



Introduction

CalFibre, LLC represents a strategic initiative spearheaded by Jerry Uhland, a pioneer in sustainable material innovation. This venture is designed as a special purpose vehicle with a critical mission: to acquire, restart, operate, and expand the operations of the original CalPlant I, LLC. CalPlant I holds the distinction of being the world's first rice straw-based Medium Density Fiberboard (MDF) plant, showcasing a novel approach by integrating agricultural waste into industrial production for sustainable building materials.

The journey of CalPlant I has been marked by ambition and resilience, navigating through the challenges of pioneering a new manufacturing process. Despite a concerted effort to overcome construction setbacks, COVID-19-based disruptions, and the initial teething issues of launching a groundbreaking manufacturing facility, CalPlant I faced significant financial strains, leading to a bankruptcy filing on October 5th, 2021, and the subsequent initiation of a liquidation process.

Situated on a 273-acre site in Willows, CA, the plant is the culmination of nearly three decades of development, led by Uhland, who not only invented this innovative process but also oversaw the planning and construction phases. Commissioned in late 2020, the facility was designed with the capacity to transform about 280,000 tons of post-harvest agricultural waste into 140 to 150 million square feet of MDF annually, assuming a normalized thickness of 3/4-inch. This capacity positions the plant to make a significant impact on the building materials industry by providing a sustainable, high-quality alternative to traditional wood-based MDF.

Jerry Uhland's vision for CalFibre, LLC is to continue and expand upon this groundbreaking work. By acquiring the CalPlant I facility, CalFibre aims to not only salvage a significant investment in green technology but also to realize the full potential of this unique manufacturing process. CalFibre is committed to innovation, sustainability, and the creation of enduring value, embodying a new standard for the MDF industry and beyond.



Vision Statement

To revolutionize the building materials industry by pioneering the use of rice straw-based medium-density fiberboard (MDF), transforming an environmental challenge into a sustainable, competitive advantage. CalFibre envisions a world where sustainable practices meet industrial demand, leading the way in eco-friendly innovation while driving economic growth.

Mission Statement

CalFibre is at the forefront of transforming the Medium-Density Fiberboard (MDF) industry by substituting wood with agricultural waste. This shift addresses a critical environmental challenge, significantly reduces the industry's carbon footprint, and meets the increasing demand for MDF across the USA. As one of only three producers in the Western USA and the sole producer in California—the largest MDF market in the country—our aim is to provide the market with a superior local alternative that surpasses the quality, performance, economy, and sustainability of traditional wood-based MDF. Our cost-effective production process, empowered by the latest technology and the abundant supply of post-harvest rice straw, positions us uniquely in the market. CalFibre is setting new industry standards for innovation, sustainability, and the creation of lasting value for our stakeholders and the environment.

Environmental Benefits

At CalFibre, our commitment to sustainability goes beyond the innovative use of rice straw as a raw material for Medium Density Fiberboard (MDF). Our approach is deeply integrated with broader Environmental, Social, and Governance (ESG) criteria, ensuring our operations not only mitigate environmental impact but also contribute positively to societal and governance advancements. Here's how CalFibre aligns with and champions these vital environmental goals:

- **Carbon Footprint Reduction:** By substituting wood with locally sourced agri-fiber, CalFibre significantly lowers the carbon emissions associated with deforestation and the transportation of raw materials. This reduces the manufacturing footprint by 25% compared to the traditional wood-based MDF manufacturing process. This initiative directly contributes to global efforts to reduce carbon footprints and combat climate change, aligning with the Paris Agreement's goals and supporting investors' and stakeholders' increasing demands for climate-conscious investments.
- **Water Conservation:** The CalFibre process utilizes rice straw that would otherwise



require significant amounts of water for decomposition. The removal of 280,000 tons of rice straw conserves an estimated 60,000 acre-feet of water annually, equivalent to the yearly water consumption of approximately 500,000 residents in the San Francisco Bay Area. This conservation effort supports global water sustainability goals (SDG 6: Clean Water and Sanitation) and underscores our commitment to preserving vital water resources.

