



### **LESI Presentation**

February 9, 2022





# We are on a mission to redesign the systems at the root of climate change.

Elemental is a non-profit that was founded in 2009. We fill two gaps:

- 1. Funding first-of-a-kind projects for climate technologies to deploy in real communities.
- 2. Embedding equity & access into everything climate

Neither are sufficiently served by the market, and both are fundamental to addressing climate change with the urgency it requires.

### **Elemental Portfolio**

We invest across 5 interconnected systems that are key drivers of greenhouse gas emissions.



Energy

CREATE A 100% CLEAN ENERGY SYSTEM

45%

of GHG emissions



Agriculture

CREATE A REGENERATIVE FOOD SYSTEM

18%

of GHG emissions



Water

ENSURE CLEAN DRINKING WATER AND SUSTAINABILITY OF WATER USE

6%

of GHG emissions



Mobility

CREATE A 100% CLEAN AND EQUITABLE TRANSPORTATION SYSTEM

16%

of GHG emissions



Circular Economy

DESIGN OUT WASTE AND POLLUTION FROM OUR ECONOMY

15%

of GHG emissions

## **Elemental Portfolio**

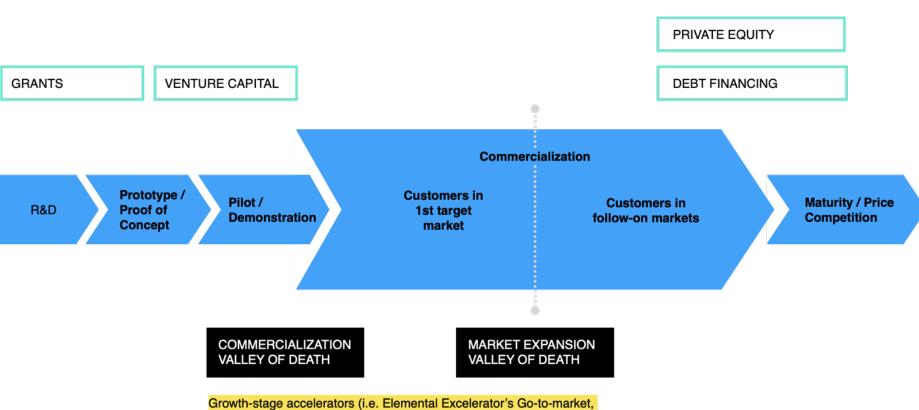
We work with our portfolio companies through a three-track accelerator ... and beyond

|                        | STRATEGY TRACK  | PROJECT TRACK   | GLOBAL TRACK   |
|------------------------|---|---|--|
| Funding from Elemental | \$200,000   | \$500,000   | \$300,000  |
| Geography              | Global  | Hawaii & California   | Global   |
| Work we do together    | Coaching to drive commercialization and equity 8 access inflection points                               | Project deployment to go deep in communities, supported with community engagement and policy work | Project deployment support to drive global expansion |
| Duration               | 9-month intensive   | Projects deployed in 16 months  | Projects deployed in 16 months                       |
| Paying it forward      | Startups donate warrants or issue SAFEs to Elemental to benefit the non-profit and future entrepreneurs |   |  |

A global force: All alumni become lifelong contributors to our vibrant community. They join our communities of practice, win prizes for new deployments, and contribute to regular summits. >



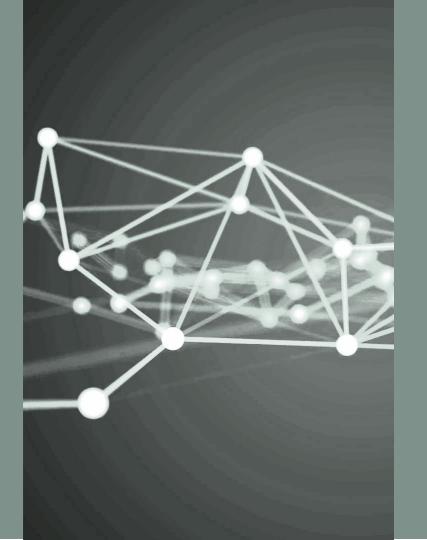




Growth-stage accelerators (i.e. Elemental Excelerator's Go-to-market, Demonstration, and Equity & Access Tracks)



Insights-driven distributed energy aggregation software



# **Our Why**



Help the world reach full energy independence



Make a positive impact on climate change



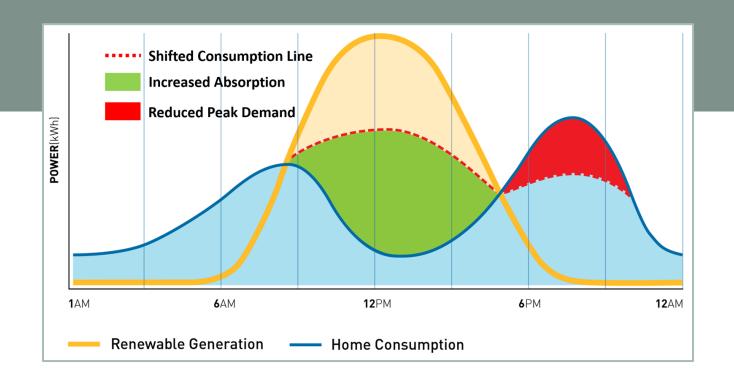
Provide renters and low-income residents a chance to make a difference



