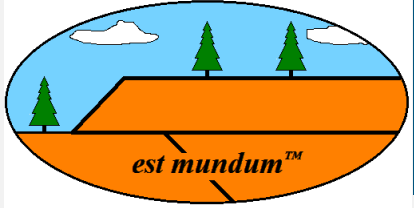
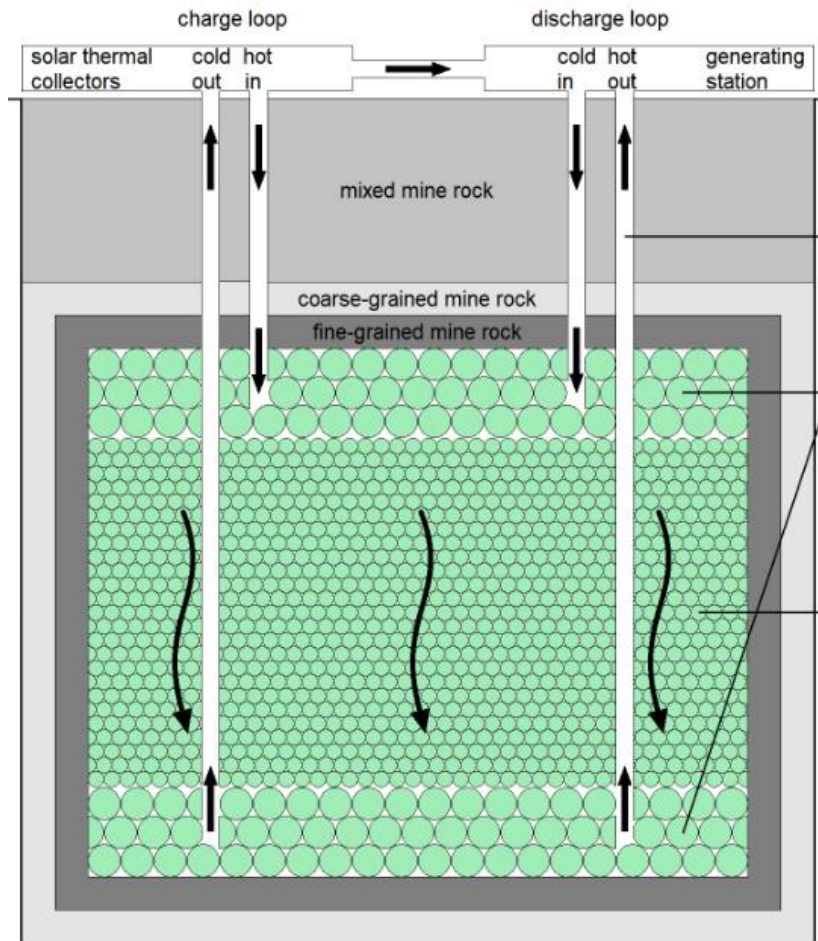