- **Ecosystem Preservation and Biodiversity:** By avoiding the need for wood-based raw materials, CalFibre saves over 4,200 acres of mature forests (the estimated equivalent of more than one million trees) from needing to be clear-cut each year. This protection of natural habitats is crucial for wildlife, supports the health of global ecosystems (SDG 15: Life on Land), and the water savings as a result of straw removal will enable the reduction of seasonal fall water diversions from the Sacramento, Yuba and Feather Rivers. This will likely help protect the fall-run Chinook salmon (a species federally listed as threatened and endangered), steelhead, striped bass, and other valuable California fisheries (SDG 14: Life Below Water).
- **Air Quality Improvement:** The utilization of rice straw, an agricultural byproduct, in MDF production, significantly reduces methane emissions, contributing to cleaner air and a healthier environment. Assuming an estimated 1,250 lbs. of methane per acre from otherwise decomposing rice straw in the fields, CalFibre will reduce methane emissions by 62,000 tons annually; this is the greenhouse gas effect of approximately 1.7 million tons of CO₂, or the equivalent of removing an estimated 370,000 cars from California's roadways each year (SDG 13: Climate Action).
- **Circular Economy and Waste Reduction:** CalFibre embodies the principles of the circular economy by repurposing agricultural waste into high-quality building materials. This initiative not only provides a sustainable solution to the disposal of rice straw but also reduces the need for virgin raw materials, promoting resource efficiency and waste reduction in line with global sustainability targets (SDG 12: Responsible Consumption and Production).
- **Social Impact and Community Engagement:** Beyond environmental benefits, CalFibre's operations support local communities by providing employment, fostering agricultural partnerships, and contributing to economic development in rural areas. This approach enhances our social impact and aligns with ESG criteria by promoting social equity and economic sustainability (SDG 8: Decent Work and Economic Growth and SDG 11: Sustainable Cities and Communities).

By integrating these environmental benefits into our core operations, CalFibre is not just manufacturing MDF; we are actively contributing to a sustainable future. Our



alignment with ESG criteria and SDGs makes CalFibre an attractive option for investors looking to support companies that are leaders in environmental stewardship, social responsibility, and governance excellence.

Business Case and Opportunity

CalFibre is uniquely positioned at the nexus of innovation and sustainability, ready to capitalize on the increasing demand for eco-friendly building materials. Amidst a global transition towards green construction practices, the market for sustainable building materials is witnessing substantial growth. CalFibre leverages this momentum with a product that surpasses both the performance and environmental benchmarks set by traditional Medium Density Fiberboard (MDF).

Our Unique Value Proposition:

- **Sustainable Superiority:** Utilizing rice straw, an abundantly available agricultural byproduct, CalFibre's MDF production significantly reduces reliance on forest resources and minimizes environmental footprint. This strategic use of materials not only caters to the surging regulatory and consumer demand for sustainable products but also secures a competitive edge in the expanding green building materials sector.
- **Cost-Effective Production:** The strategic sourcing of locally available rice straw drastically cuts down raw material costs. Coupled with our cutting-edge manufacturing processes, CalFibre is positioned to produce MDF more cost-effectively than traditional wood-based counterparts, offering a distinct price advantage in the competitive market.

Market Characteristics and Expansion Opportunities:

- As of 2021, the U.S. consumption of MDF totaled 2,000 MMSF, translating to approximately \$1 billion in sales. The Western U.S. constitutes about 25% of this consumption, with California ranking as one of the largest consuming states, accounting for roughly 10-15% of the national demand. This market dynamic underscores the significant opportunity for CalFibre.
- Currently, CalPlant, with its strategic location and capacity, is one of only three MDF plants in the Western U.S., and notably, the sole producer in California. With approximately 60% of Western U.S. MDF supplied regionally and the remainder primarily sourced from Canada, the absence of local wood fiber resources presents a unique opportunity for CalFibre. Our anticipated production capacity of 140 MMSF is poised to bridge the existing supply gap, offering a locally-

Cal fibre LLC
1769 County Road FF
Willows, CA 95988
United States

Web: calfibre.com
Mail: ju@calfibre.com
Phone: +1 (530) 521-0249



sourced alternative that benefits from geographic advantages such as reduced shipping and fuel costs, proximity to customers, and streamlined logistics.

- The establishment of long-term raw material contracts and agreements with offtakers underscores CalFibre's readiness to meet market demand reliably. Moreover, access to alternative utilities aimed at reducing power costs further enhances our competitive positioning.
- By strategically aligning with market demands for sustainable building materials and optimizing production processes for efficiency and cost-effectiveness, CalFibre is set to redefine the MDF market landscape. Our approach not only positions us as a leader in sustainability but also as a vital contributor to the regional and national building materials supply chain, promising growth and profitability in the face of expanding market opportunities.

