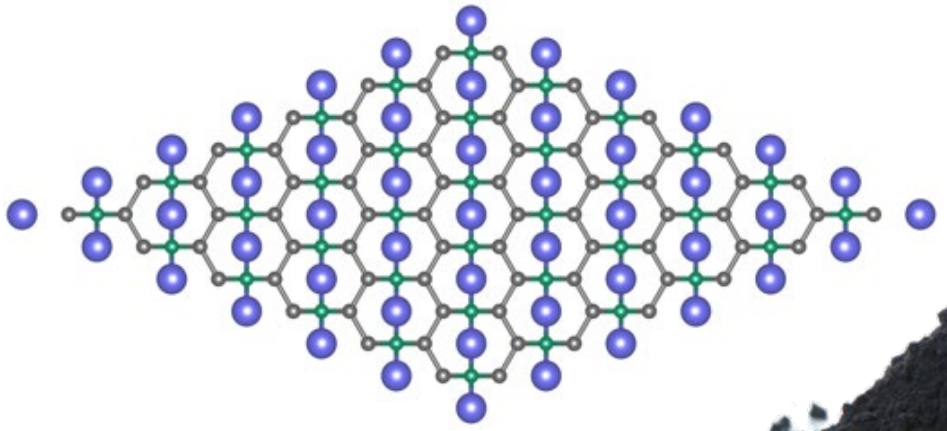
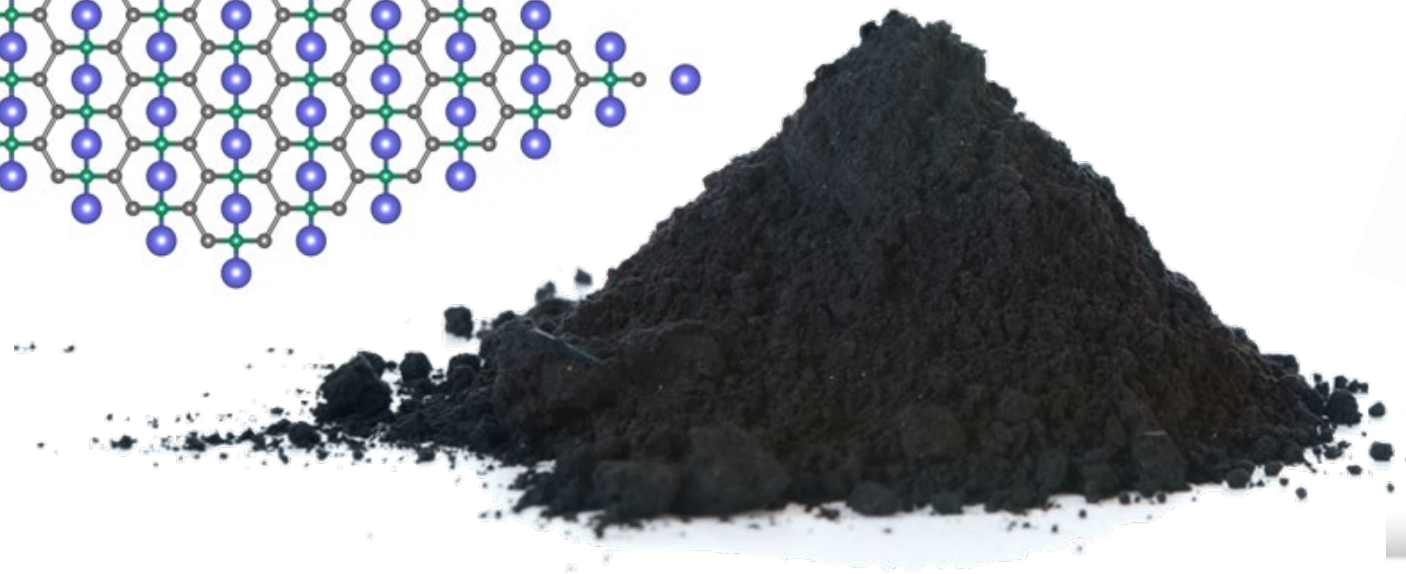
REVOLUTIONARY MATERIALS FOR EVOLUTIONARY SOLUTIONS





