

Liquid Metal Battery Corporation (LMBC)

seit August 2012: Ambri, Inc. (Quelle der Info und Bilder: LMBC / Ambri)

Entwickler: MIT Professor(Donald Sadowy) und Studenten

Ansatz: möglichst billige Materialien
möglichst einfach Technik / Skalierbarkeit
für den stationären Gebrauch
will Partnerschaften mit Metalverarb. Getrieben in aller Welt eingehen
= schnelle Verteilung vieler Geräte

Grundaufbau:

obere Lage: Magnesium

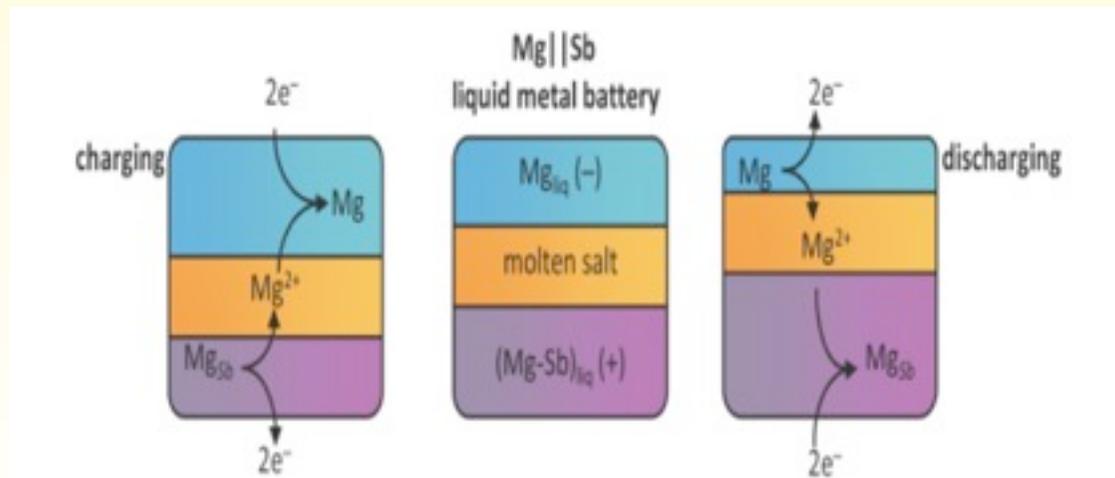
(neg. Elektrode)

-----dazwischen: Salz / Magnesium Chlorid Mischung

(Elektrolyt)-----

untere Lage: Antimon (Sb)---früher: Stibium

(pos. Elektrode)

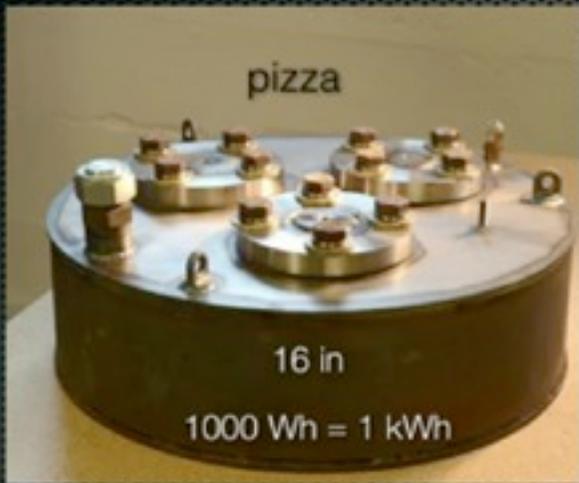


Temp: 700° C

Figure 2. Schematic of a Mg|Sb liquid metal battery comprising three liquid layers that operates at 700 °C. During charging, Mg is electrochemically extracted from the Mg-Sb alloy electrode and deposited as liquid Mg on the top (negative) electrode. During discharging, the Mg electrode is consumed, and Mg is deposited into the Mg-Sb liquid bottom (positive) electrode. During charging, the battery consumes energy; upon discharge,

