

CASE STUDY: Fibrevolution LLC

Portland, OR Founded in 2016 by Shannon Welsh and Angela Wartes-Kahl

ABOUT FIBREVOLUTION

Fibrevolution will launch the first fiber flax mill in over 50 years in Oregon. The mill will operate with machinery from Europe to process fiber flax and eventually hemp when the regulations regarding production are provided for growers and mills. The mill will serve as a blueprint for additional locations on the East coast and Midwest.

MAIN BARRIERS OR NEEDS

Fibrevolution is reviving the fiber flax industry in Oregon after 50 years. This region has the history and capacity to grow the same high-quality fiber flax (linen) available in the European markets. The first step is building relationships with local farmers to sustain the production of a scutching mill with raw material input in Oregon. Almost simultaneously, the procurement of mill material will begin, including the machinery needed to operate, the farming equipment to harvest and store the fiber flax, and securing the facility required to perform daily mill operations.



IMPACT AREAS



Water Regulation



Carbon Sequestration



Soil Improvement



Equity and Justice

Fibrevolution is dedicated to organic farming practices, our variety trial farms, and seed production are all currently certified organic. Organic farming is an important factor in mitigating climate change. Organic farming pulls carbon from the air returning it to the soil. Organic agricultural practices are sustainable and regenerative. We also time the growing of our flax crops to maximize rain patterns and eliminate the need for irrigation. Our mill will be certified to the Global Organic Textile Standard. It will also bring jobs to rural Oregon and bridge the urban and rural landscapes of Oregon.

CURRENT CAPITAL STACK A/O INVESTMENT TO DATE

Funded by two consecutive Patagonia Environmental Grant Awards 2017–2018, an Indiegogo crowd fund campaign, and co-founder’s capital contributions.

TYPE AND MAGNITUDE OF INVESTMENT SOUGHT

- The total cost of used processing line equipment is ~**\$800,000**. This number includes all machinery, electrical connections, dust control system, freight, and labor to set up the flax fiber line.
- The mill’s operational cost breakdown is ~**\$500,000** to include operators’ salaries, a mechanic, payroll, building area, annual building rent, insurance, travel, and utilities.
- The goal is to include a ~**\$80,000** annual income for both founders who will manage operations, sales and HR in the first year.
- The total cost for these three sectors of initial costs is ~**\$2,700,000–\$3,000,000** (includes \$1,545,000 in startup costs) for the first year of processing (at 50% capacity) 2,184 metric tons of flax straw from 728 acres. Year 2–3 processing 4,368 metric tons of flax straw from 1,456 acres.

REVENUE MODEL & PROJECTED PROFITABILITY TIMELINE

Fibrevolution’s Bast Fiber Mill Business Plan lays this out in detail.

KEY RISKS

Crop failures are a reality in agriculture, and something we work hard to limit risk of by diversifying growing regions. Timeline may need to be adjusted due to the global Covid-19 pandemic, which will impact shipping of machinery and seed from overseas.

INTEGRATED CAPITAL PATHWAY: FIBREVOLUTION

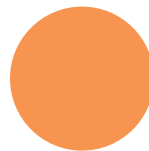
2017 ————— 2018 ————— 2019 ————— 2019 ————— 2020



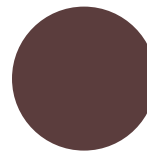
\$22,500 Patagonia Environmental Grant Award



\$15,000 Patagonia Environmental Grant Award



Non-Financial Support from a professional business consultant to finalize our Fibrevolution Bast Fiber Mill Business Plan



Continued R&D and Field Trials (Funded by Co-founders Capital Contributions)



Seek Series A Funding for \$2,700,000–\$3,000,000 (full business and financial plan available)

TYPES OF CAPITAL



NON-FINANCIAL SUPPORT

Business Planning TA
Network Connections
Advisory Support



GRANTS

State & Federal Grants
Philanthropic Grants



LOAN GUARANTEES

Philanthropic Guarantees
Guarantee Pools



LOANS

Friends/Family Loans
Other Debt Financing
Bank Loans



INVESTMENTS

Revenue Share Agreements
PRIs & MRIs
Equity