipment:
- Substantially de-risks commercialization
- Allows for rapid technology transfer to commercialization partners
- Existing production lines can be transitioned as market demand grows (est. at 10% of cost of new plant)
- Minimal historical and future capex requirements to prove commercialization

Existing lithium-ion production infrastructure accommodates sulfide-based solid electrolytes.

De-risks commercialization and allows for rapid tech transfer to future commercialization partners.

Source: Adapted from Bloomberg NEF.
Real Results on the Path to Commercialization

Rapid performance and manufacturing achievements

Independent testing completed for 0.2 Ah and 2 Ah cells to date with 20 Ah independent testing pending. 1. Cell rendering shown for 100 Ah cell. 100 Ah Silicon EV Cell anticipated in 2022. 100 Ah Lithium Metal EV Cell anticipated in 2024.

Note: Lithium Metal EV Cell pouches shown for 0.2 Ah, 2 Ah, and 20 Ah. Each cell layer refers to the number of double-sided cathodes. 1. Independent testing completed for 0.2 Ah and 2 Ah cells to date with 20 Ah independent testing pending. 2. Cell rendering shown for 100 Ah cell. 100 Ah Silicon EV Cell anticipated in 2022. 100 Ah Lithium Metal EV Cell anticipated in 2024.
Ford participated in Solid Power's Series A funding in 2018, providing plan validation and capital.

Relationship dating back to 2016 conducting all-solid-state battery research and development.

Recent JDAs represent shift from collaborative R&D to vehicle integration programs.

Expanded JDAs announced in May 2021:
Developing 100Ah automotive cells for qualification testing and vehicle integration via BMW and Ford.

Source: Company press releases (BMW) (Ford).
Pathway to Vehicle Start-of-Production ("SOP")

Sulfide-based solid electrolyte, Silicon EV Cell and Lithium Metal EV Cell development timelines

**Product**

<table>
<thead>
<tr>
<th>Product</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sulfide-Based Solid Electrolyte</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refine Product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass Production</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Silicon EV Cell</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell: 2 Ah-20 Ah (proof of concept)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell: 100 Ah (concept validation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Validation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Execute Production Validation Build</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lithium Metal EV Cell</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell: 2 Ah-20 Ah (proof of concept)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell: 100 Ah (concept validation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Validation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Execute Production Validation Build</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Commercialization Partner**

- Pre A-Sample
- A-Sample
- B-Sample
- C-Sample
- D-Sample

**Vehicle SOP**
# Path to Market – Upcoming Milestones

<table>
<thead>
<tr>
<th>Year</th>
<th>Milestone Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>2 Ah Silicon EV Cells produced via MWh production line</td>
</tr>
<tr>
<td></td>
<td>2 Ah Silicon EV Cells delivered to auto partners</td>
</tr>
<tr>
<td></td>
<td>2 Ah Silicon EV Cells delivered to auto partners</td>
</tr>
<tr>
<td>2022</td>
<td>20 Ah Silicon EV Cells delivered to auto partners</td>
</tr>
<tr>
<td></td>
<td>100 Ah EV cell pilot manufacturing line operational</td>
</tr>
<tr>
<td></td>
<td>Formal entrance into automotive qualification with 100 Ah Silicon EV Cell</td>
</tr>
<tr>
<td></td>
<td>Increase 100 Ah Silicon EV Cell production to 300 cells/week</td>
</tr>
<tr>
<td></td>
<td>100 Ah Silicon EV Cells delivered to automotive partners</td>
</tr>
<tr>
<td>2023</td>
<td>100 Ah Silicon EV Cell concept validation completed by automotive partners</td>
</tr>
<tr>
<td></td>
<td>100 Ah Silicon EV Cell design validation begins</td>
</tr>
</tbody>
</table>

- **20 Ah Silicon EV Cells produced via MWh production line**
- **100 Ah EV cell pilot manufacturing line operational**
- **Increase 100 Ah Silicon EV Cell production to 300 cells/week**
- **100 Ah Silicon EV Cells delivered to automotive partners**
Solid Power is the Leader in Solid-State Battery Technology

**Solid Product**

- **$300bn+ Market**
  - OEMs committed to EV growth
  - Market has room for multiple winners

- **Superior Performance vs. Li-ion**
  - Longer range, extended life and improved safety

- **Clear Path to Lowering Battery Costs**
  - Ability to reduce most expensive component of EVs
  - Simpler design, higher energy density

- **Validation from Industry Leaders**
  - JDAs and investment from Ford and BMW
  - Partnership and investment from Tier-1 Li-ion producer SK Innovation

**Solid Business Model**

- **Multiple Shots on Goal**
  - Cell manufacturing through licensing
  - Electrolyte sales to partners

- **Capital Light Business Model**
  - No need to construct capital intensive gigafactories

- **Proven Manufacturing Process**
  - Pilot production facility operational since 2019
  - Validation from OEMs, commercialization partners

- **Fully Funded Business Plan**
  - Through vehicle SOP (2026E)

---

1. Based upon BNEF’s estimates of global electric and non-electric vehicle production in 2035. Battery opportunity assumes 70 kWh pack sizes and $85 / kWh.
2. Assumes no redemption by DCRC’s public stockholders. Based on current financial projections.
Thank You