



PiLLaR3D

Sustainability with 3D Printing

Executive Summary



Pillar3D is building a distributed manufacturing network that transforms locally sourced waste plastic into industrial and commercial products through large-format additive manufacturing.

We produce bespoke items from recycled plastic for individuals, industrial, and institutional clients, creating a scalable circular economy.

We are positioned in the \$50 Billion ('25) Large Format Additive Manufacturing (LFAM) market, with a unique focus on recycled plastic.

Current Status

Pillar3D is a pre-revenue, pre-seed startup. We have vertical markets identified for lead generation.

Problem

Creating a circular plastic economy is difficult without the right tools.

- > *There is limited access to local, agile, digital manufacturing using recycled plastics (to complete a circular economy).*
- > *Few Additive Manufacturing print farms focus on large format.*
- > *Fewer still include any recycled materials as feedstock options.*

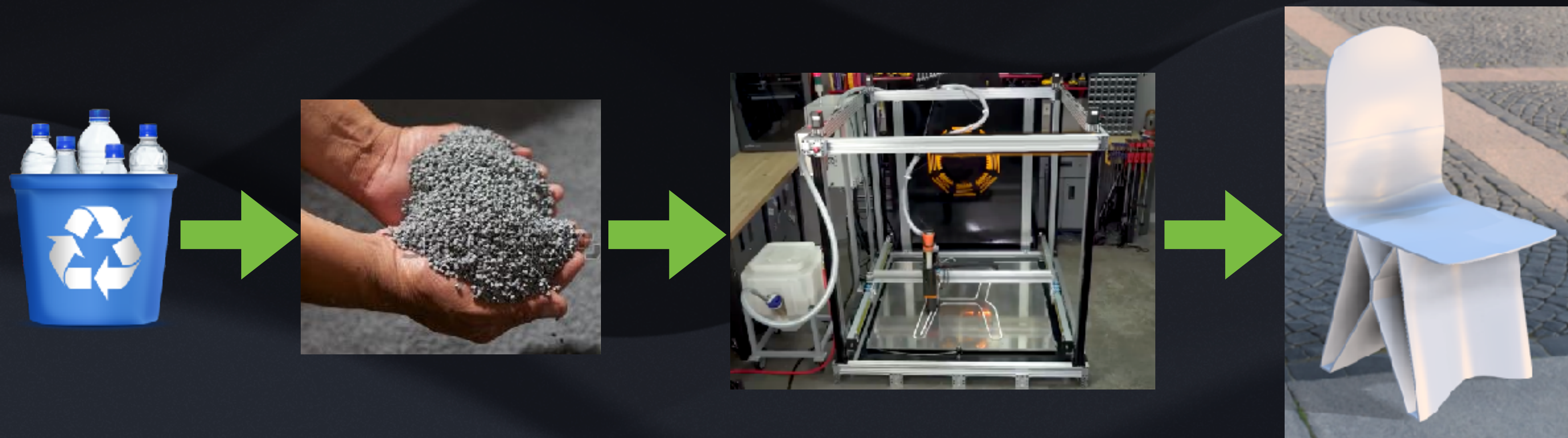
The world is choking on plastic waste, creating an environmental hazard that worsens the effects of climate change.



Solution

Use locally-sourced waste plastic as feedstock material for use in industrial-scale 3D printers.

Build a manufacturing network of production centers, transforming locally sourced waste plastic into industrial and commercial products.



Model

Pillar3D is building a **distributed manufacturing network** that transforms locally sourced waste plastic into industrial and commercial products through large-format additive manufacturing.

We deliver a **sustainable, circular economy solution** via 3D printing as a production center and development lab.

As a type of franchise, this model is infinitely scaleable.



Model — Why we win

Pillar3D is uniquely positioned in this market.

Size matters: *We specialize in **big**.* Less than 5% of all 3D print centers have a printer larger than 1000mm³. Our biggest footprint is 1600x2600x1600 (5'2"x7'10"x5'2").

We win when big is needed.

Materials: We're "recycled first", offering a "Green Product Certificate" for our output. **We win with sustainability.**

We're Digital: Just-in-time production (lowering inventories), mass-customization (each item is unique), and an Agile Supply Chain. We're the *Bridge Tooling* answer. **Digital wins.**

Local is key: Distributed manufacturing offers a local focus, which ties to our scaling model. Networks are always stronger; **another big win.**



Competitive Advantage Summary



Differentiators include:

- **very large build volumes**
- **recycled pellet feedstock**
- **low material costs**
- **localized manufacturing**
- **rapid turnaround**
- **custom production**
- **sustainability and a circular plastic economy**
Large format means more recycled material is used.