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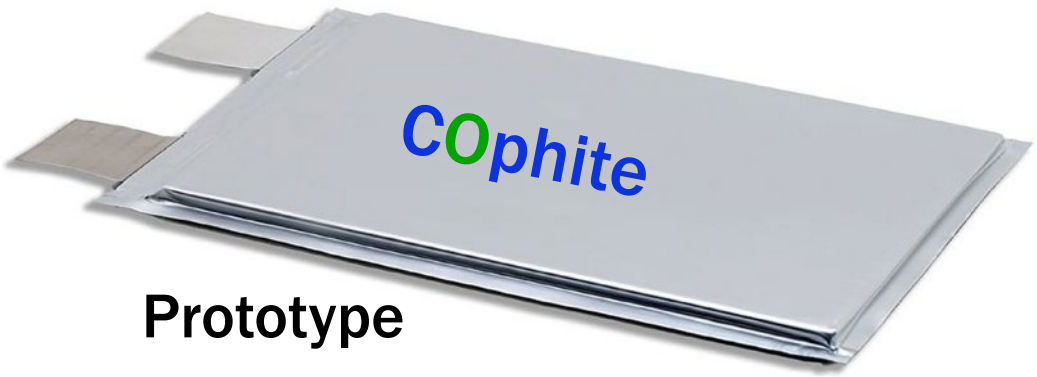
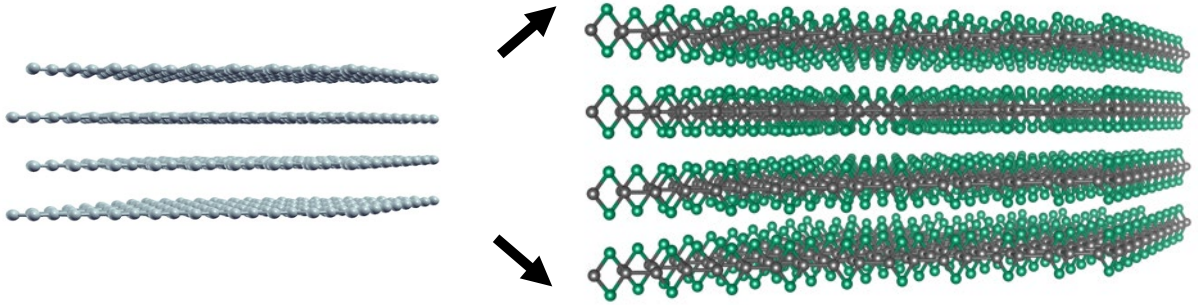
LARGER SPACING AND OXYGEN ENABLE BETTER PERFORMANCE



Prototype



Graphene Layers
in Graphite
372 mAh/g (LiC_6)

Graphene Monoxide Layers
in COphite Material

Graphene Monoxide:
957 mAh/g ($Li_2C_2O_2$)*

Large spacing between the carbon layers makes it easier for the lithium to move in, and oxygen sites for binding lithium

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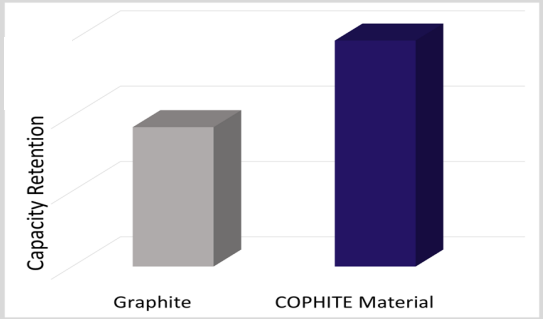
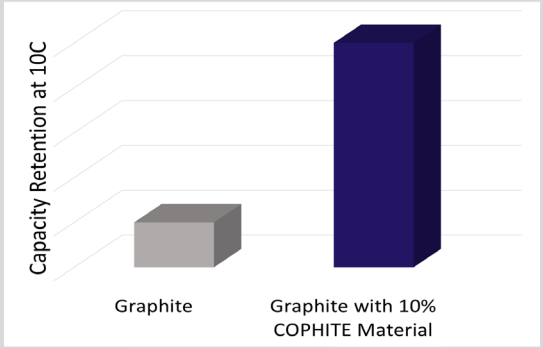
*D Radevych, M Gajdardziska-Josifovska, C Hirschmugl, M Weinert, J. Phys. Chem. C 125(2021)11820

