LiNova

Energy LP.

At LiNova we're solving the battery materials supply problem not by changing the game, but by changing the players.

Who are the new players?

LiNova's Polymer Cathodes

The LiNova Advantage

MORE ENERGY

Gen 3 at 450 Wh/kg for significantly longer life/ range

LOW COST

Polymers are significantly less expensive than legacy metal cathode materials such as NMC, NCA and LFP.

LIGHTER

Polymer Cathodes are significantly lighter than conventional cathodes

FAST CHARGING

LiNova's proprietary chemistry will allow for faster charging than conventional Li-Ion batteries

SAFE

Proprietary electrolyte, dendrite blocking solid-state membrane and polymer cathode provide a significantly safer system with no thermal runaway

SUSTAINABLE

Polymers are abundant and locally sourced. Their ability to be manufactured and processed in North America utilizing existing infrastructure will replace our reliance on nickel and cobalt.

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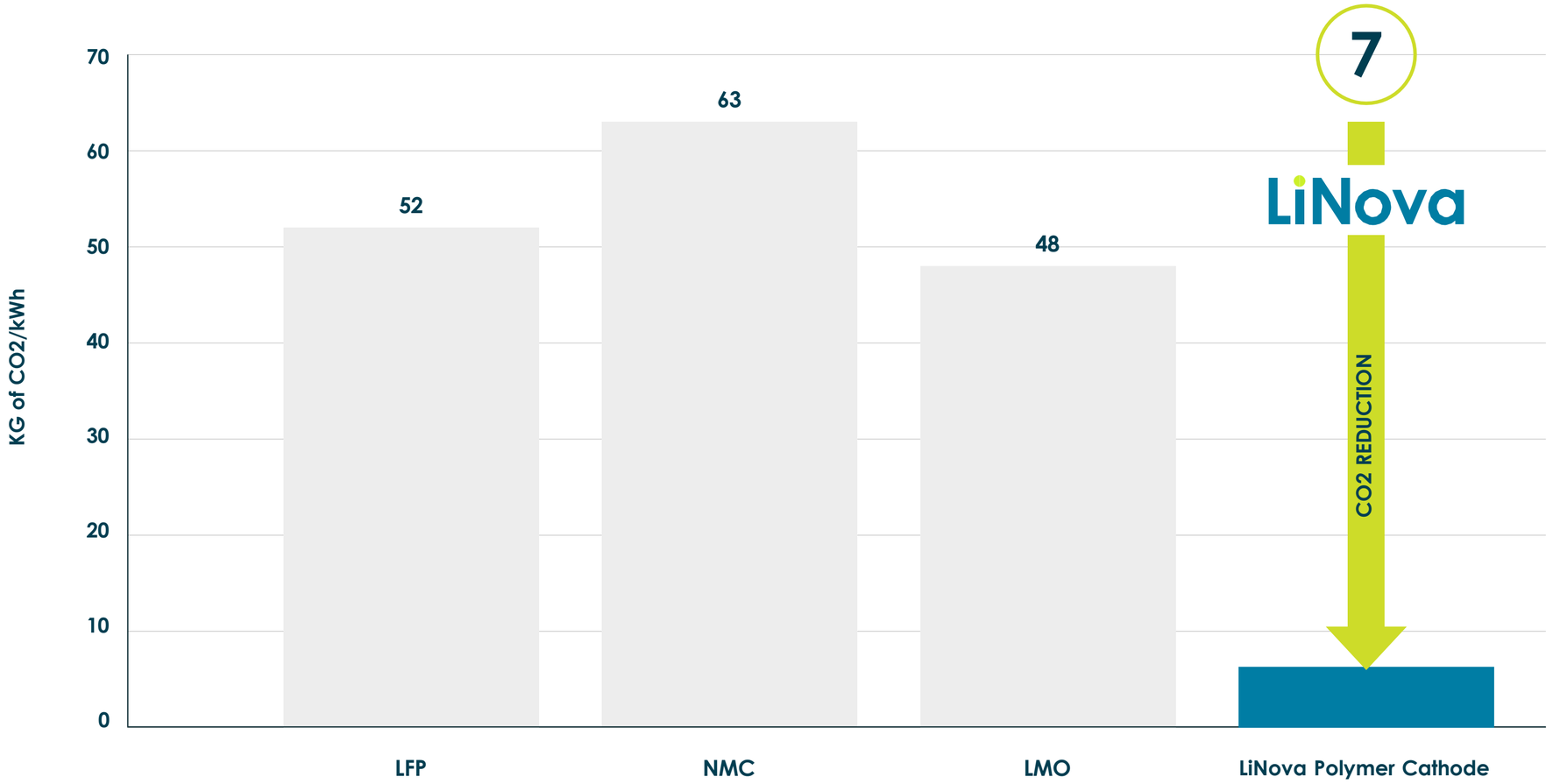
LiNova Polymer Cathode:

