



The Energy Crisis: A Challenge We Must, and Can, Overcome

- Electricity is the foundational commodity for development and the global economy, and demand is only increasing.
- The need for clean, continuous, scalable energy solutions is urgent.





Tomorrrow's Solar: Utility-Scale Energy 24/7/365 No Intermittence, No Storage

- Registered in Delaware, Flooid Power Systems, Inc., is a Massachusetts-based, for-profit "public benefit" corporation (B corp), committed to powering carbon-free economies around the world with our new, globally patented solar thermal electric generation system.
- Not reliant on direct sunlight, Flooid Power captures, concentrates and converts heat from the sun into electricity.
 - Continuous, small footprint, uses no fuel, makes no emissions.
- Similar to hydropower, but without the need for a river, dam, or flowing water
 - Closed, controlled system—*Hydropower in a Tower*®, trademarked tagline
- Utility-scale output for high-volume customers
 - Grid operators, data centers, cement, steel, auto plants
- **Highly profitable, reliable, scalable** energy system
 - 5-20 megawatt (MW) FT125 to the FT200, expected to produce 50 MW continuously, or 1,200MWh/day
 - Higher-load customers served by multiple Flooid Towers



Tengger Desert Solar Park, China – 1500MW PV & storage – 463 square miles



Best Currently Available

Technologies in Grid-Scale Solar:

Intermittent, Unsightly, Expensive

Waldpolenz Solar Park, Germany—52MW Solar PV

<u>Today's Solar Thermal Electric Generation, Concentrated Solar Power (CSP):</u> <u>Expensive, Location-specific, Intermittent</u>



Noor Power Station, Morocco, 510MW CSP, 6.5 hrs storage, \$2.5 billion



Ivanpah Solar Thermal Electric Generating Station, California, 377MW, \$2.18 billion





<u>Tomorrow's Solar Thermal Electric Generation:</u> <u>Continuous, Inexpensive, Unobtrusive, Scalable</u>

- Air stores energy in the form of heat, constantly replenished by the sun.
- Flooid Power's **compression-based system captures, concentrates, converts ambient heat**, operates 24/7 at utility or microgrid scales.
- 2 Patent "families" operating in tandem—Unique cascading heat pump design and the Flooid Tower, which converts low-grade heat into electricity via displacement, a function of gravity.
- Flooid Tower is built to blend in, align with local preferences—modern building, farm silo, camouflage, etc.