Lessons Learned and Solutions

Addressing Past Challenges with Transparency and Action

CalFibre, through its journey, has navigated a series of challenges that have provided valuable insights into not only the technical and operational aspects of producing MDF from rice straw but also into the resilience and innovation required to transform challenges into opportunities. Our experiences have reinforced the importance of adaptability, rigorous process optimization, and the need for strong partnerships.

Key Lessons Learned:

- **The Complexity of Innovation:** Developing the world's first rice straw-based MDF plant introduced unforeseen complexities. From these, we learned the critical importance of flexibility in problem-solving and the value of pioneering with persistence.
- **Supply Chain and Operational Resilience:** Operational hiccups, including issues with raw material consistency and technology integration, underscored the need for a robust supply chain and adaptable operational protocols.
- **Partnership and Collaboration:** The challenges highlighted the necessity for strong, reliable partnerships at every stage, from technology development to operational execution.

Implementing Solutions:

In response to these challenges, CalFibre has taken decisive steps to ensure the



stability and success of our operations moving forward:

- **Strategic Partnership with Andritz:** We've solidified a partnership with Andritz, a global leader in plant, equipment, and services for the MDF industry. This partnership includes comprehensive support for the plant's fix, backed by Andritz's cutting-edge technology and extensive experience.
- **Technological Advancements:** We've integrated the latest technological advancements to address previous operational inefficiencies. This includes improvements in raw material processing and automation to enhance product consistency and quality.
- **New Management Strategies:** Learning from past experiences, we've implemented new management strategies that emphasize operational excellence, continuous improvement, and risk management. These strategies are designed to ensure that CalFibre remains agile and responsive to both market and operational dynamics.
- **Commitment to Continuous Learning:** Recognizing that innovation is a journey, not a destination, CalFibre remains committed to continuous learning and improvement. We are always looking for ways to enhance our processes, reduce our environmental impact, and provide value to our customers and stakeholders.

Through these lessons learned and the solutions implemented, CalFibre is not only addressing past challenges but is also laying a strong foundation for a future characterized by innovation, sustainability, and success.

Forward-Looking Statements

The unique opportunity before us involves acquiring the CalPlant facility—a venture that initially demanded over \$400 million in investment—for an estimated \$20-\$25 million. This acquisition sets the stage for the implementation of the fully developed "Fix" Plan, designed to ensure a minimum guaranteed throughput of 120MM sf 3/4" per year. The initiation of the "Fix" encompasses crucial modifications to the refining system, addressing previous capacity and quality challenges. This effort is supported by partnerships with leading equipment manufacturers Andritz and Siempelkamp and involves an estimated \$50 million investment during a 9-month period, aiming for a 12-month ramp-up to stable production. With a total investment of approximately \$75 million, we anticipate achieving an annual EBITDA of \$43 million upon stabilization, not accounting for potential revenues from carbon credits.



Vision for the Future

- **Zero-Emission Production:** In our pursuit of environmental excellence, we aim to achieve zero-emission production. Plans include establishing a biochar production facility to utilize excess energy for replacing natural gas boilers and installing photovoltaic systems to meet 100% of the plant's power needs with renewable energy. This step forward not only underscores our commitment to reducing our environmental footprint but also significantly optimizes utility costs.
- **New Product Developments:** Innovation remains at the heart of CalFibre's strategy. Our ongoing R&D efforts focus on expanding our product range with new MDF grades designed for specific applications, thereby broadening our market reach and product diversity. Each innovation is guided by our core principles of quality, performance, and sustainability.
- **Strategic Partnerships:** Collaboration is key to our growth strategy. We seek partnerships with technology providers and other bio-based technology ventures, aiming to leverage the full potential of the Sacramento Valley's post-harvest rice straw. Our facility's location and infrastructure are ideal for supporting a diverse range of technologies and manufacturing processes, including those further along the value chain like building materials or furniture manufacturers. These partnerships are pivotal in enhancing our competitive edge and delivering stakeholder value.
- **Commitment to Sustainability and ESG Leadership:** CalFibre's dedication to sustainability and responsible governance continues to drive our strategic decisions. By aiming to set new industry standards for ESG performance, we reflect our core values and respond to the growing demand for responsible investment and production practices.
- **Financial Growth and Profitability:** Positioned for success, CalFibre is committed to operational excellence and financial sustainability. Our strategic direction, combined with advanced technology, a skilled workforce, and management expertise, lays the foundation for significant financial growth and profitability. We are focused on delivering efficiency, innovation, and sustainable practices that promise a strong financial future for CalFibre and our investors.

In essence, CalFibre is not merely adapting to market dynamics but is actively leading the way towards a more sustainable future in the building materials industry. Our forward-looking strategies are meticulously designed to unlock growth, spur innovation, and provide lasting value for all stakeholders. As we advance, CalFibre is set to continually evolve, adapt, and lead, all while staying true to our vision of a



sustainable and prosperous future.

Unlocking New Revenue Streams Through Carbon Credits

CalFibre is at the forefront of environmental innovation by leveraging the AM0057 methodology under the UN CDM framework, now adopted by Verra's Verified Carbon Standard (VCS) Program for the Voluntary Carbon Market (VCM). This strategic approach not only underscores our commitment to sustainable practices but also opens up a promising new revenue stream through carbon credit generation.

Methodology AM0057: A Gateway to Sustainable Carbon Credits

- **Scope and Application:** Focused on projects that prevent methane emissions by utilizing agricultural wastes, like rice straw, in the production of sustainable products, AM0057 perfectly aligns with CalFibre's operational model. This methodology specifically targets scenarios where agricultural residues, otherwise left to decompose and release methane, are repurposed, directly contributing to emission reduction efforts.
- **Anaerobic Decomposition:** By diverting rice straw from paddy fields—sites prone to anaerobic decomposition—and using it in our MDF production, CalFibre effectively reduces potential methane emissions, qualifying for emission reduction credits under AM0057.

The Path to Validation and Certification

- **Verra's VCS Program:** Engaging with Verra's rigorous validation and certification process, CalFibre is on track to register our emission reduction projects, aligning with international standards and enhancing our appeal to global investors.

Investment and Financial Implications

- **Compliance and ROI:** Adherence to Verra's international standards not only bolsters our environmental credentials but also positions CalFibre to generate substantial carbon credits. These credits, rooted in traceable, verifiable actions with a clear US origin, promise an attractive return on investment within the fluctuating carbon market.

Forecasting Carbon Credit Revenue

With the full implementation of our production capacity, CalFibre's utilization of approximately 217,000 metric tons of rice straw is projected to result in a net avoidance of 325,000 metric tons of CO₂ emissions, translating into an estimated

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United States

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Mail: ju@calfibre.com
Phone: +1 (530) 521-0249



annual revenue of \$1.6 to \$8.1 million US Dollar from carbon credit sales, based on current market valuations.

Conclusion

Embracing the AM0057 methodology represents a pivotal step for CalFibre, marrying environmental sustainability with tangible financial benefits. Your investment in CalFibre not only supports cutting-edge environmental solutions but also places you at the heart of a growing market with significant potential for impact and profitability. Together, we are setting a new standard for sustainable production and environmental stewardship in the MDF industry and beyond.

Investor FAQs

Q1: Why did CalPlant I go bankrupt?

A1: CalPlant I encountered multiple unforeseen challenges, including construction delays, COVID-19 disruptions, and initial operational issues, which significantly strained our liquidity. Despite the innovative nature and potential of the project, these combined factors led to financial difficulties culminating in bankruptcy.

Q2: How have past financial challenges been mitigated?

A2: We've restructured our financial approach by securing strategic partnerships, streamlining our operational processes, and rigorously managing our finances. Long-term contracts with suppliers and offtakers have been established to ensure a stable and predictable financial foundation.

Q3: What assurances can CalFibre provide that past challenges won't recur?

A3: We've conducted thorough analyses of past challenges and implemented strategic measures, including operational optimizations, technological upgrades, and bolstering our management team with industry veterans. Our proactive stance and these improvements are designed to prevent the recurrence of past issues.

Q4: Who are the people behind CalFibre?

A4: CalFibre is led by Jerry Uhland, the original inventor of the rice straw-based MDF process, and a team of experienced professionals from the manufacturing, technology, and sustainability sectors. Their collective expertise forms the backbone of CalFibre's strategic direction.

Q5: Why is the team uniquely capable to execute the plan?

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A5: Our team combines decades of experience in manufacturing, environmental technology, and business management. This unique blend of skills and experiences, coupled with a deep understanding of the challenges and opportunities within the MDF industry, positions us to successfully execute our vision for CalFibre.

Q6: How much money does CalFibre need and what is it going to do with the money?

A6: CalFibre requires \$75 million to fully implement our strategic plan, covering operational improvements, technological upgrades, and working capital to achieve optimal production levels. This investment will directly support our path to profitability and sustainable growth.

Q7: Which milestones is CalFibre accomplishing with the money?

A7: The funding will enable us to complete the "Fix" plan, achieve full operational capacity, solidify our market position, and reach key financial milestones, including positive cash flow and profitability within a defined timeframe.