BiMBy™ Big Mass Battery

Ray Donelick, PhD
donelick@apatite.com



Glass Spheres to Store Solar Energy

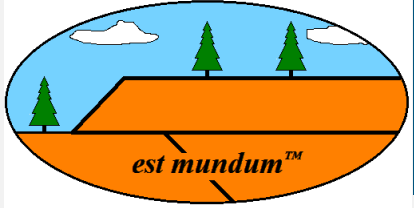


When the sun is shining

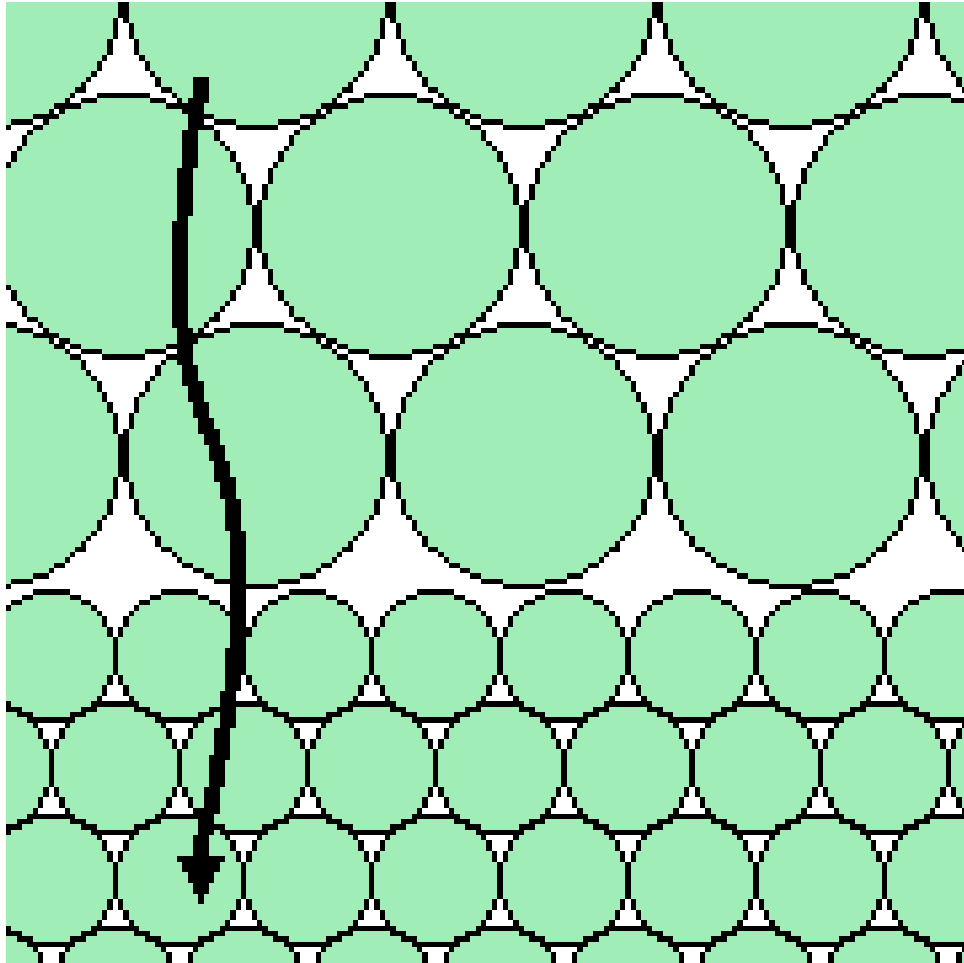
- Heat fluid with sunlight
- Transfer heat to glass spheres and store it