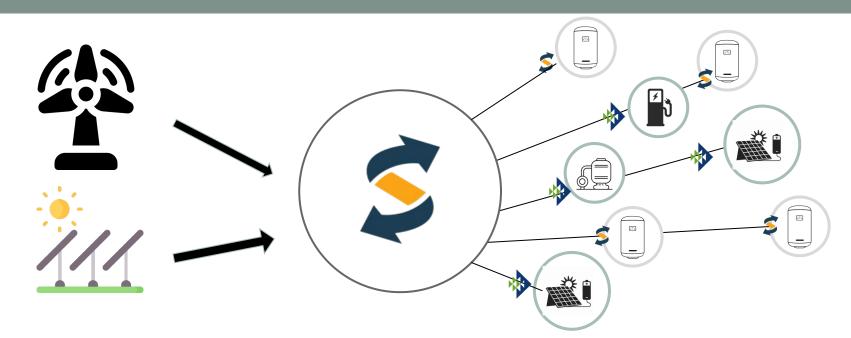
Make use of a resource already in people's homes



# We Help Solve Clean Energy's Balancing Challenge



# Balancing Renewable Energy Value Streams



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# **Traction in Market Segments**

**Grid Operators** 



Aggregators & DER Providers



**Property Managers** 





 Lower cost through multiple site load aggregation

Hawaiian

- Commercial contract in Hawaii
- Pilots in multiple U.S. states, Canada, Australia, Spain, and
   Portugal

- Untapped capacity from new asset classes
- 2.5 MW commercial contract

✓ TurningTables

 Incremental flexible capacity for existing partner projects and customers

- Lower costs through fleet insights
- Deployed with Hunt, Greystar, Avalon
- Deployed at military base housing

# **VPP Business Development Pipeline**



# **Providing Value at Infinite Scale**













- Methodology to reduce data usage to a couple MB per month and still give 1 min telemetry
- Electrical telemetry to actionable demand response. Beneficial to assets like pumps, EVs, WH's, thermostats
- Electrical telemetry to maintenance alerts

## Flexible Electrification = More Equity & Access





# Team



Forest Frizzell

Co-Founder & CEO

Leadership in Utility & Gov,
20+ year IT, SV Start Up.

Omidyar Fellow



**CFO**Executive finance at multiple related cleantech companies

**Chris Murphy** 



Olin Lagon
Co-Founder & CTO
Il patents. Serial tech
entrepreneur/innovator
with 2 exits



Matt Motoki
Chief Data Scientist
Electrical Engineer &
world ranked data
scientist



Randy Fish

Dir, Business Development

National experience in demand response & energy storage markets and policy



Jennifer Ignacio

Dir, Business Development
Expertise in DSM project
management and engineering.
CEM, LEED, AP



Nicole Brodie
Customer Success
Leads HECO GSPA
implementation



Seiichi Nagai
Senior Software Engineer
Leads API Integrations and
Serverless architecture



Khaled Ghamgui

AWS Certified Architect

Leads Algorithms,

Forecasting, and Insights



Constanza Lengerich

Mgr, Bus Dev & Marketing

Project delivery engineer and technical marketing



Forest Frizzell, CEO forest@shiftedenergy.com

#### Discovery

#### **Product Development**

- Energy programs engaging 3,000+ mostly hard to reach homes
- Piloting of over 700 endpoints, 5 market ready technology
- EEx Ideation Track

#### **Location / Endpoints**

Hawaii / 1,700

#### **Grid Maestro System V1.0**

#### **Product Development**

- TOU. Demand Charge Reduction, Solar+Storage
- Robust forecasting
- Geographic expansion

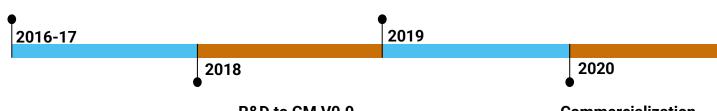
#### **Locations / Endpoints**

- Australia / 3
- Canada / 20
- Europe / 20
- South Dakota / 25



#### **Product Development**

- 3rd Party Integration and co-optimization
- Data analytics and disaggregation
- Matching renewable curves
- Expanding customer value proposition
- Lab testing universal smart EV charger
- Google for Startups



#### R&D to GM V0.9

#### **Product Development**

- Piloting multiple stacked grid services
- IoT communications and ease of installation
- EEx Go To Market Track

#### **Locations / Endpoints**

Hawaii / 20

#### Commercialization

#### **Product Development**

- 2.5MW VPP project
- New asset types and regions
- National Lab joint R&D: heat pumps & CTA-2045

#### **Locations / Endpoints**

- Hawaii / 2,000
- Colorado / 2
- Washington / 250

#### **Locations / Endpoints**

Colorado / 20

2021

- Australia / 150
- Georgia / 100
- Arizona / 1,050
- Spain / 22
- Hawaii / 3.000
- Mountain View / N/A