Go to Market

Pillar3D will launch as an industrial production service for large-format recycled plastic manufacturing.

Our first 100 customers will come from

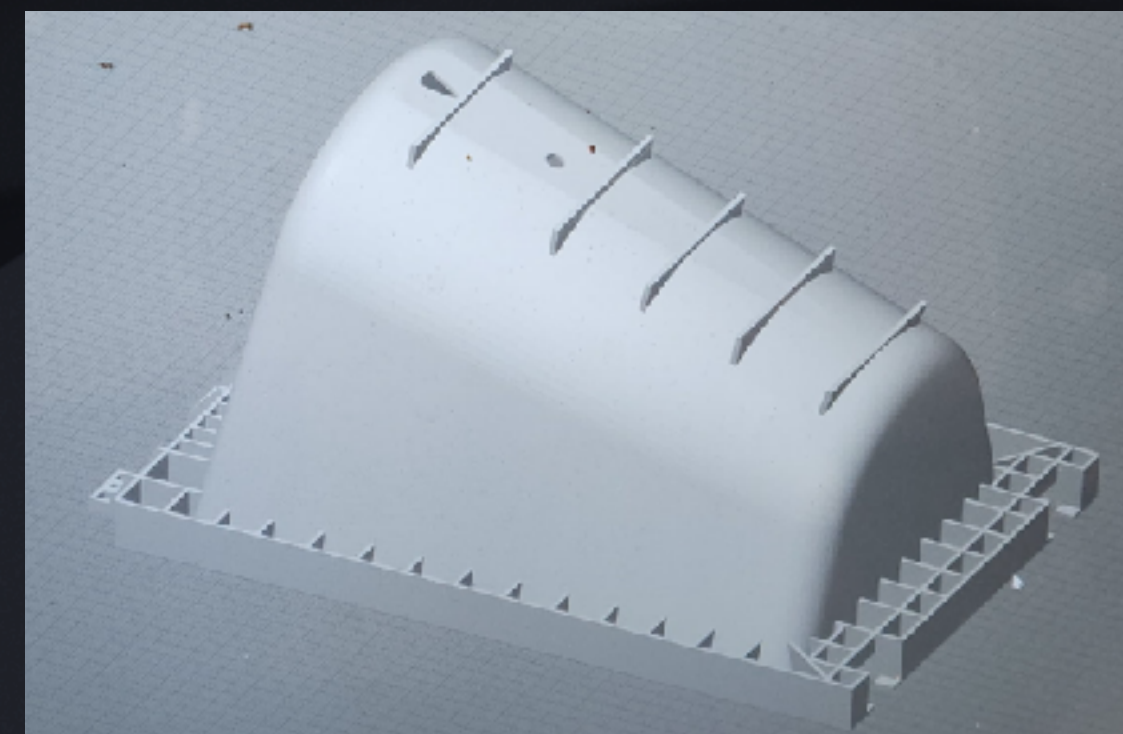
- Engineering/Architectural/Experiential/Design firms
- Colorado or Minneapolis SME's
- Solar companies
- Agricultural equipment manufacturers
- Municipal governments



Traction/Validation

Pillar3D had a Live Field Test with an international nonprofit partner, set up as a Circular Economy Initiative, and located in Chimaltenango, Guatemala. The program was a success, but grant funding was discontinued.

Working with a Colorado polymer recycler, we designed a solar tub that could be made from recycled Polypropylene in a fraction of the time to make a mold and below market costs for commercial production.