FT125 "Hidden in Plain Sight"—Noiseless & Emissions-Free

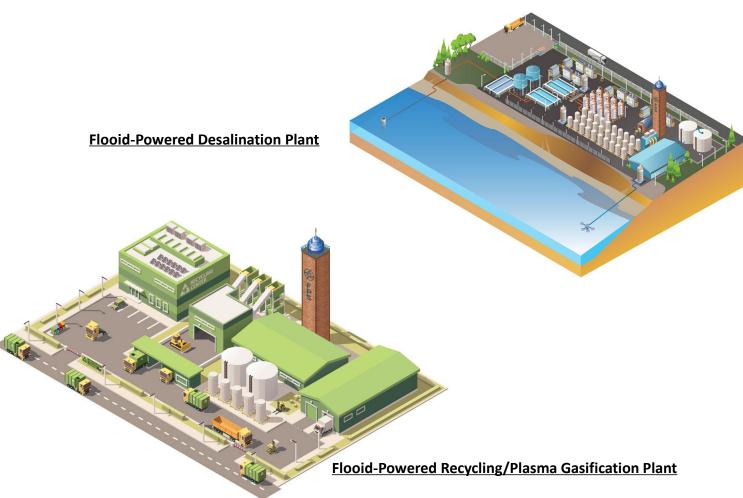


Street View

View from ½-mile



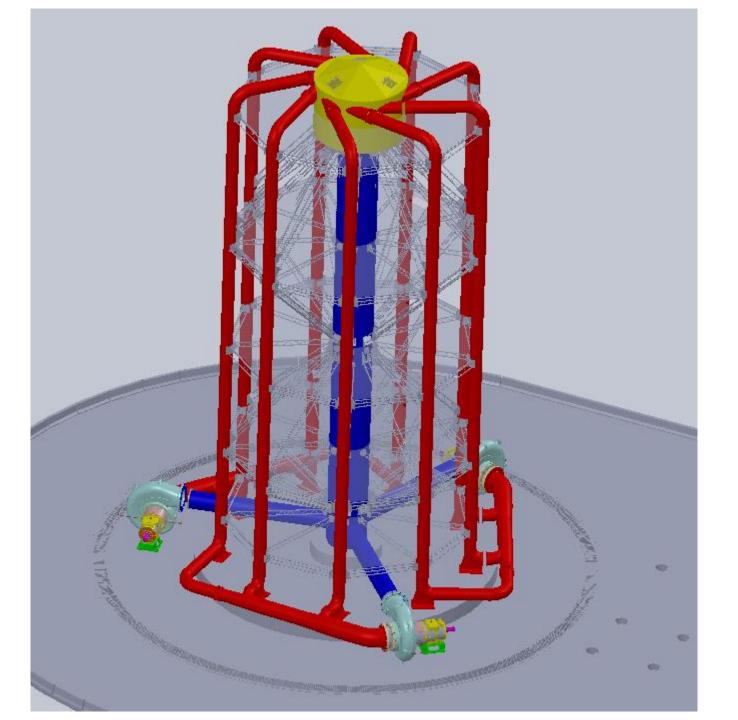
<u>Highly Versatile:</u> <u>Direct Connections Provide Affordable, Reliable Electricity to Energy-intensive Industries</u>





Flooid-Powered Hyperscale Data Center



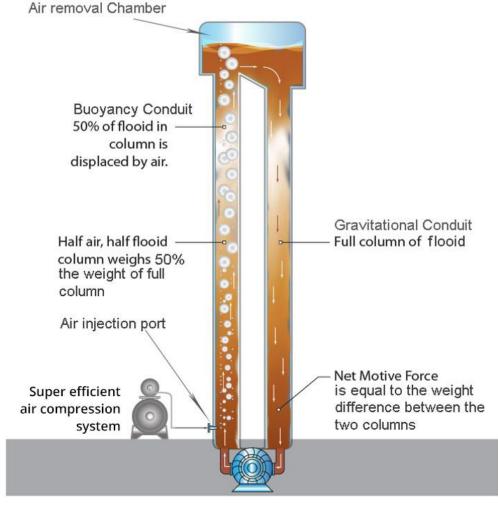






How it Works—Hydropower in a Tower®

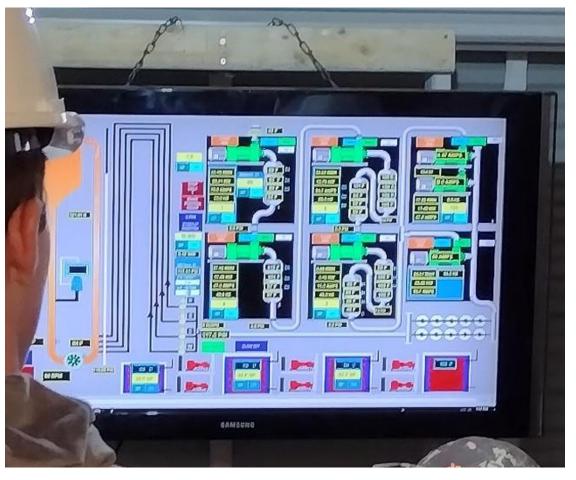
- Two Patent "Families" working in tandem: High-volume cascading air compression & heat capture system incorporates large mechanical compressors with specially designed refrigeration equipment.
- Multiple cascading cycles of mechanical compression and refrigeration result in more work being performed isobarically, not mechanically—uses less electricity while actively capturing otherwise-wasted heat for conversion into electricity.
- Flooid Tower converts super-efficiently compressed air energy and heat into kinetic flooid energy via displacement.
- Constantly introducing air and heat maintains motive flow.
 Continuously-flowing flooid drives modified hydropower turbines, generating renewable, reliable, affordable electricity.
- **Flooid is an excellent heat sink**—captures, concentrates thermal energy. Heat absorption causes **polytropic expansion of air**.



