Next Gen Fiber: Performance, Markets, and Supply Resilience

Introduction

Supply chains are shifting faster and with more uncertainty than ever before. New regulations like the European Union Deforestation Regulation (EUDR), Extended Producer Responsibility (EPR) laws, Packaging and Packaging Waste Regulation (PPWR) and voluntary corporate sourcing policies, are reshaping market expectations.

At the same time, fiber shortages, post-COVID disruptions, and rising competition for both forest-based and recycled feedstocks are driving up risk and challenging long-term sourcing strategies.

Canopy and our brand partners are closely tracking these developments. Producers that diversify their fiber portfolio now, by exploring commercially viable, scalable Next Gen fibers, will be better positioned to capture market demand, stay ahead of regulatory changes and build long-term supply resilience.

About Canopy

Canopy is a solutions-driven NGO working with 1,000+ global brands, producers, and innovators to transform supply chains for paper, packaging, and MMCF textiles. Our Next Gen Solutions Program is focused on creating the market conditions and cross-sector alignment needed to scale the use of alternative fibers, addressing global sourcing challenges while unlocking opportunities for supply chain resilience and future growth.

Canopy has 466 Pack4Good brand partners with collective annual revenue of over $381 Billion USD.

adidas BEN&JERRY'S H&M HUGO BOSS

LVMH PVH PUMA zalando

What Are Next Gen Solutions?

Next Gen Solutions are fiber feedstocks, systems, and technologies that diversify the fiber basket, and build robust, cost-effective, and future-proof operations and supply chains. Next Gen fibers like agricultural residues and some purpose-grown fiber crops, offer a strategic path forward for the paper and packaging sector. Canopy has an audacious plan to scale an additional 60 million tonnes of Next Gen pulp production, globally, by 2033.

FEEDSTOCK OPTIONS INCLUDE:

- Cereal straw residues (wheat straw, rice straw)
- Flax and hemp residues (bast and hurd fibers)
- Fiber-specific crops (miscanthus, switchgrass, hemp)
- Sugarcane bagasse residue

ALTERNATIVE FIBERS:

- Align with policies of key markets and customers

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Why It Matters for Producers

Alternative fibers have evolved beyond niche or molded pulp applications. With proper processing, they can match, and in some cases *exceed* (i.e. tensile strength), the performance of wood fiber across packaging, paperboard, printing and writing, and tissue grades.

- Aligning with policies of key markets and customers
- Compatible with conventional and pilot-scale equipment
- Proven applications across paperboard, corrugate, and tissue
- Technically validated for recyclability and product performance
- Strategic hedge against rising cost and volatility of forest fiber

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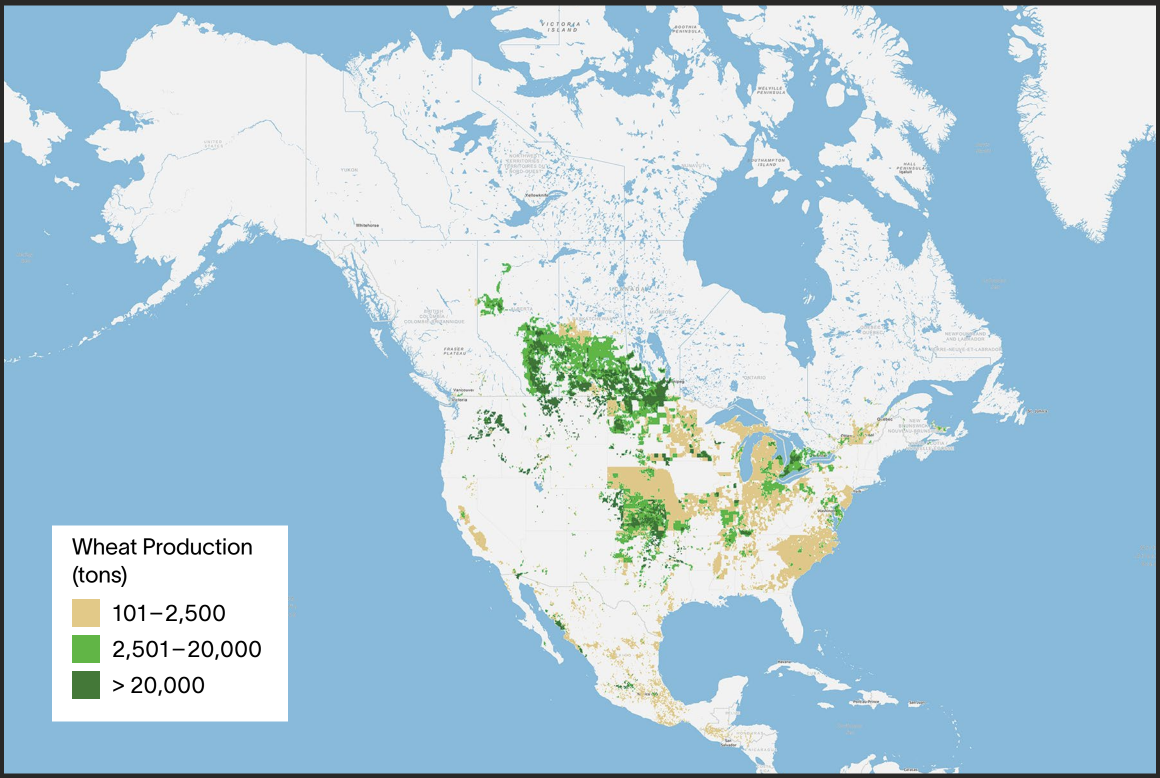

The Next Gen Landscape Today

ECOPAPER DATABASE (EPD)

- Canopy's EcoPaper Database, the world's largest directory of recycled and Next Gen paper and packaging solutions in the world, features over 461 commercially available products, including some from 34 North American producers and distributors, showcasing the growing market readiness of low-impact alternatives.
- At least 170 product listings are 100% alternative fiber, where producers have optimized grade-specific blends.
- EPD.CANOPYPLANET.ORG

GLOBAL

- At least 175 million tonnes of agricultural residues are burned in fields every year.
- There are 130 mills globally producing about 8.8 million tonnes of commercial-scale alternative fiber pulp like wheat straw or bagasse.

NORTH AMERICA

- Each year, North America produces between 10 to 40 million tonnes of recoverable **wheat straw**.
- 255,000 tonnes of surplus **sugarcane bagasse** per year are burned in Louisiana alone, costing farmers and leaving opportunity on the table. There is an additional 250,000 tonnes of surplus **sugarcane bagasse** in Florida.
- There are nearly one million tonnes of **hemp and cannabis waste** in North America.
- Up to 20 million tonnes of pulp (combo of wheat straw, bagasse, hemp stalk) is a multi-billion USD opportunity in pulp sales. This untapped stream could supply feed-stock for mills in North America.
- Hundreds of commercial-scale trials have been conducted in North America across grades from corrugate to tissue, using both domestic and offshore alternative fibers, including wheat straw, bagasse, bamboo, miscanthus, and hemp.

Growing Market Demand

Brand demand for Next Gen is rapidly accelerating. Leading companies across food and beverage, personal care, and fashion are actively seeking supply chain partners to meet their targets and compliance requirements as well as their performance needs.

Policy Tailwinds

Recent global policies, such as the European Union's Deforestation Regulation (EUDR), Extended Producer Responsibility (EPR) laws, state-level product disclosure requirements, and corporate due diligence frameworks, are intensifying the need to fortify and diversify fiber supply. Brands and mills that adapt early will be better positioned to mitigate risk and can gain a strategic advantage.

Learn more at: www.canopyplanet.org
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