Dramatically Reduces Greenhouse Emissions from Cathode Active Material Production



Sources: A. Alsabri, et al., Polymers, 2021, 13, 3793
H. Hao, et al., Sustainability, 2017, 9, 504
J. Zheng, S. Suh, Nature Climate Change, 2019, 9, 374

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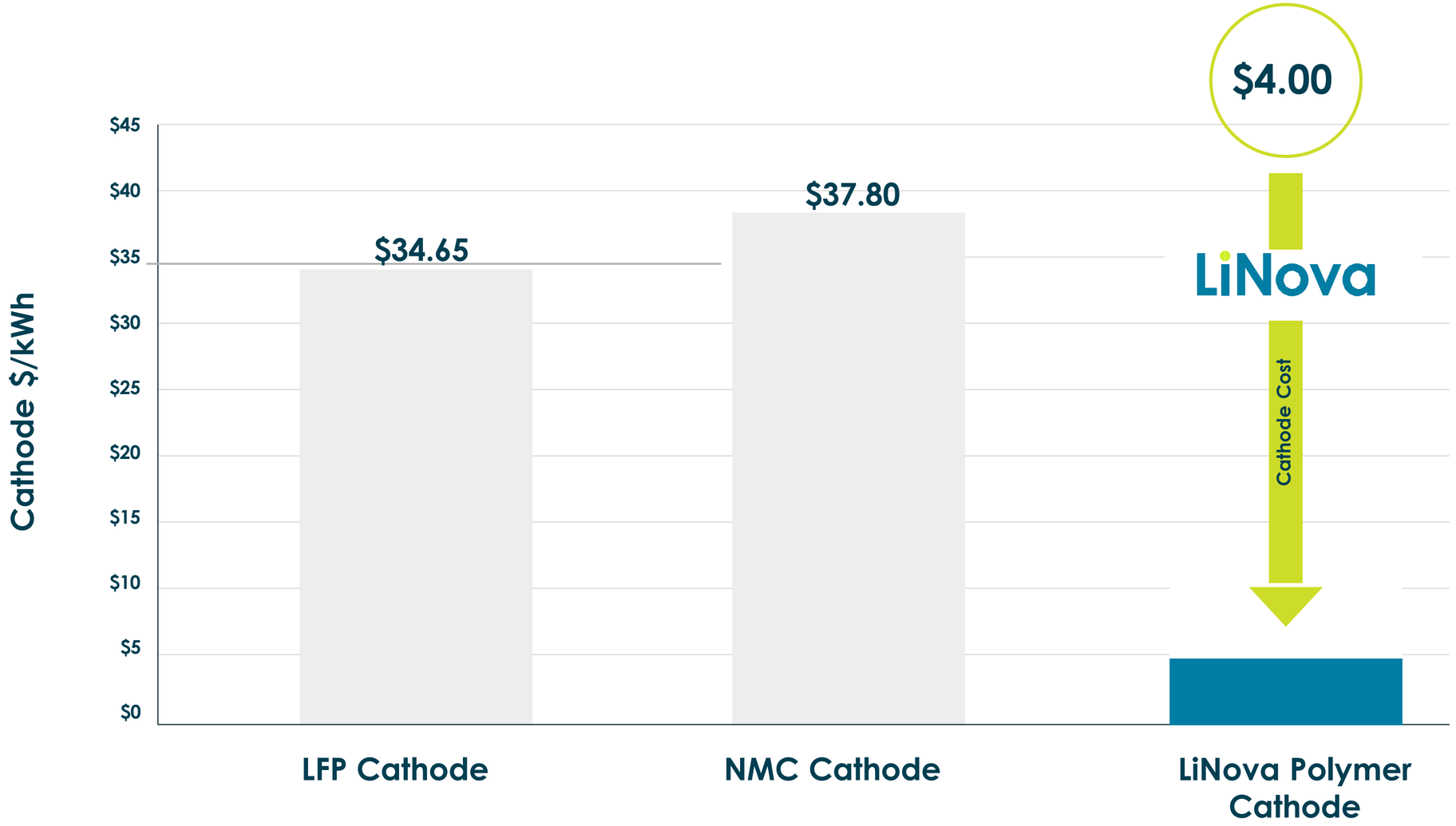
LiNova Polymer Cathode Cost Comparison:

