Solid-State Battery Technology Efforts

		Anode		Test Conditions				
	Separator	Carbon or Lithium	Number of Layers	Cycles to 80%	Current density / mA cm^2	Temp / °C	Pressure / atm	Source
Impact to EVs				**Battery Life**	**Power (Acceleration, Charge Rate)**	**Energy Density (Range), Cost**	**Energy Density (Range), Cost**	
Requirement			Dozens	> 800	> 3	≤ 30 °C	< 1	QS Analysis
Toyota	Sulfide	Carbon/Silicon	Not Published	Not Published	Not Published	Not Published	Not Published	NEDO 2018 presentation
ProLogium	90% Ceramic		Not Published	1300	Not Published	Not Published	Not Published	Disclosed at De-Leon Conference ProLogium Brochure
Ionic Materials	Polymer	Lithium Metal	1	20	0.5	30	Not Published	Disclosed at 2020 AABC
Samsung	Sulfide		2	1000	3.4	60	20	2020 paper
SolidEnergy	Gel		Not Published	60	1.7	Not Published	Not Published	Disclosed at 2020 AABC
Solid Power	Sulfide		2 22	250 30	C/10	29	Not Published	Solid Power Twitter Disclosed at AABC Europe Solid Power Update
QuantumScape	100% Ceramic		1 4	>1000 >800	3.2	30	3.4	QS Shareholder Letter

KEY	≥10	2-10	1	≥800	600-800	<600	≥3	<3	≤30	30-45	>45	<2	2-10	≥10

For a detailed description of the performance metrics and separator materials characteristics please refer to Solid-State Battery Landscape.

PLEASE NOTE: The data presented above is made as of March 4, 2021 and is based on information that we have been able to obtain, infer or derive from publicly disclosed materials and presentations. This information likely will change over time and QuantumScape does not make any representations as to the accuracy and completeness of the competitive data presented, nor does it make any claims about the actual performance of the cells being developed by other companies. By presenting this information, we are do not undertake any obligation to update this chart to reflect events or circumstances after the date they were made, whether as a result of new information, future events or otherwise, except as may be required under applicable laws.