During night or winter

- Transfer heat to fluid from glass spheres
- Run turbines

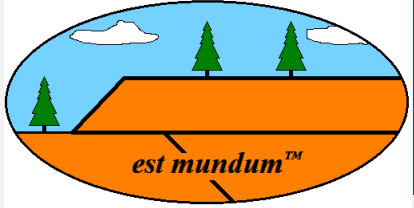


Glass Spheres to Store Solar Energy

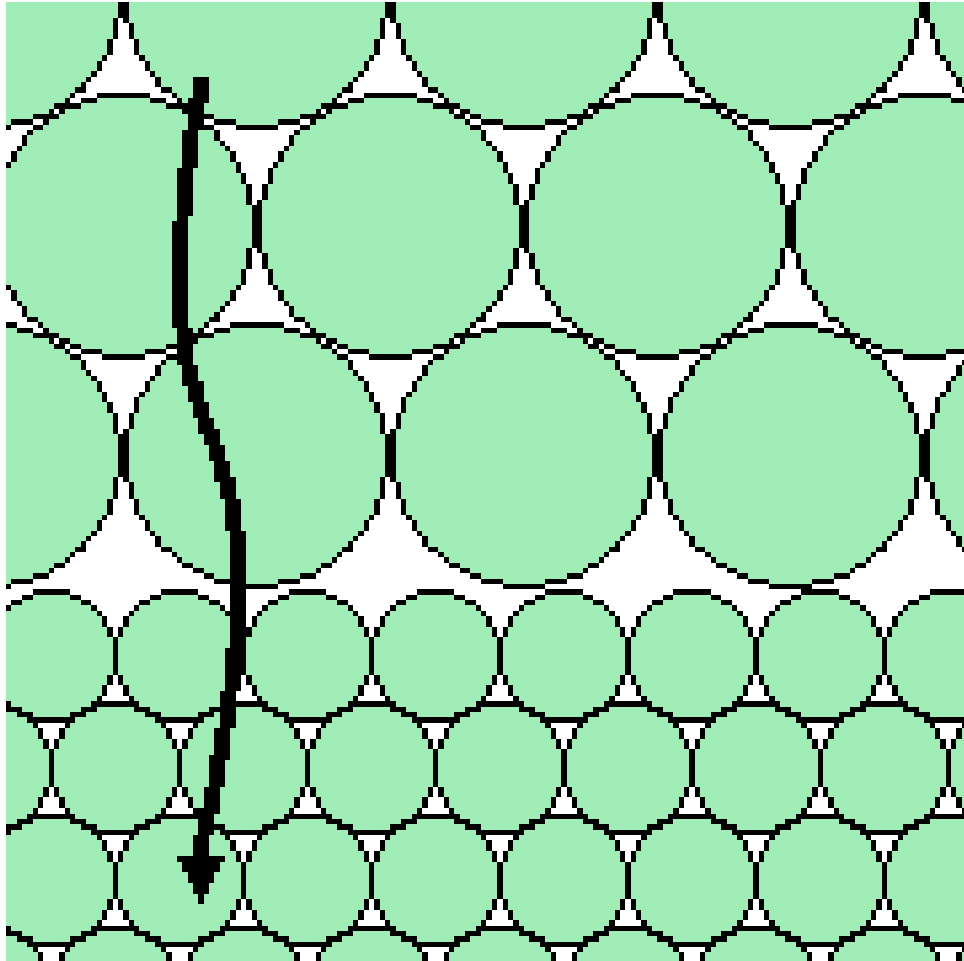


Features

- Stabilize electricity grid
- Consume coal ash and mine tailings waste
- Scalable, engineered from the ground up