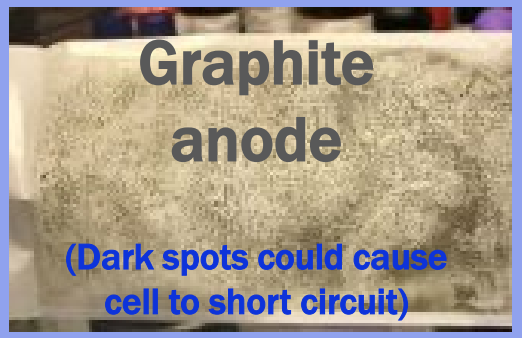
PATENTED COPHITE™ MATERIAL OFFERS SIGNIFICANTLY BETTER BATTERY PERFORMANCE, SAFETY AND SUSTAINABILITY

Higher Capacity (2x)
Faster Charging (6x)





Better Safety after Low Temperature Operation



Can be derived from inexpensive, natural sources

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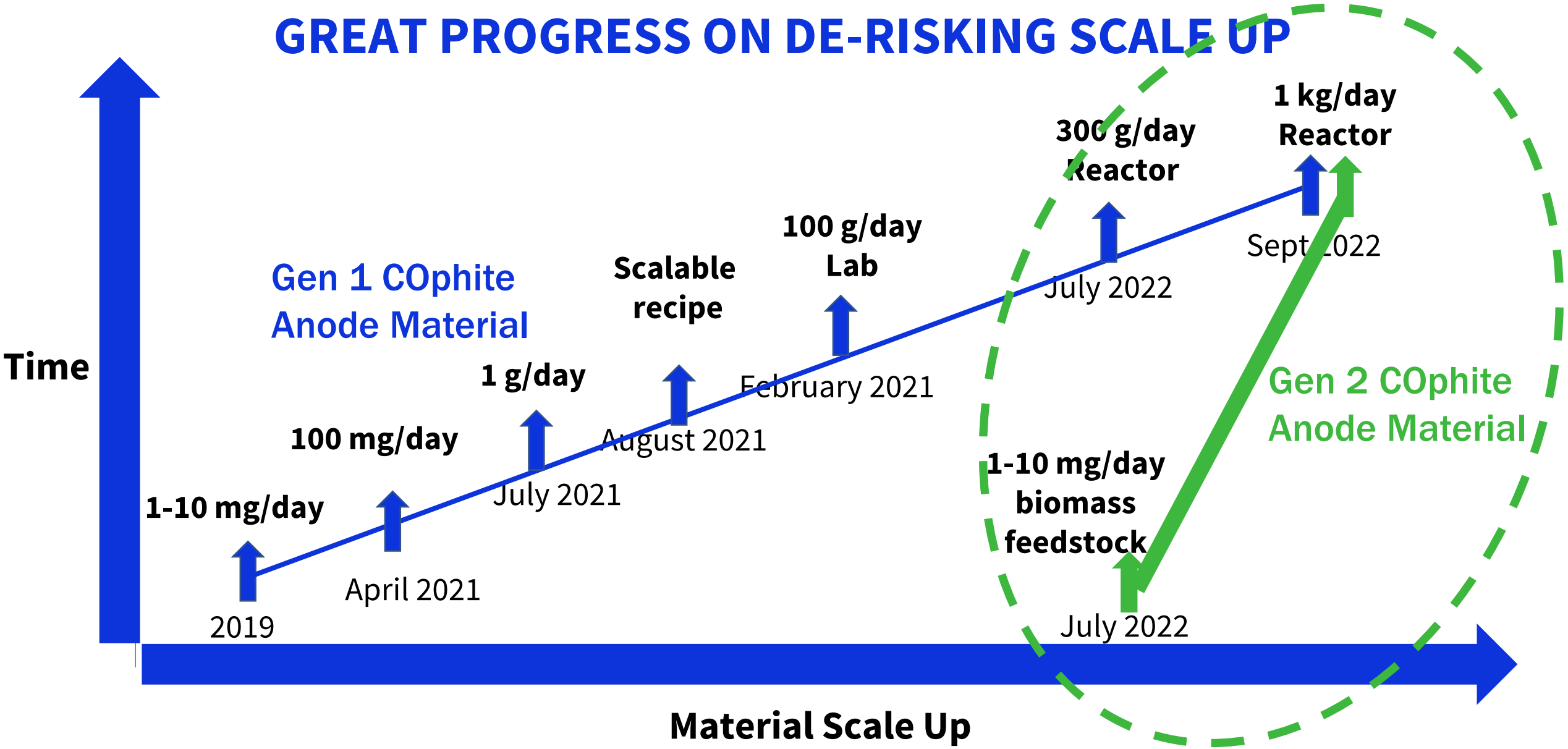
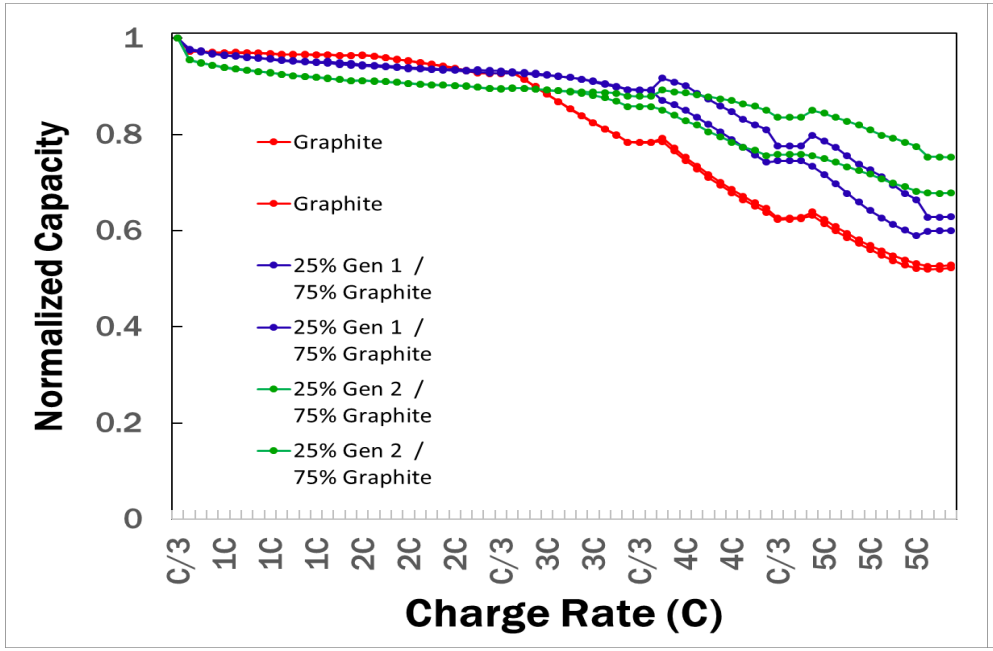
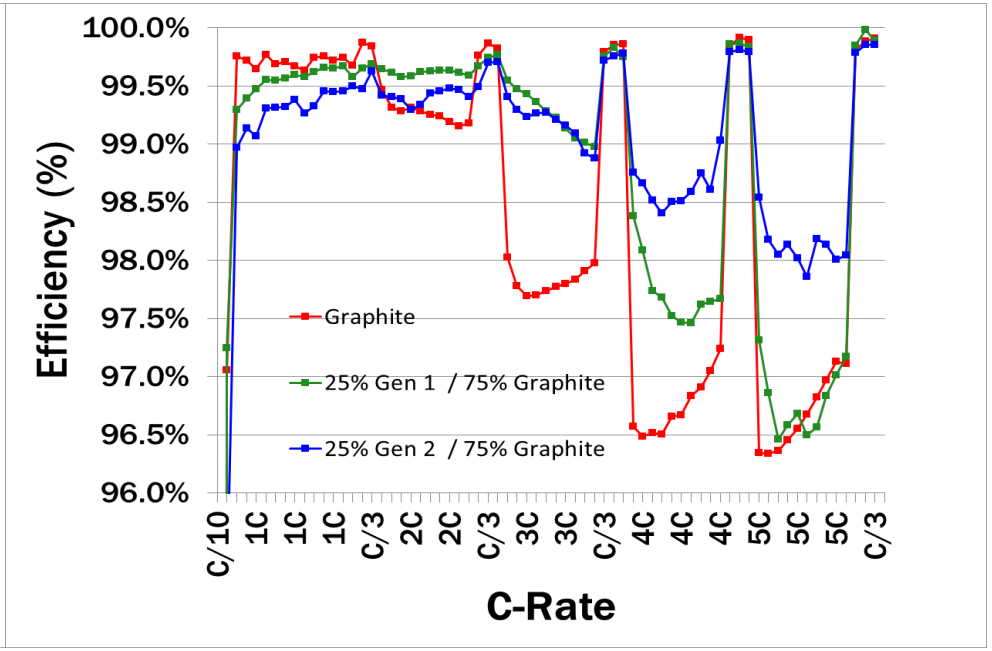
GREAT PROGRESS ON DE-RISKING SCALE UP



