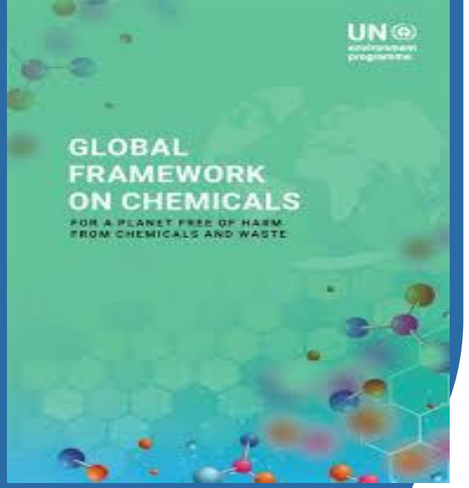
CHEMICALS AND WASTES FINANCING PARTNERSHIP FACILITY (CWFPF)

ROUND TABLE MEETING



Cocoboard: 100% Biocircular Building Material from Coconut Husk Waste

Charmaine Cu-Unjieng
NaturLoop

Cocoboard

From Coconut Husk Waste to Global Leadership in Sustainable Materials

100% bio-based alternative to medium density fiberboard (MDF) and particle board

Disrupting a $50 billion global MDF market with Vitra, Steelcase and IKEA

Philippines Impact:

- Saving 45 million coconut husks from being burned a year
- Raising income of poor coconut farmers by 10-15%

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The Crisis We're Solving

Climate Impact of Furniture and Construction

13 million hectares of forest lost annually due to furniture and construction industries

37% of global carbon emissions come from the building sector, including material production

Billions of Coconut Waste Burned

62.4 million tons of coconut waste burned or left to rot yearly, creating immense environmental and health hazards

Philippines discards
15 billion husks a year

Coconut Farmers Remain Poor

60% of 2.8 million Filipino coconut farmers survive on $1/day despite working in a $2 billion (2025) coconut industry

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Abundant, Unmonetized Raw Materials






Under-Utilized Resources

Only 5%-10% of coconut husks are converted into products such as ropes, geotextiles, bio-charcoal, and soil substrates

Low-Value

Of those 5%-10%, all are low-value commodities

Early R&D Stage

Other proposed coco-based solutions are stuck at the R&D stage because they are industrially unfeasible as of now or...

Use of Toxic Adhesives

They contain toxic substances that increase carbon footprint and complicate end-of-life scenarios

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Bio-Circularity: Not a Trend, But a Mandate

EU Regulation / Policy	Focus for Furniture	Timeline
EU Deforestation Regulation (**EUDR**)	Deforestation-free wood & panels	Dec 2025 • SMEs: Jun 2026
Ecodesign for Sustainable Products Regulation (**ESPR**)	Circular design, durability, recyclability	Furniture act Jan 2026 • Applies ~2027
Packaging & Packaging Waste	Recyclable & reusable packaging	2025–2030 phased
EU Ecolabel	Voluntary ecolabel, non-toxic, sustainable wood	Active since 2022
REACH / CSS (Chemicals Regulation + Chemical Strategy for Sustainability)	Hazardous chemicals & non-toxic design	Ongoing updates

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Furniture Industry Forced to Shift, Fast

⚠️ **Tightening Emission & Formaldehyde Regulations:**

- EU mandates E0 levels; brands like IKEA are moving towards low-carbon materials

🧪 **Phase-Out of Fossil-Based Adhesives:**

- MUF, UF, and pMDI resins account for over 50% of wood panel CO_2 emissions

🌳 **EU Deforestation Regulation (EUDR):**

- Full traceability is essential; non-compliant suppliers face import bans

♻️ **Circular Economy Directives:**

- New policies call for recyclability, durability, and eco-design; MDF presents challenges for reuse

📊 **Corporate ESG Targets:**

- Reductions in Scope 3 emissions (product lifecycle) are critical, especially in furniture and interiors

❓ **Demand for Better Materials:**

- Growing need for formaldehyde-free, bio-based, natural-surface panels
- Central theme of Interzum Cologne 2025 was biocircularity in furniture materials

🧮 **Carbon Accounting Systems:**

- Major buyers like IKEA and Steelcase are now monitoring emissions in their procurement processes

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Cocoboard: Addressing the Need, Filling the Gap

100% bio-based alternative to wood panels made from coconut husks and natural adhesives for furniture and interior architecture use

100% Non-Toxic

Free from formaldehyde and other harmful chemicals found in conventional wood panels, creating healthier indoor environments for homes and workplaces

Exceptional Strength

Higher screw-holding capacity and structural integrity allow for more versatile applications and increased durability, reducing replacement frequency and total lifecycle costs

30% Higher Moisture Resistance

Superior performance in humid environments with less swelling and better dimensional stability than traditional MDF

Termite Resistant

Natural compounds in coconut fibers repel termites without chemical treatments, extending product lifespan and reducing maintenance costs in vulnerable regions