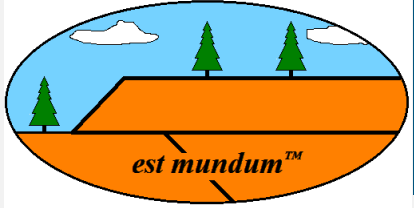
Glass Spheres to Store Solar Energy



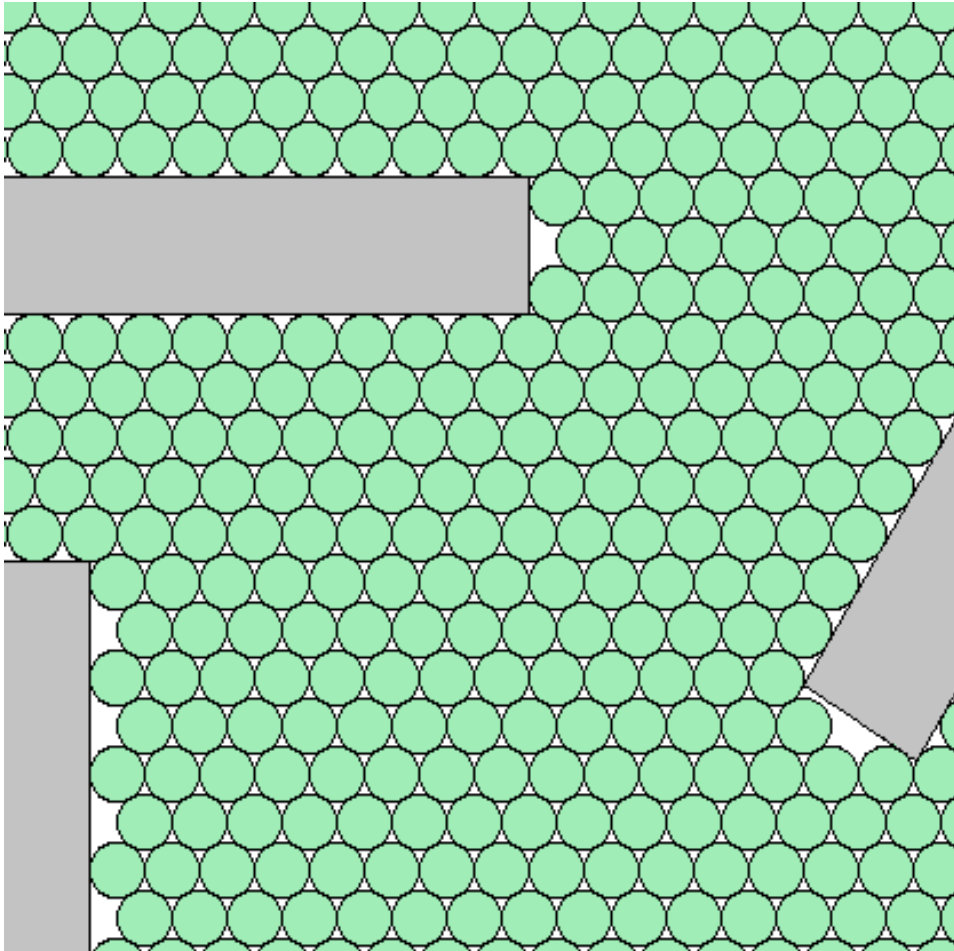
BiMBy's IP

- Hot fluid percolates by gravity
- Spheres round and smooth for easy fluid flow
- Sphere size controls fluid flow

US Patent 10,288,221
US Patents Pending



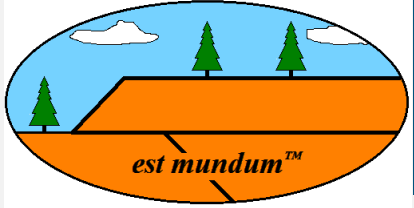
Glass Spheres to Store Solar Energy



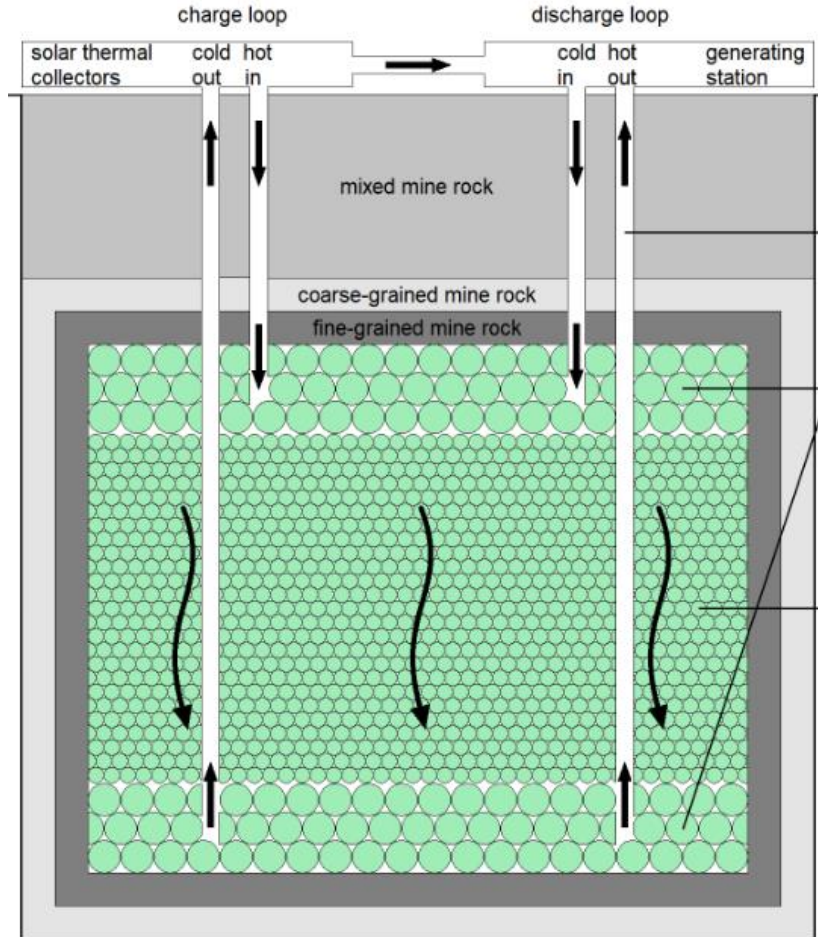
BiMBy's IP

- Planar features control fluid flow

US Patent 10,288,221
US Patents Pending

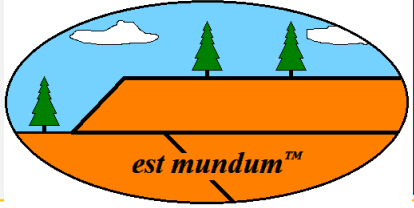


What we need



For minimal viable product

- Engineering expertise
Direct hire or via partnership
- Operating money
IP, salaries, expenses
- New CEO/President?