3rd party battery validation: Material Quality HIGH

SINGLE LAYER POUCH CELL PERFORMANCE





Remaining challenge: Leveraging $1M NSF SBIR Phase II to address 1st cycle irreversible loss

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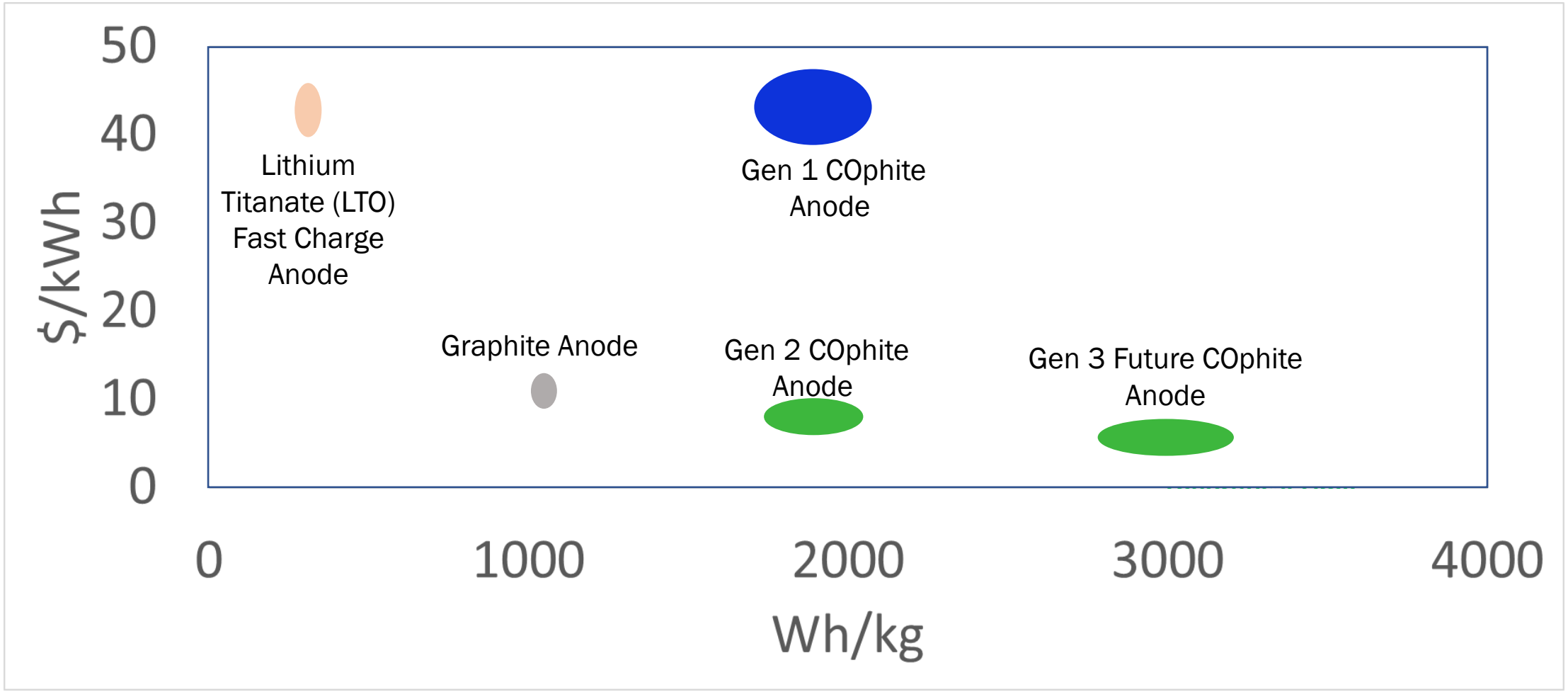
COPHITE ANODES ARE COST COMPETITIVE WITH INCUMBENT GRAPHITE



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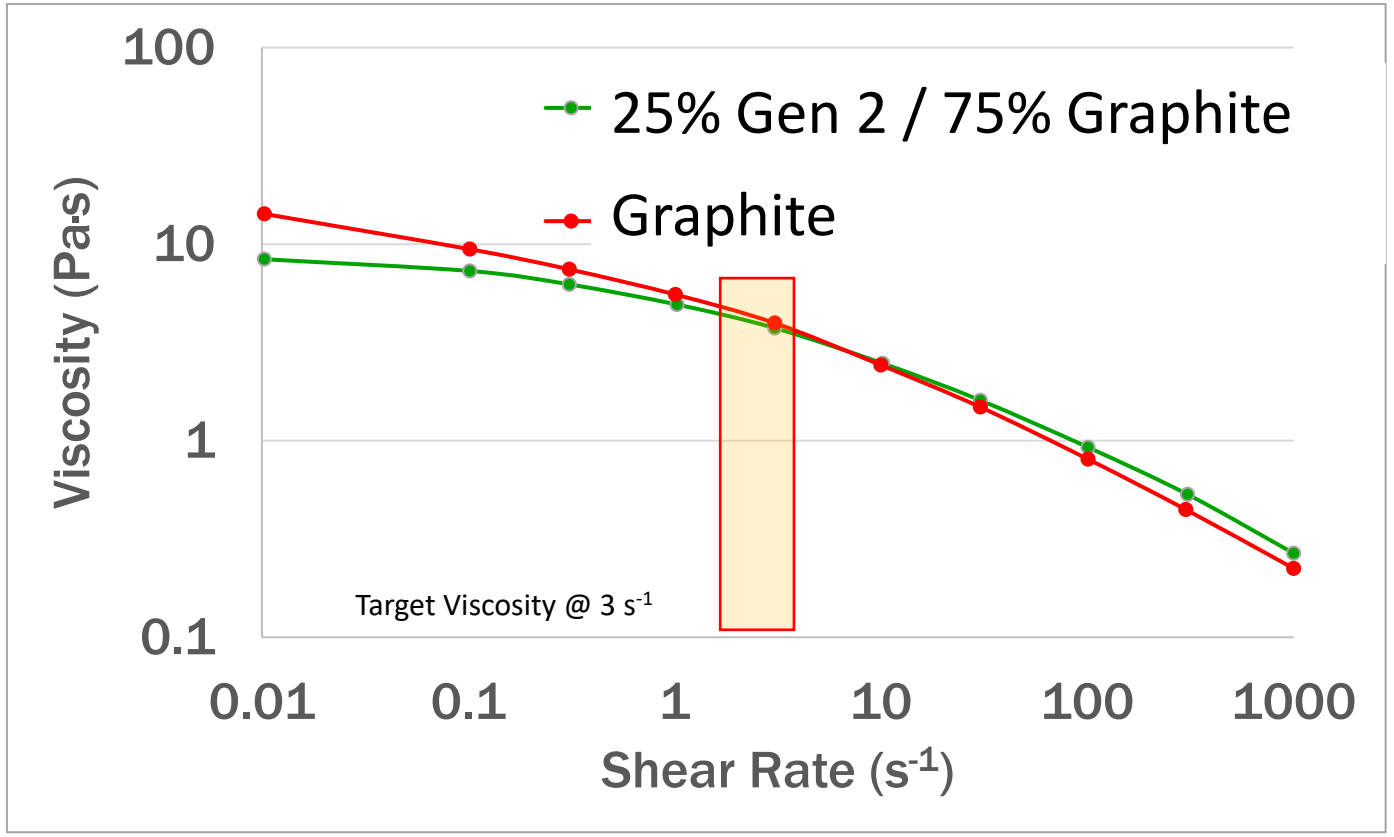
Feedstocks will drive our material cost

COPHITE MATERIAL WORKABILITY



COphite material has desirable viscosity

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SUMMARY

- Patented COphite material has demonstrated good capacity, fast charging, workability and safety
- COphite is compatible with incumbent materials (graphite) and anode processing with existing infrastructure
- We are developing and scaling a cost effective, domestic solution into the anode materials marketplace

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