Significantly Less Expensive



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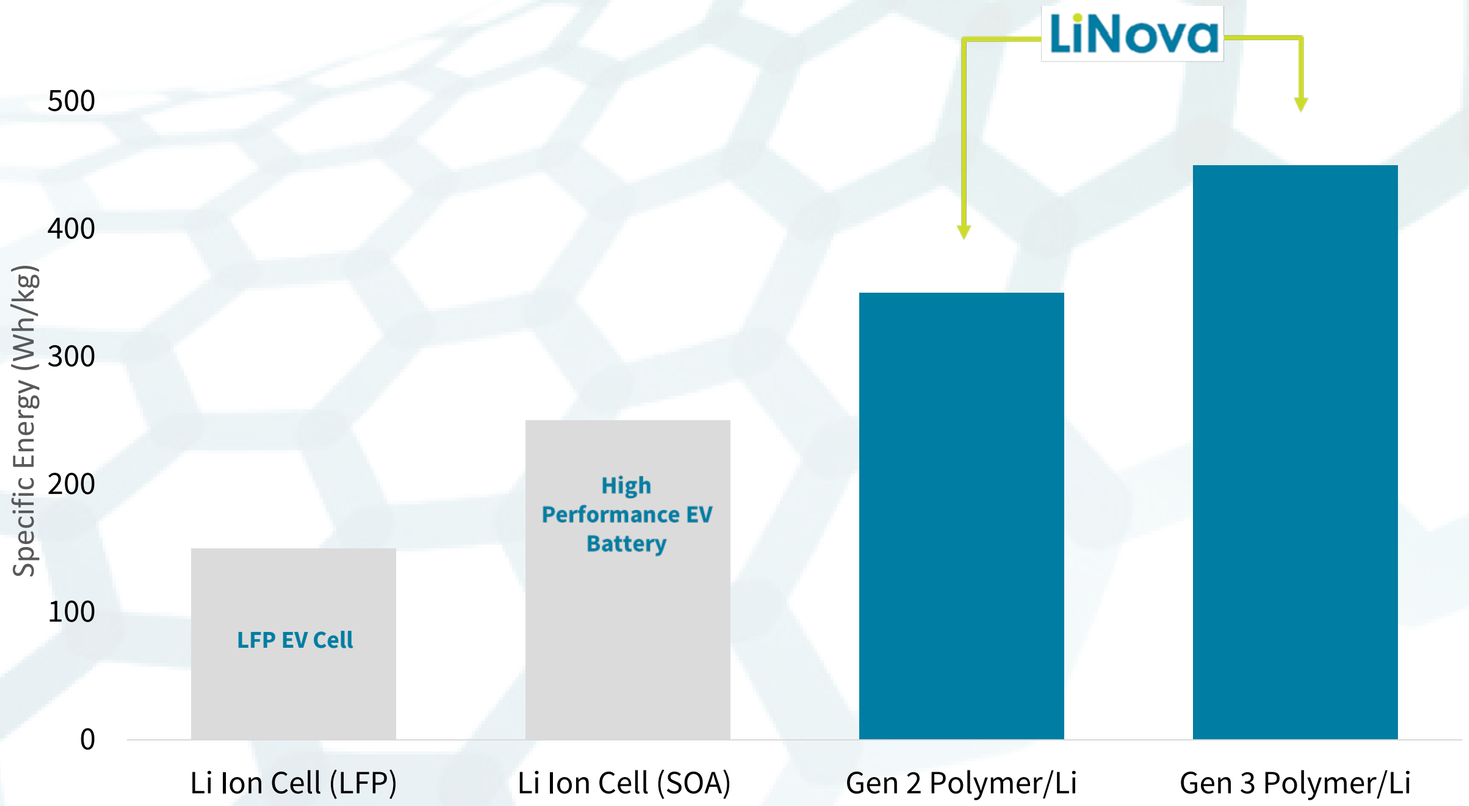
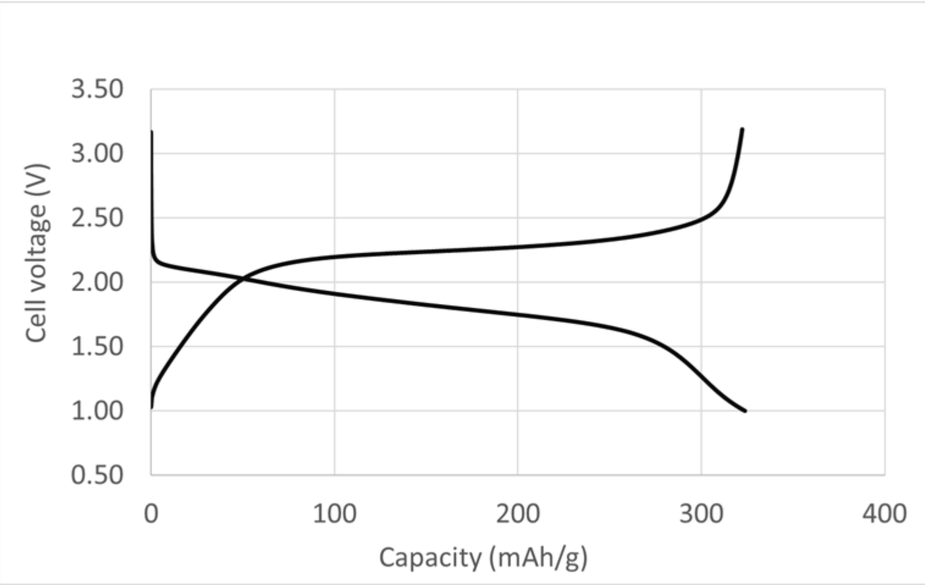
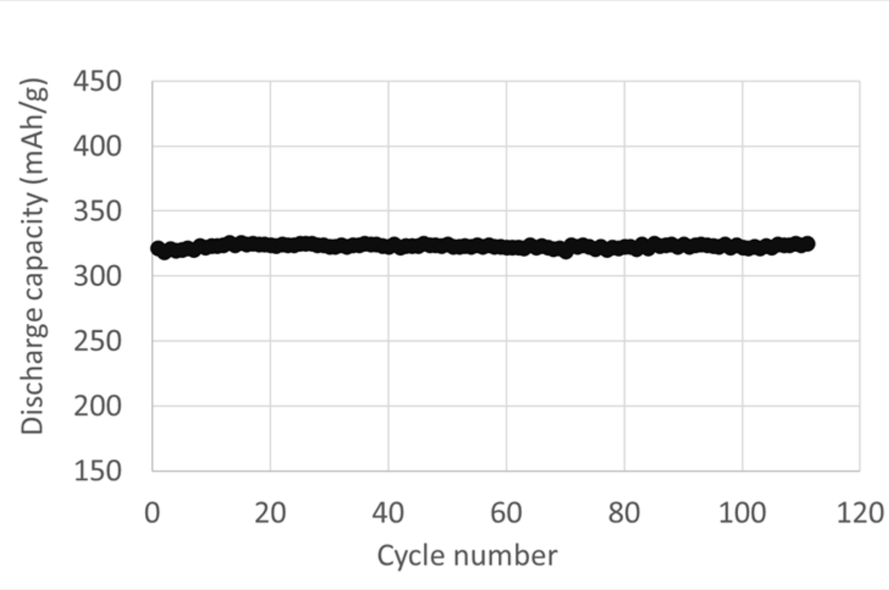
Cell Level Specific Energy



LiNova Polymer Cathode performance

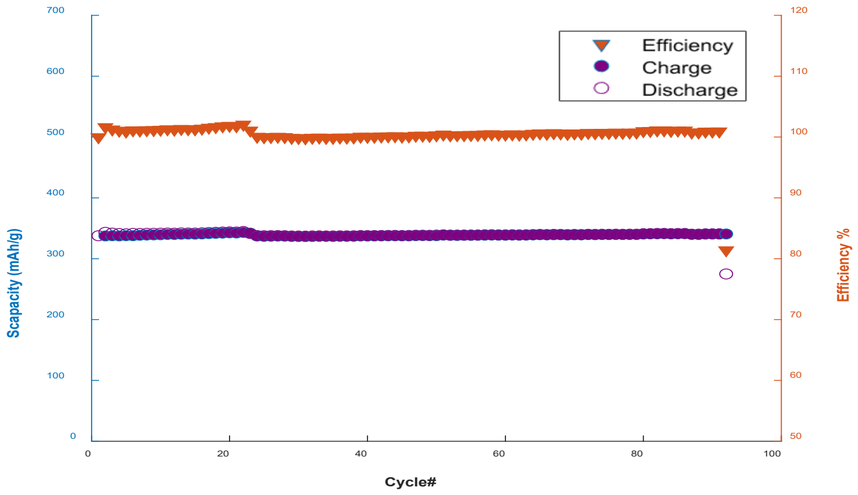


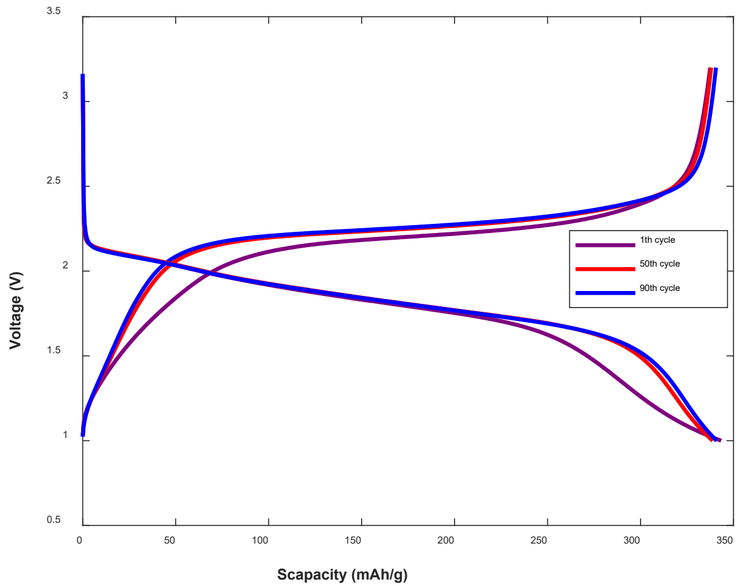


- Capacity: 325 mAh/g
- Stable cycling: up to 112 cycles at C/5 (ongoing)
- Coulombic efficiency: ~100% up to 112 cycles at C/5