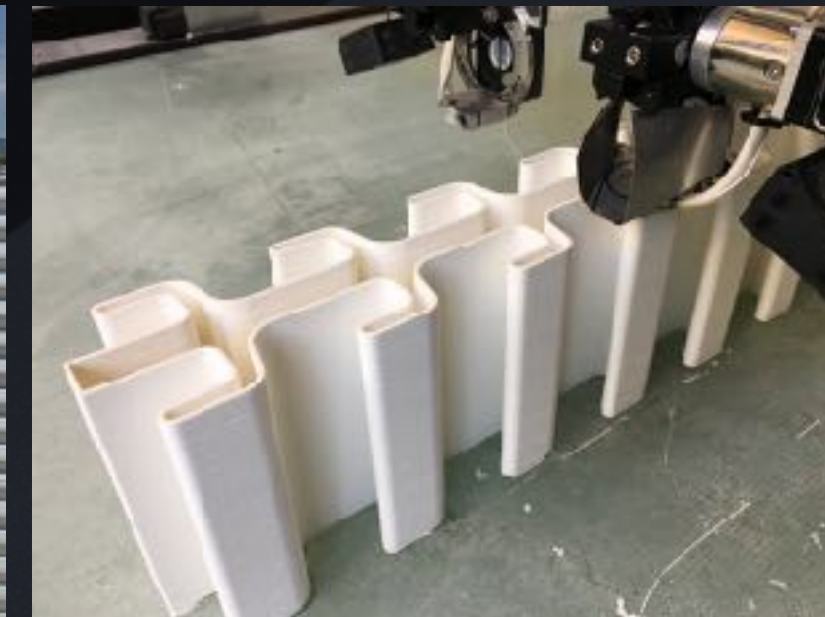
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Traction/Validation

Pillar3D has many product designs that are market-ready, and compete with other sourcing for similar items.

Several potential clients in the area of higher education and research have committed to our service once ready.

Research clients in the Marine boat building industry are in stand-by mode, waiting for new vendor sources like Pillar3D.



Customer Acquisition



Year One

50 manufacturing companies

Sales Presentations — Providing proof is essential. Large format 3D printing is an unknown process to many buyers. Direct sales presentations with a variety of sample objects is required.

Lead generation

- Online sources; i.e. LinkedIn, All3DP, etc.
- State manufacturing associations, engineering/industrial/experiential design firms, architecture firm

Average sales cycle — 30–60 days

Repeat business — Quarterly

Revenue



3D Print Production Lab

- ~ Customers supply digital files or physical model for replication.
- ~ Service bureau provides estimate, creative, and technical support
- ~ Focus on large format projects & recycled thermoplastic materials.

Small print farm: 3-4 large format printers
(@60% capacity; will add additional printers as needed).

Average Order: \$650-\$800

Orders per month: 80-120

Average monthly revenue: \$52k — \$96K

Revenue/Targets/Projections:

Year One projections: \$650K - \$800K

Year Two projections: \$2.7M - \$3.2M

Year Three projections: \$6.5 - \$7.5M



Road Map



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The Market Size

The global green technology & sustainability market was estimated at USD \$23.10 billion in 2024 and is projected to reach USD \$79.65 billion by 2030, with a CAGR of 29.9% (2026 to 2033).

Reality Check: The Serviceable Obtainable Market

Market share of any given geographic market we enter: 1.5-3%.
(If constrained to large format digital production)

Colorado or Minneapolis/St Paul manufacturers needing large-format plastic fabrication (similar markets)

Estimated: \$180M

Our share: \$2.7M—\$5.4M



Future Scaling



A transformational distributed manufacturing network

The Pillar3D concept works best as a multi-site, corporate owned franchise concept, with centers placed strategically to maximize market presence and increase the measure of circularity.

Early targeted locations:

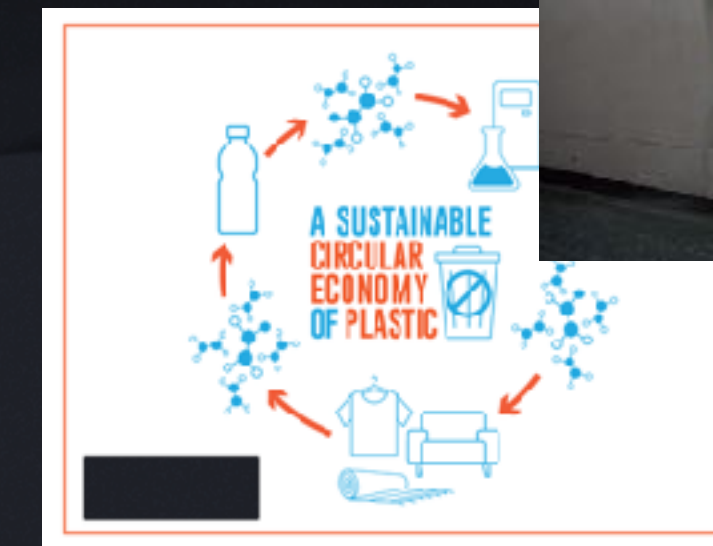
Colorado, Minnesota, Iowa, Indiana, Pennsylvania

International targeted locations:

Guatemala (to finish the pilot program)

El Salvador, Mali, Togo, Kenya, etc.

A minimum requirements per location description will be determined once we are funded.