30% Lower Coating Consumption

Smoother surface structure requires up to 30% less paint and finishing materials, reducing costs for manufacturers while decreasing chemical usage and environmental impact

Unique Natural Aesthetics

Versatile as traditional MDF but can be finished to showcase its raw, natural characteristics

Cocoboard vs. MDF: A New Standard for Sustainable Panels

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Product	Cocoboard	Standard MDF	Fire-Rated MDF	Exterior MDF	Coloured MDF
Bio-Based Adhesive	**100% bio-based**	X	X	X	X
Emission Class	E1	E1	E1	E1	E1
Fire Performance	**C-s1,d0**	D-s2,d0	B-s1,d0	D-s2,d0	D-s2,d0
Internal Bond Strength (N/mm^2)	0.6	0.55	0.6	0.8	0.75-0.8
Bending Strength (N/mm^2)	15	20	25	20	35-38
Water Resistance (Thickness Swell%)	9	12	12	2	8
Price (CHF/m^3)	2,000	813	1,938	6,500	3,125-3,250
Density (kg/m^3)	705	725	750	705	760
Origin	EU/Asia	Switzerland / Germany	Belgium	Ireland	Portugal/ South Korea

MDF = medium density fiberboard

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Green Technology Ready to Industrialize

Swiss Technology

- Ongoing partnership with the Bern University of Applied Sciences
- 10 years of R&D and $1.75M of grants
- Protected by international patent

Scalable

Highly scalable production using existing wood panel factories with minimal retrofitting, reducing capital costs and time-to-market

Cost-Competitive

Each fully-dedicated factory designed to generate 600 shipping containers of panels a year, leveraging economies of scale to offer competitive pricing

Market Opportunity

Targeting a $1-$2B Bio-Based Opportunity in Europe's $18B MDF & Particleboard Market

Our estimated addressable market in the EU is $1–$2 billion.
→ Driven by growing demand for formaldehyde-free, low-emission panel solutions

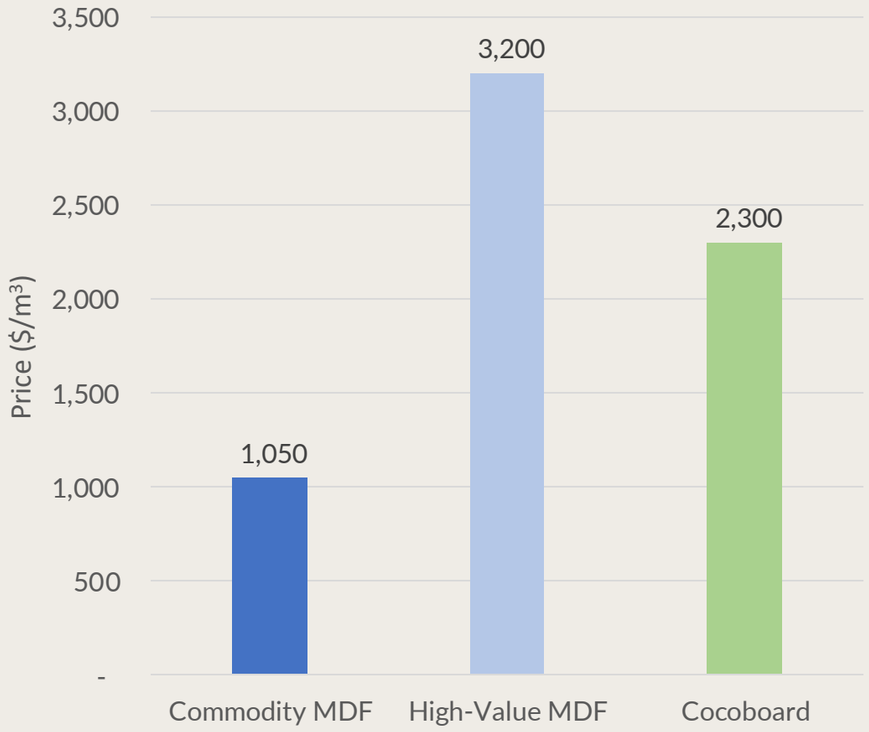
EU MDF + Particleboard Market = $18B

- EU represents ~25-30% of the global $50B MDF market
- Includes commodity and higher-value panels

Emerging Bio-Based Segment (5–10%)

- Represents a $1-$2B niche within the broader EU market
- Driven by emission regulations, E0 demands, and ESG pressures
- Early adopters: furniture brands, architects, interior designers

