

# Stone Soup Leadership Institute's BETA Program BMC Durfee High School 2021-2022





#### PowerDocks LLC

**Autonomous Floating Microgrids** 

**Powering BlueTech** 

www.power-docks.com

2020 - RI / MA

### Global mooring market = \$1.037 Billion in 2015; Projected to reach \$1.41 Billion by 2022, 5.0% CAGR (Allied Market Research 2017)



#### **Problem Challenge**

#### Solution Need > Opportunity





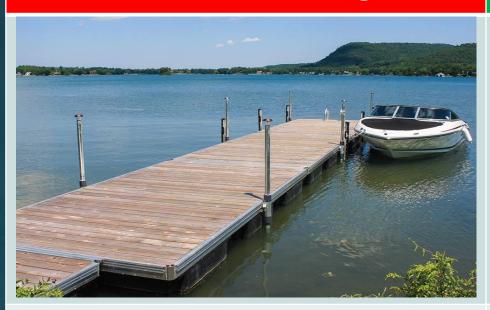
Static Moorings / No Value Add
Relies on Fossil Fuel Based Power
\$\$\$ Cost Expense for Fossil Fuels
Noisy Fossil Fuel Power Generator
Environmental Contaminant Air, Water
No IoT Communication
Decreasing Fossil Fuel Demand
Negative Internal Rate of Return (IRR)

- ✓ Active Based Moorings / Value Add
- ✓ Relies on Sustainable Solar Power
- ✓ Cost Savings / No Fossil Fuels
- ✓ Silent Sustainable Power Generator
- ✓ Non Pollutant
- ✓ Integrated IoT Communications
- ✓ Increasing Electric Use Demand
- ✓ IIR > 10%

#### Global Floating Dock Market = \$350 Million; Growing to \$470 Million (2024) (Zion Market Research 2018)



#### **Problem Challenge**



Static Infrastructure / No Value Add Undervalued Surface Area High Cost Expense for Electric Demand No Electric Vehicle Charging (EVC) Declining Fossil Fuel Propulsion Services Negative Internal Rate of Return (IRR)

#### **Solution Need = Opportunity**



- ✓ Active Infrastructure / Value Add
- ✓ PV Power Producing Surface Areas
- √ Low / No Cost for Electric Demand
- ✓ EVC Aiding Customer Retention
- ✓ Electric Increased Savings / Revenue
- ✓ IRR > 10%

## "Sustainable Powered Aquatic Microgrids" \$4B+ Market Opportunity (Ave. 40% GM)





**Sustainable Power Moorings** 



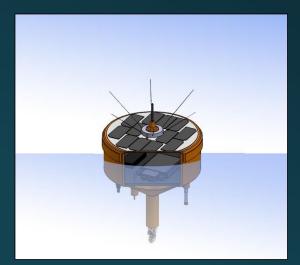
**Sustainable Marinas** 



**Defense / Autonomous Systems** 



**Solar Microgrid Docks** 



Remote Water Health Monitoring / Aquaculture



Sustainable Floating Living / Hospitality <sup>5</sup>

#### 2018 Industry Award Products = Traction & Recognition



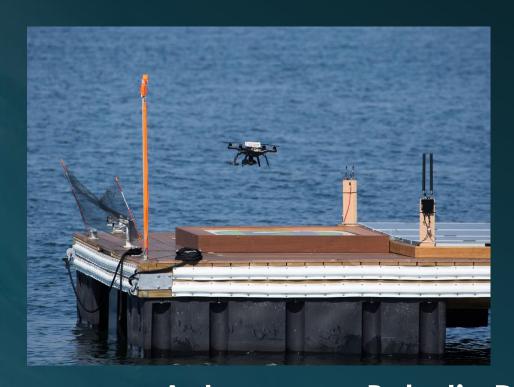




- ✓ Miami International Boat Show Innovation Award
   ✓ Electric & Hybrid Marine Product Innovation of the Year Award
  - ✓ Over 60 World Renowned Marine Industry Judges

#### US Navy ANTX 17/18 @ NUWC = Traction & Recognition





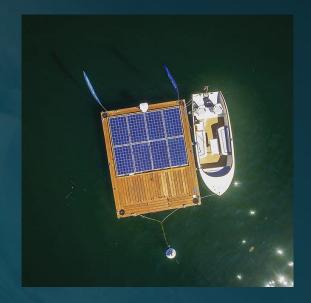


Autonomous Robotic Devices Wireless Recharging 24/7 Air , Sea, Underwater (C3) Autonomous Remote Surveillance / Intelligence Recognizance for Defense, Border Patrol, and Homeland Security

12 kWh Wireless Charging UAV-UUV / Sustainable Power Generation & Storage / 360 Video & Data Transmission Command Control Remote Monitoring / EV Propulsion

#### **Growing Product Deployments**



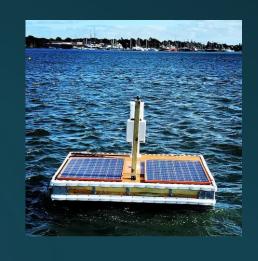


Newport Harbor, RI



Barcelona, Spain October 2018





Miami, Florida





**NUWC.** Newport RI



#### Company = "Experienced / Proven Team"



- R.I. LLC April 2016 / Chris Fagan & Anthony Baro/ Offices in RI, MA
  - ✓ Over 30 Years Combined Professional Experience Sustainable Design-Build, Renewable Energy Developments, Design/Engineering, Project/Program Management, Commercial, Industrial, Marine and Defense Markets
  - ✓ Founder– E2SOL LLC / <a href="http://www.e2sol.com">http://www.e2sol.com</a> / 8 yrs. RE Developments
  - ✓ Founder– Fagan Design Studio / <a href="http://cfd-studio.com">http://cfd-studio.com</a> / 10 yrs. Arch. Design-Build
- 6 Interns (RI / MA): Business, Engineering (ME & Ocean), Architecture
- Professional Advisors: MARCUM LLP, KLR, APS Law, IEC Partners
- Strategic Partners: Bellingham Marine, Wibotics, BluCloud, dotOcean
- 5 Patents Pending + New IP in Pipeline: "Floating Power Microgrids"
- Capabilities: Design, Engineering, Rapid Prototyping 3DP, Business Development, Project Management, Digital Graphics, Renewable Energy Developments, Architectural Design Build

#### Resources / Accomplishments



#### **Strategic Partners**











**BluCloud** 

#### **Recognitions**











#### Seeking Strategic Partners

(Accelerate Commercialization)



- Strategic Technology Partners:
  - \* sensors
  - energy storage
  - **❖** loT systems
  - power transfer systems
  - 3D cameras, Al
- Marine R&D Teaming Opportunities
- > Aquatic Health Management Remote Monitoring Opportunities

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