Funding: Asking for \$250,000

Post-funding Market-Cap / Valuation Cap of \$2,500,000

Funds will be used to **expand** our **launch** to a **production facility**, purchase equipment to get started and make the required sales samples.

- ▶ We will triple our output capacity by adding capital equipment in a commercial environment

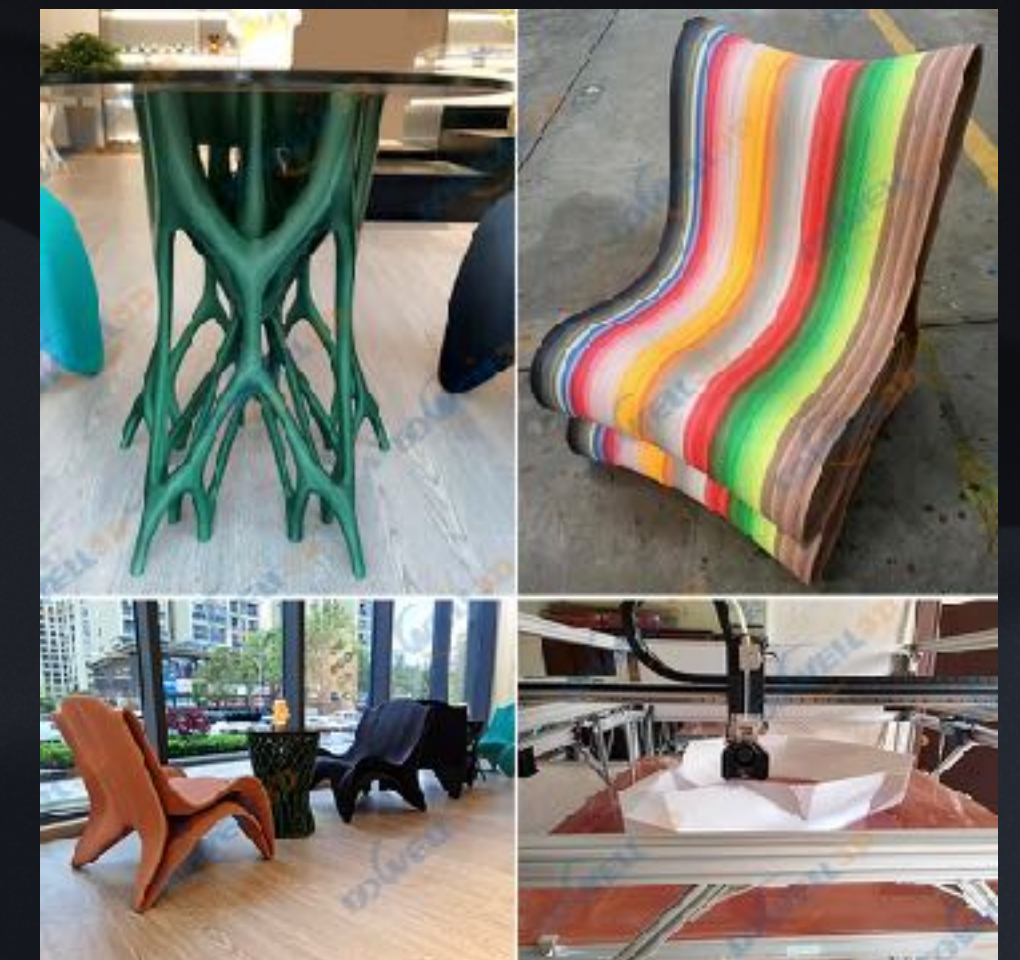
\$250k

\$90k equipment
\$55k facility
\$40k sales
\$35k working capital
\$30k hiring

Expected outcome

- Launch production
- First 20 customers
- \$650K ARR

We need to **buy/place equipment** in order to **make sales presentation samples.**



Team

Founders

Dr. Michael Westphal – CEO/Co-Founder
Ph.D., – Innovation & Entrepreneurship.
Published research on 3D printing in manufacturing.
Serial Entrepreneur: Design, Brand & Product development

Susanne Westphal – CFO/Co-Founder
Corporate Finance, payment systems, and Operations.

Advisors & Industry Partnerships

Yinghua 'Alice' Jin, Ph.D., Polymer Chemist, RockyTech, Ltd.
Sustainability expert.

Coleman Jordan – Architecture Professor, Harvard University
C. Lee Westphal, Government Advising and Global Relations
Kyle Vistuba, Production engineering



Questions?



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