Cocoboard is competitively priced within the premium MDF segment



Sources: GMI Insights, Grand View Research, IMARC, NaturLoop customer data

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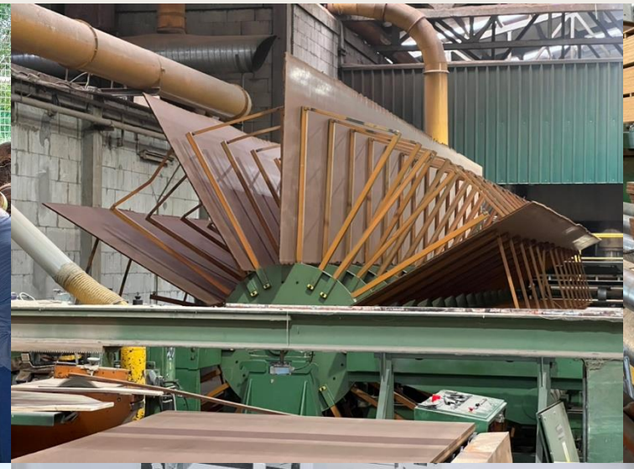
Integrated Supply Chain + Strategic Production



Roadmap to Scalable, Global Production of Cocoboard

Early Production & First Sales
Now to June 2026

Supply:
- Ramp up to 20 tons/month
- Launch compressed husk shipments

Pilot Production:
- Sweden: Oct 2025
- Thailand Dec 2025

Customers:
- Convert LOIs to commercial orders
- Target $60k in revenue
- Deliver panels to Vitra, Kuratle & Jaecker, Schwab System, Studiocolony

Scaling Production & Market Growth
Q3 2026-2028

Supply:
- Establish 2nd and 3rd PH husk centers Increase capacity to 90 tons/month

Production:
- Start continuous batch production in Sweden
- Launch pilot production in SE Asia

Customers:
- Expand EU volume orders and distribution
- Enter architectural market
- Secure first sales in Asia

Full-Scale Production & Global Reach
2029-2030

Supply:
- Expand raw material supply by sourcing full husks from farm-level

Production:
- Launch dedicated contract manufacturing in SE Asia
- Reach 10,000-20,000 m^3/year

Customers:
- Scale furniture brand orders globally
- Expand distribution in Asia

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Commercial Traction with Leading Brands

vitra.	Tabletops	Prototyping since Oct 2021. Updated LOI for 3 initial products.
SCHWAB SYSTEM BOIS - BATIMENT - AUDITORIUM	Acoustic Panels	Prototype complete, 7-panel follow-up. Acoustic validation.
STUDIOCOLONY	Design Studio	Long-time partner, 3 prototypes completed.
Steelcase	Office Furniture	Developing sustainable office furniture. Global scale potential.
KURATLE JAECKER Mach was mit Holz	Swiss Distributor	Exclusive Swiss distributor.
TECHNEW	Luxury Packaging	Strong results. Entry to luxury packaging market.
KNOBLAUCH	Premium Retail	Initial tests complete. Premium fit-out channel.
IKEA	Home Furniture	Internal lab testing complete. High-volume long-term potential.
wd 3	Office Furniture	Prototype built. Further testing planned.
WERKKOLLEKTIV	Interior Design	Team tested industrial panels. Strong hands-on engagement.

Meet the Tenacious NaturLoop Team

Our gender and culturally diverse team combines expertise in materials science, wood technology, coconuts, and sustainable development

Co-founder & CEO: Daniel Dinizo

Wood innovation and materials science specialist, continuing a third-generation entrepreneurial legacy

Bern Univ. of Applied Sciences

Co-founder & CTO: Michail Kyriazopoulos

Wood technology, furniture design, and bio-composite adhesives specialist

Bern Univ. of Applied Sciences

Co-founder & CSO: Charmaine Cu-Unjieng

Social impact and international development specialist

Yale, Univ. of Amsterdam

ADB, UN, international and Local NGOs

Kees Tijs: COO

Operations and scale-up specialist with expertise in international manufacturing partnerships

Nespresso, Richemont

Charlie Zhu

Head of Procurement & Logistics

Jerelle Marques

Head of Operations Philippines

Aira Ackermann

Marketing & Sales Support

And Our Passionate Advisors

Thomas Walther

Product Development

20+ years in fiber-board composites, former IKEA industry expert, Senior Principal at AFRY on wood industry strategy

Peter Scrivener

Finance

25+ years in finance including leadership roles at Nestle and Mars, guiding NaturLoop on fundraising, capital strategy, and financial planning

Fred Dinizo

Commercial Solutions

40+ year in wood manufacturing, co-founded Element5 and CNC wood component company

Agnes Cristobal

Coconut Industry

Deep sector knowledge and networks in the Philippines, supporting NaturLoop in building resilient farmer partnerships and expanding local supply chains

Joseph De Leon

Fundraising

10+ years' experience guiding global brands. Combines rigorous analysis, creative problem-solving, and collaborative leadership to drive breakthrough marketing and business results

Vivian Yuchengco

Partnerships

Philippine Stock Exchange (President 1989, Chairman 2002-2003, Director 2003-present)

Looking for strategic investors and partners to lead in sustainability.

- Governments: secure farmer livelihoods, create new industries, solve waste issue
- Industry: hedge against regulation, unlock new revenue, market differentiation
- Investors: ride the fast-growing bio-circular market

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FUNDERS and PARTNERS: