

Update Oktober 2014

Liquid Metal Battery Corporation (LMBC)

seit August 2012: Ambri, Inc.

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Entwickler: MIT Professor(Donald Sadowy) und Studenten

Grundaufbau:

obere Lage: Magnesium

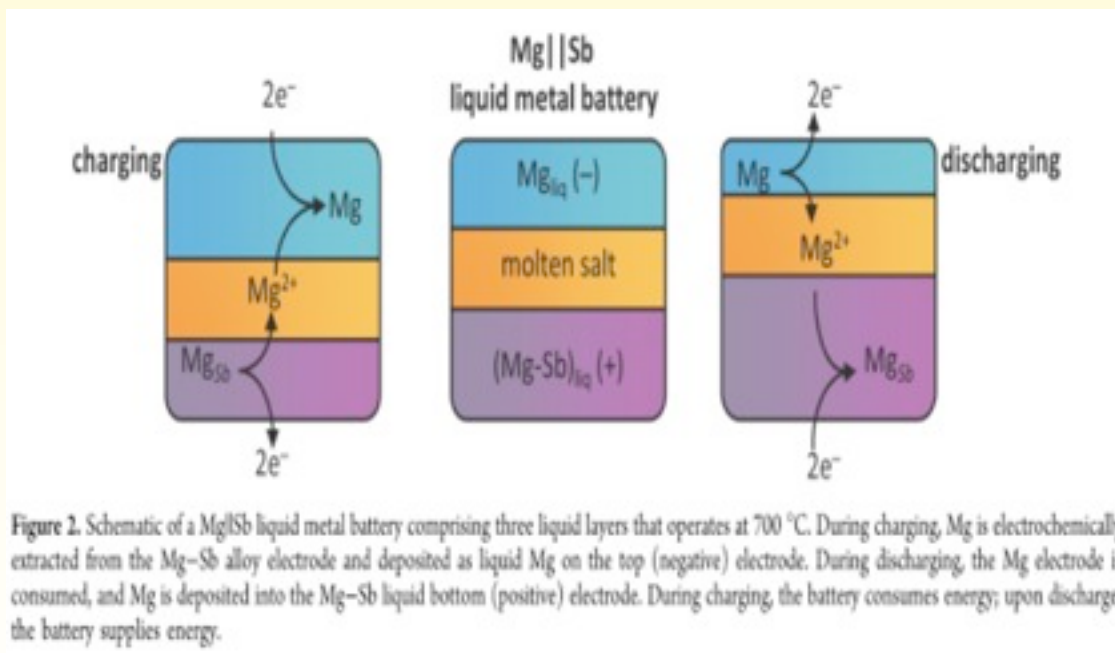
(neg. Elektrode)

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

(Elektrolyt)-----

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

(pos. Elektrode)

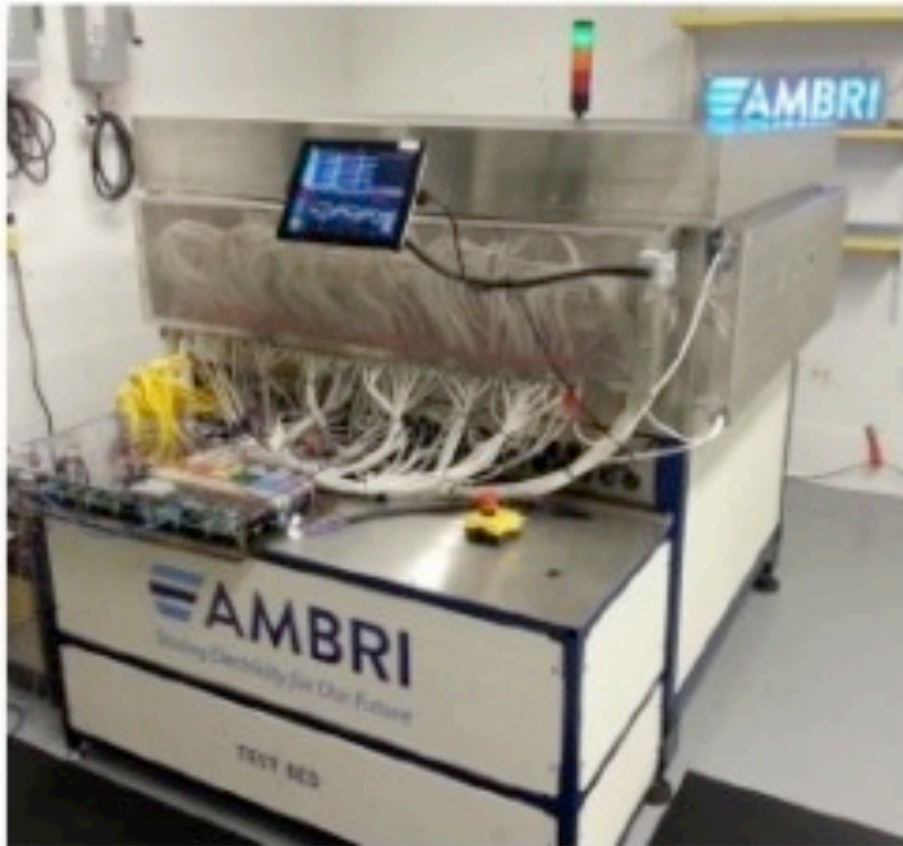


Temp: 700° C

Laboratory systems

Fall 2013

Test Bed (36 cells, 2 kWh)



- Operational fall 2013
- First laboratory 'system'
- One thermal chamber
- Battery management system

Spring 2014

Alpha Core (432 cells, 20 kWh)



- To be operational late Q1 2014
- First 'scaled' system
- One thermal chamber
- High temperature busbars and interconnects

Commercial deployment projects

Ambri recently selected for several prototype commercial deployments in 2014:

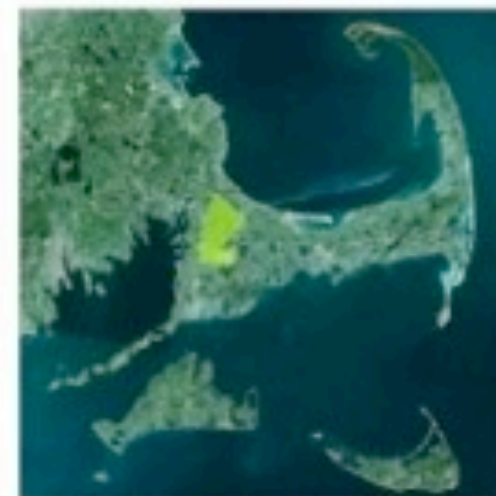
1. Project Vigilance

- Joint Base Cape Cod, Massachusetts
- Deploy 35 kWh prototype system, coupled with economic assessment via 3rd party analysis group
- Increase grid security and reliability

2. Project Imua! (Forward!)

- Two 35 kWh Core deployments: 1) Hawaii Natural Energy Institute, 2) partner site (TBD)
- Partners: First Wind, Hawaiian Electric Company, Maui Electric Company, Hawaii Electric Light Company
- Applications: Solar integration, peak shifting, reduced wind curtailment, ramp-rate-excursion mitigation, freq reg., voltage support

Other projects underway, 4 projects awarded, 2 rejected, 3 pending



JBCC in Cape Cod, MA



First Wind windfarm on Maui