LiNova Polymer Cathode 3rd party testing

UC San Diego
Jacobs School of Engineering





- Capacity: 345 mAh/g
- Stable cycling: up to 90 cycles (ongoing)
- Coulombic efficiency: ~100%

Our Team

MIKE NAGUS, CEO

Mike is currently the CEO of Alionyx Energy Systems. Over the last 12 years he has held upper level management positions in the commercial battery manufacturing space, including as President of Charger Industries, and Vice President of Power Products at HPC (the parent company of Engineered Power and Charger Industries). Mike has a Bachelors of Science in Mechanical Engineering from the University of Saskatchewan.

ZEIAD MUNTASSER, COO

Zeiad is currently the president and chief engineer of Alionyx Energy Systems. He has over 18 years of technology and leadership experience. His expertise is in new product development, battery design and electrode coating and processing. Prior to AES, Zeiad was the director of product development with Engineered Power. He also worked at Enevate as a team leader, engineering materials in silicon systems. Zeiad also worked for Enersys, Powergenix and Reveo. Over the course of his career, Zeiad has managed over 30 million dollars of private and government projects. He has over 10 pending and granted patents and over 15 publications. Zeiad has an M.S. in corrosion from Dalhousie University and B.S. in mechanical engineering.

DR. LIN-FENG LI, CTO

Lin-Feng has two decades of energy technology and management experience. His experience includes scaling up a battery manufacturing facility and bringing the venture to full production. Lin-Feng has over 20 issued and pending US patents and has been PI for over $30 million of DOD, ARPA-E, DOE, NSF, NASA, and NYSERDA SBIR and non-SBIR programs. Lin-Feng has B.S. degrees in both Chemistry and Applied Physics from Tsinghua University and a Ph.D. in Chemistry from Case Western Reserve University.

GUY LONGOBARDO,
VP OPS NY AND GENERAL COUNSEL

Guy has business and legal experience in a broad range of industries. Experience includes positions with HSBC Securities (Managing Director and Head of Corporate Finance) and ETS Payphones, Inc. (Chairman and CEO), serving as a public official and on corporate, community and non-profit organization boards. BA in Economics from Williams College and JD from Columbia University School of Law.

BOB GALYEN
DIRECTOR AND TECHNICAL ADVISOR

Bob is recognized as one of the top executives in the battery energy storage world and science/engineering-based communities. His positions as CTO of CATL (the world's largest battery manufacturer), Chairman of SAE International Battery Standards Steering Committee, SAE Fellow, Chairman Emeritus and CTO of NAATbatt International, provides him a unique leadership perspective in the global battery industry. His degrees in chemistry and biology, along with decades of engineering experience and executive roles, provides him a unique view in a leadership or consulting role in cross functional technology areas. He has patents, publications and participates on multiple BOD's and TAB's. The 44 years' international work experience has given him a visionary perspective on worldwide business, making him uniquely qualified as a global energy storage and scientific/engineering community thought leader.

Dr. SIMON JONES, SCIENTIFIC ADVISOR

Simon has over 18 years of chemical technology and leadership experience in start-up companies focused on the commercialization of technologies developed at Caltech and MIT. He is currently the CEO of Fluid Efficiency, a Caltech-originated start-up in the specialty chemical space. Past relevant roles and experience include as Senior Member of the Technical Staff, NASA-JPL as the energy storage subject matter expert in the Electrochemical Technologies Group; Vice President Technology, Contour Energy Systems, a battery technology company based in CA; and Research Chemist, Materia Inc. working with Dr. Robert Grubbs (the 2005 winner of the Nobel Prize in Chemistry.)

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