

Quino Energy: Practical, Affordable Grid Storage



Opportunity: Storage is necessary for grid decarbonization through renewables

Solution: Quino Energy's redox flow batteries

What we do: Quino is scaling up **aqueous redox flow batteries** made from **abundant coal/wood tar** that will **beat Li-ion in \$/kWh for 5-12 hour storage** durations.

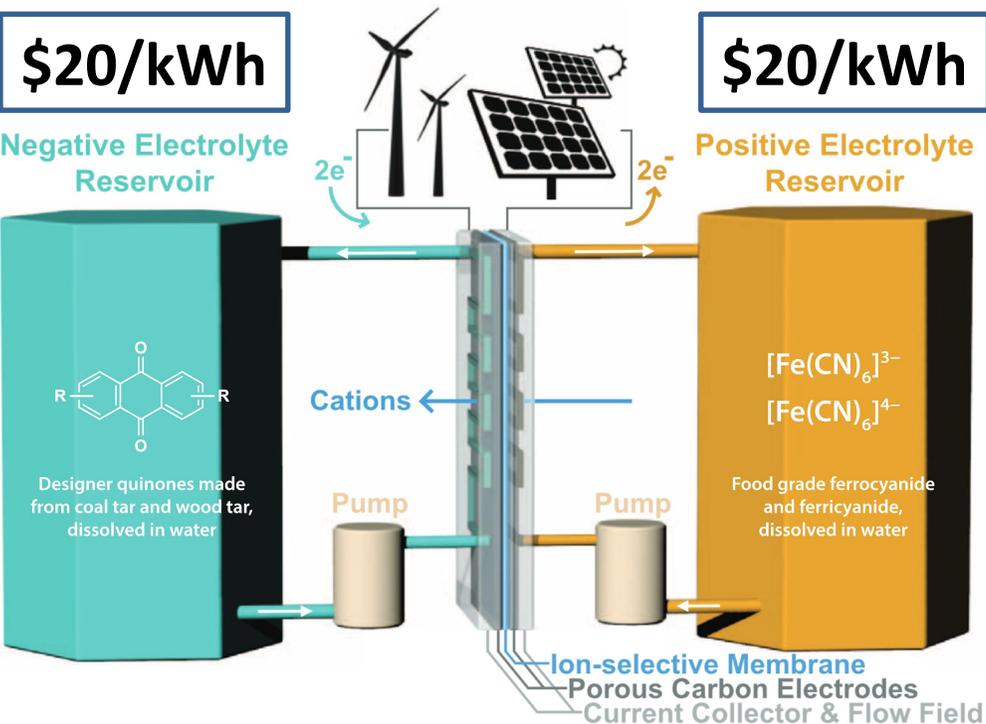


Figure adapted from team publication: R. G. Gordon, M. J. Aziz et al. *Science* **2015**, 349, 1529-1532
Source for cost of manufacture: T. D. Gregory, Borealis Technology Solutions LLC, under contract.

Features

Low Cost. Made from abundant coal/wood tar in a simple patented zero-waste process. Low maintenance and easy recycling.

Ultralong Lifetime. Decadal lifetime enabled by patented low degradation molecules and in-situ capacity recovery process.

Unmatched Safety. True zero fire risk: water-based, no hydrogen production, no lithium, no organic solvents, no volatiles.

Company and Project Status

- Lab-scale systems demonstrated, characterized, and published
- Awarded \$4.6M Department of Energy grant for scaleup
- Technology license with strategic partner signed Feb 2022
- Product demo with strategic partner expected in Q2 2022
- \$1.2M of \$2.0M currently raised for seed round (Feb 2022)

Questions for C2M

- What is the best beachhead market: residential, commercial, utility?
- Which users actually care about fire safety and will they pay more?
- How much is safety worth: installation, insurance, intangibles?