Modified Hydroelectric Turbine



Short-term, Low-output Pilot FT125 Confirms Design, Engineering for Commercial FT125



System Controls Monitor, with Flooid Tower on left





Compressors & Intercoolers



Water Baths/Refrigeration



Turbine/Generator



Milestones & Industry Traction

- Multiple Patents issued and pending around the world (India, China, Japan, South Korea, US, EU and several
 countries within it, South Africa, etc.)
- Operational pilot system currently proving the technology, scalability
- Utility, high-volume customers & sites identified—data centers, municipal utilities first
- Path to recognition by Commonwealth of Massachusetts as eligible to generate Class 1 Renewable Energy
 Credits (RECs) as a new solar thermal electric generation technology.
- Proven technology— **Demonstrated Coefficients of Performance (COPs) of 9** for patented cascading heat pump system—**2.5-3x better than the best commercially available systems**.
- Licensing opportunities with HVAC, refrigeration, and compressor industries—likely first revenue



Unique Value Proposition

- Industry-standard Construction, Maintenance & Operational Costs
- High Continuous Production on a Small Footprint
- Novel Re-configuration of Mature, Tested Technologies--Established Vendors, Supply Chain
- No Fuel or Storage Costs
- Monetizable Energy Benefits (RECs, Carbon Credits)
- Highly Profitable: 4-6-year payback time, depending on system output, market served, negotiated rates, etc.



Key Vendors/Development Partners

- Nutter, McClennen & Fish, Intellectual Property attorneys
- <u>Eastern Refrigeration</u>—Specially designed refrigeration equipment is an essential part of FPS's patented cascading heat pump. Eastern was an early a vendor/development partner, and continues to be critical to the development of FPS's cascading heat pump design, with demonstrated Coefficients of Performance (COPs) of 9. Stan Shumbo, co-founder VP of Eastern, has invested personally in Flooid Power Systems, Inc.
- <u>Neil Doherty, Senior VP of Aon Insurance</u>, which has secured coverage for the pilot Flooid Tower via the specialty insurance market and will provide surety bonds backing production of our Flooid Power Centers.
 <u>Neil has invested personally</u> in Flooid Power Systems, Inc.
- <u>Matt Cain</u>, President of Ohio-based Eaton Compressors and Emax Compressors, also an investor personally
- Woodard & Curran, Engineering, Design/Build Contractor
- **Ten or eleven technical vendors and professional service providers are investors** in FPS, Inc., reflecting their belief in the technology and company.



Company Structure, Past & Future Funding

- FPS co-founded in 2017 with \$1.5 million in founder funding. B corp status reflects co-founders' shared values.
- **Project-based company**—FPS, Inc. will **own and operate** Flooid Power Centers **directly or via JV or licensing to established companies**. Community benefit is part of FPS's business model.
- Flooid Power Centers are standalone LLCs, consumer co-ops, etc., financed non-dilutively via long-term loans.
- **Significant progress made on little capital**: \$3.25 million raised from accredited investors through a convertible note at a \$102 million valuation.
- Flooid Power is near-commercialization, and FPS is seeking investment to accelerate growth and achieve revenue-positivity. Funds will enable FPS to:
 - Start to Build Beta plant, co-located with a data center customer—engineering, design, etc.
 - Continue R&D and marketing of cascading heat pump design, become revenue-positive via licensing
 - Hire key personnel
- Also seeking relationships with potential project-finance partners, licensees, vendors, utility managers, etc.



Thank you for your interest in Flooid Power



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