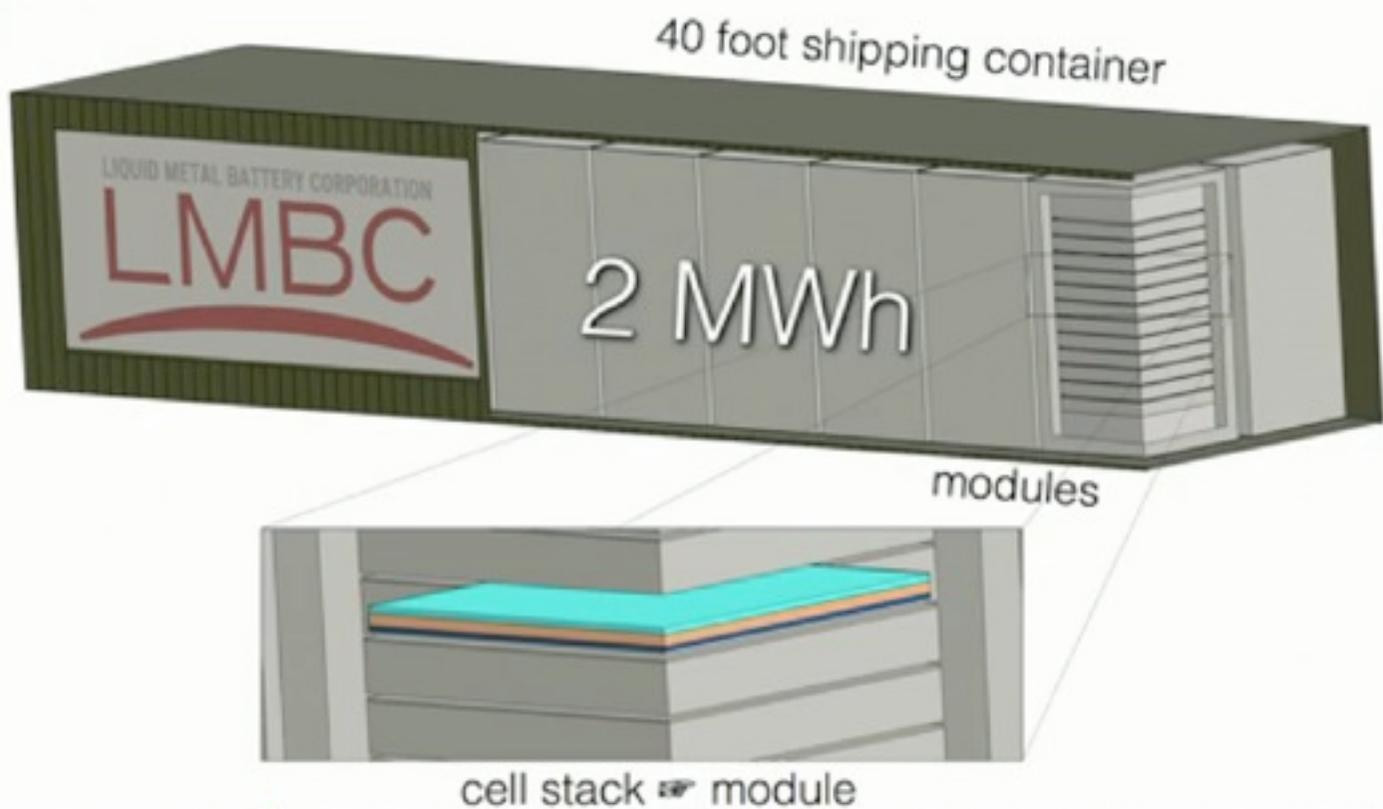


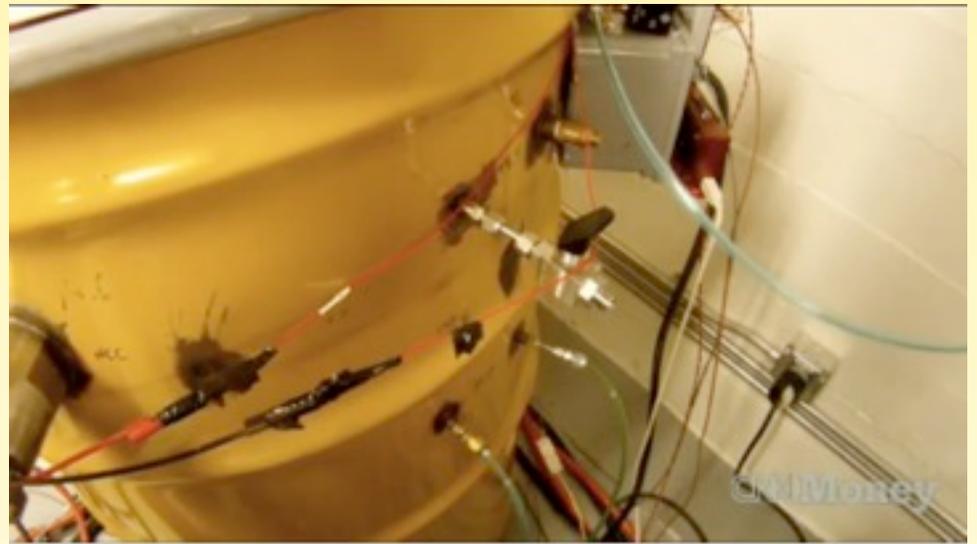
4000 Wh = 4 kWh



Sponsoren:

- * MIT
- * Bill Gates Stiftung
- * Total (franz. Ölfirma)





Courtesy: Liquid Metal Battery Corp.