Team Members & Brief Bios



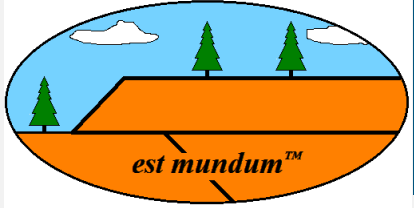
Ray Donelick, PhD, Rensselaer, Geology

- Co-Founder, President, BiMBy Power Corp.
- Member SME, AGU, MSA



Margaret Donelick, PhD, Dalhousie, Geophysics

- Co-Founder, Director, BiMBy Power Corp.
- 28 years major oil, small business experience



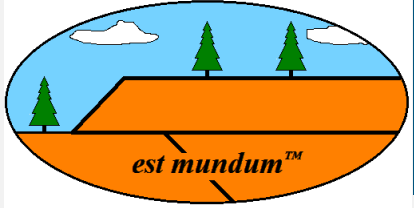
BiMBy Power Corporation



BiMBy Main Office, Viola, Idaho

Early-stage start-up

- Incorporated in Delaware
- 2 PhDs, geology, geophysics
96% ownership
well connected USA and worldwide
- 2 minor partners
4% ownership



This is our vision

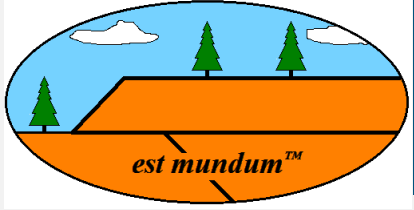


Gone Fission Uranium Mine, Utah

Imagine...

Storing intermittent renewable energy in low-cost, long-lived devices built using mines and mining by-products

Converting mining reclamation expenses into investments, liabilities into assets



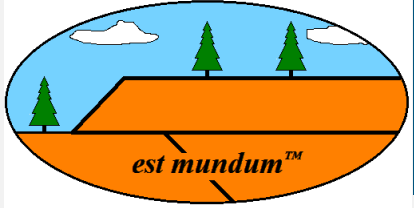
This is our mission



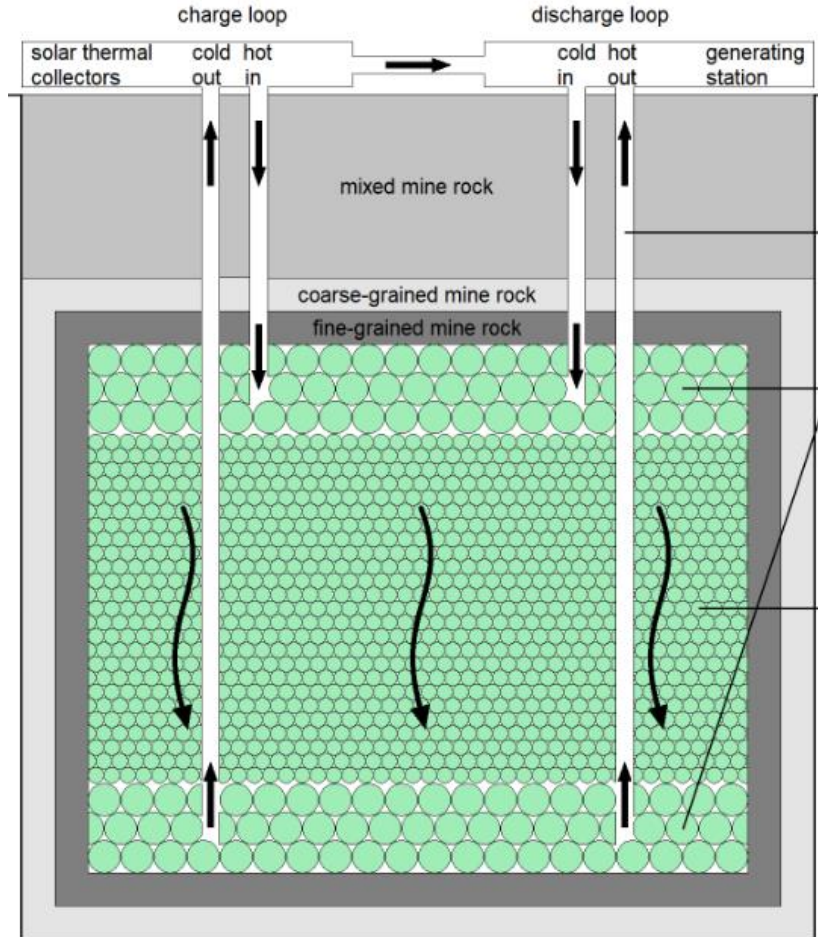
TransAlta USA, Centralia, Washington

Develop a new business model to maintain electricity grid stability using intermittent renewable energy.

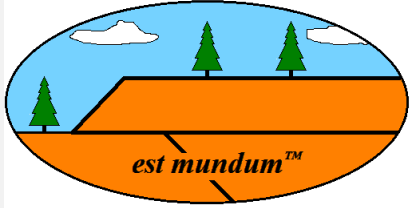
Maximize use of existing infrastructure and offer distressed mining communities good jobs.



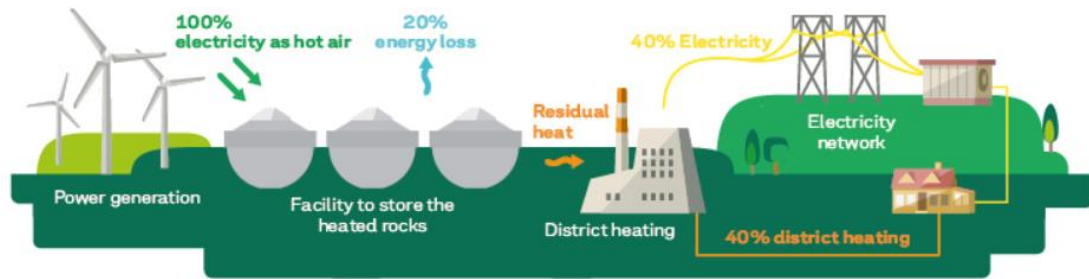
What we want to achieve



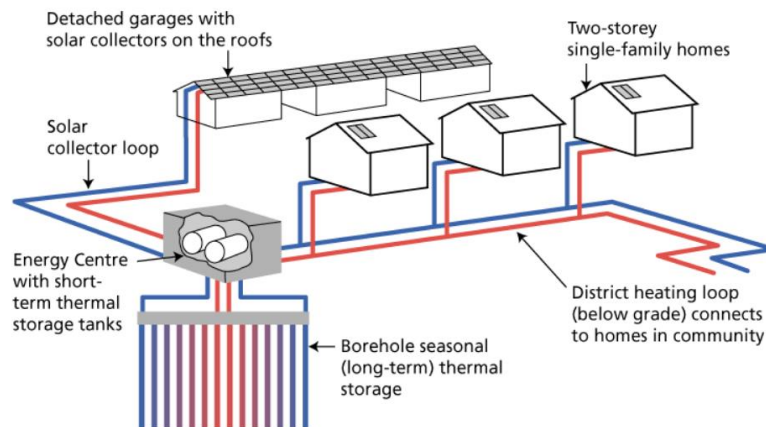
- Minimal viable product
- Learn
- Commercial-scale product



Similar successful projects



Solar Seasonal Storage and District Loop

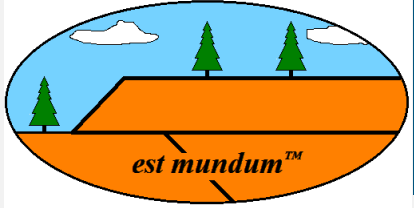


SEAS-NVE, Denmark

- Hot air at 500°C
- Rocks to store heat
- Demo launched March 2019

Drake Landing Solar Community, Alberta

- Hot water at 80°C
- Boreholes in natural soil
- Began operation 2007

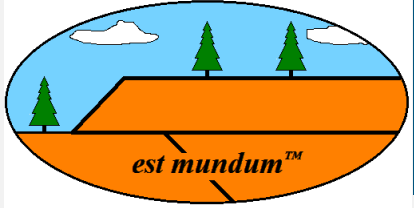


Short-term plan



Minimal viable product

- University of Campinas, Brazil
Response to tailings pond failure of January 2019
- Navajo Nation?
Closure of Navajo Generating Station and Kayenta Coal Mine
December 2019

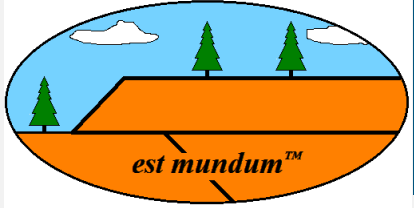


Long-term plan



Commercial-scale product

- Build IP base
- Build partnerships



Does it work?

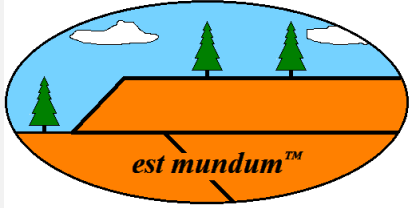


CAES Proof-of-Concept

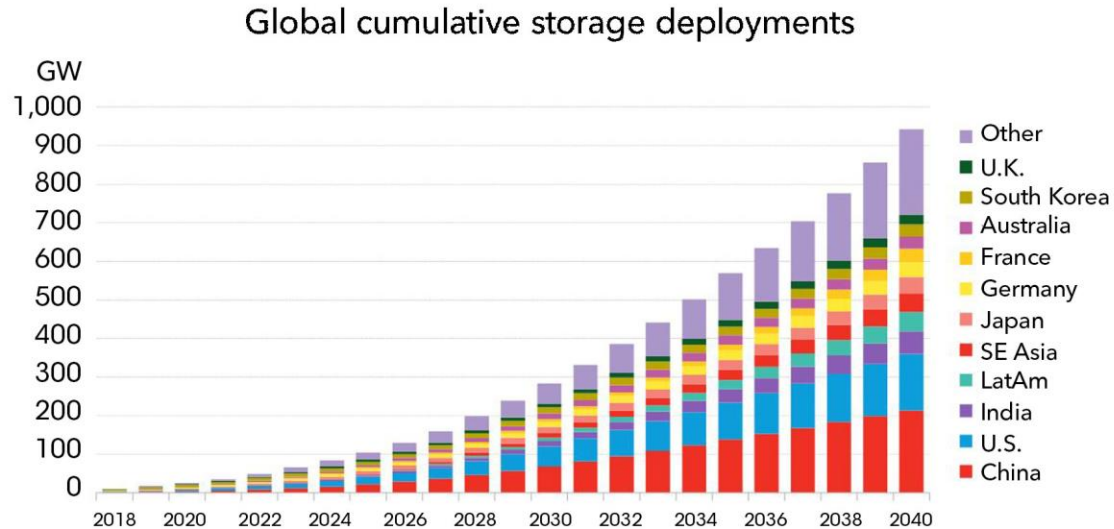
- Built in our backyard (idea for planar features)

TES Proof-of-Concept

- Built in our shop (tested planar features, idea for vegetable oil and glass spheres)



Our Market

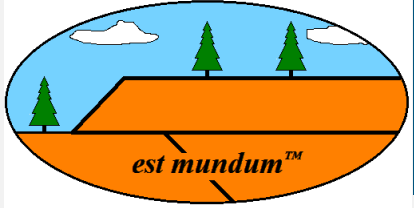


Source: BloombergNEF

Future Energy Storage, Bloomberg

Potentially huge

- USA 3.5 billion tons coal ash
- thousand tons = MWh storage
- million tons = GWh storage



SWOT Analysis

Strengths

- US Patents
- Industry connections

Weaknesses

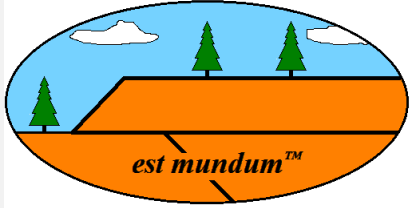
- 5-7 year profitability
- At the limit of our capabilities

Opportunities

- Brazil, Navajo Nation?
- DOE, BEV

Threats

- Longevity of glass spheres



Action Steps



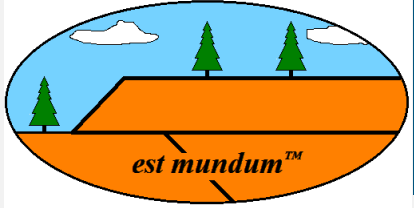
BiMBy at Rosebud, Colstrip, Montana

Ray as CEO and President

- Hire mechanical engineer, electrical engineer
- Design MVP

New CEO/President

- We welcome informed direction



More information



Yerington Pit, Yerington, Nevada

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Viola, Idaho 83872-9709 USA

voice: +1.208.596.1423

email: donelick@apatite.com

**Please visit Ray in
Exhibitor Booth 1448**