

CHOP X VALUE

ONCE A CHOPSTICK - NOW A STATEMENT

Circular Economy Principles



Scaling impact responsibly, one chopstick at a time.



Felix Böck, Founder & CEO

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  @chopvalue



MADE
LOCAL



HAND
CRAFTED

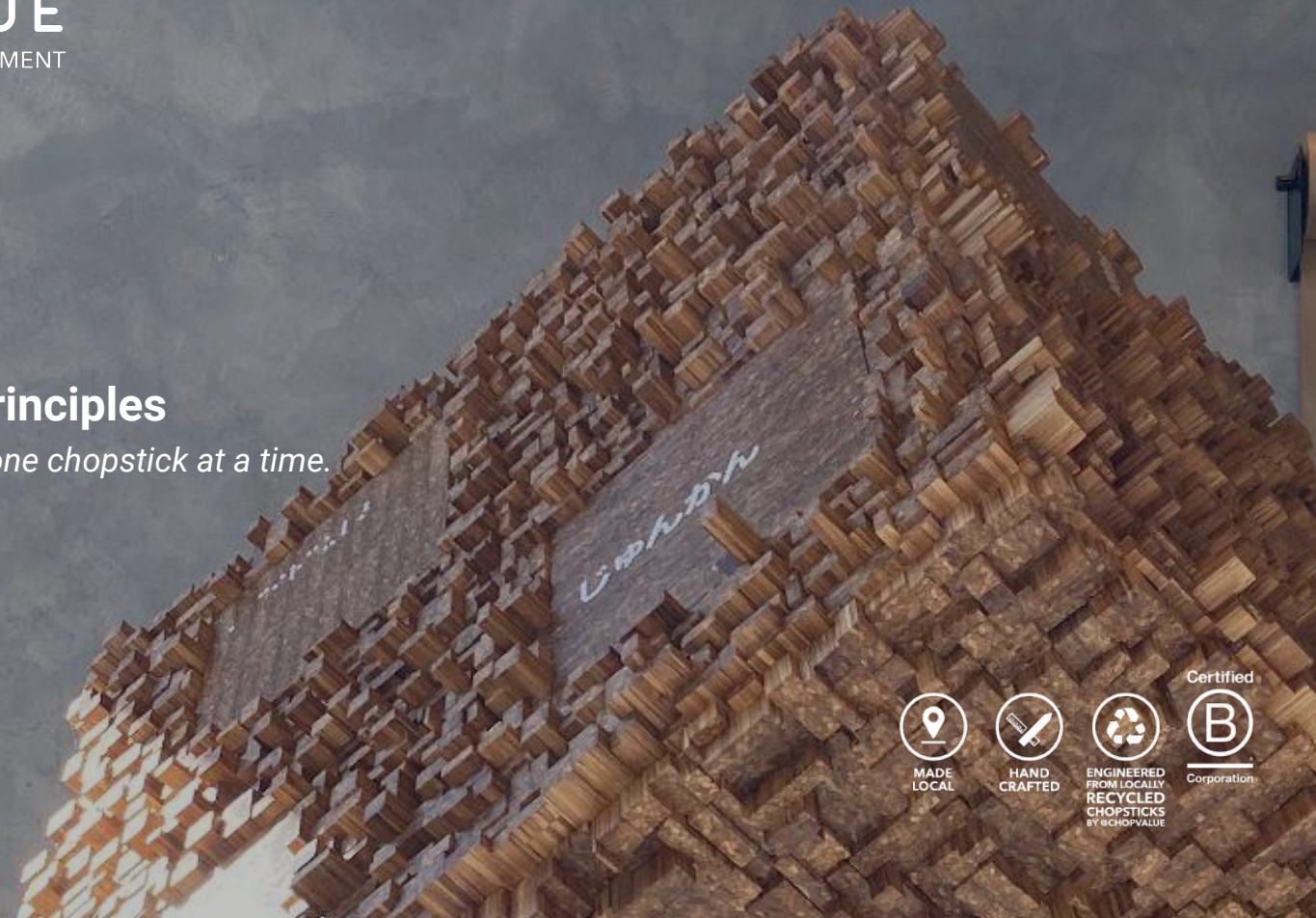


ENGINEERED
FROM LOCALLY
RECYCLED
CHOPSTICKS
BY @CHOPVALUE

Certified



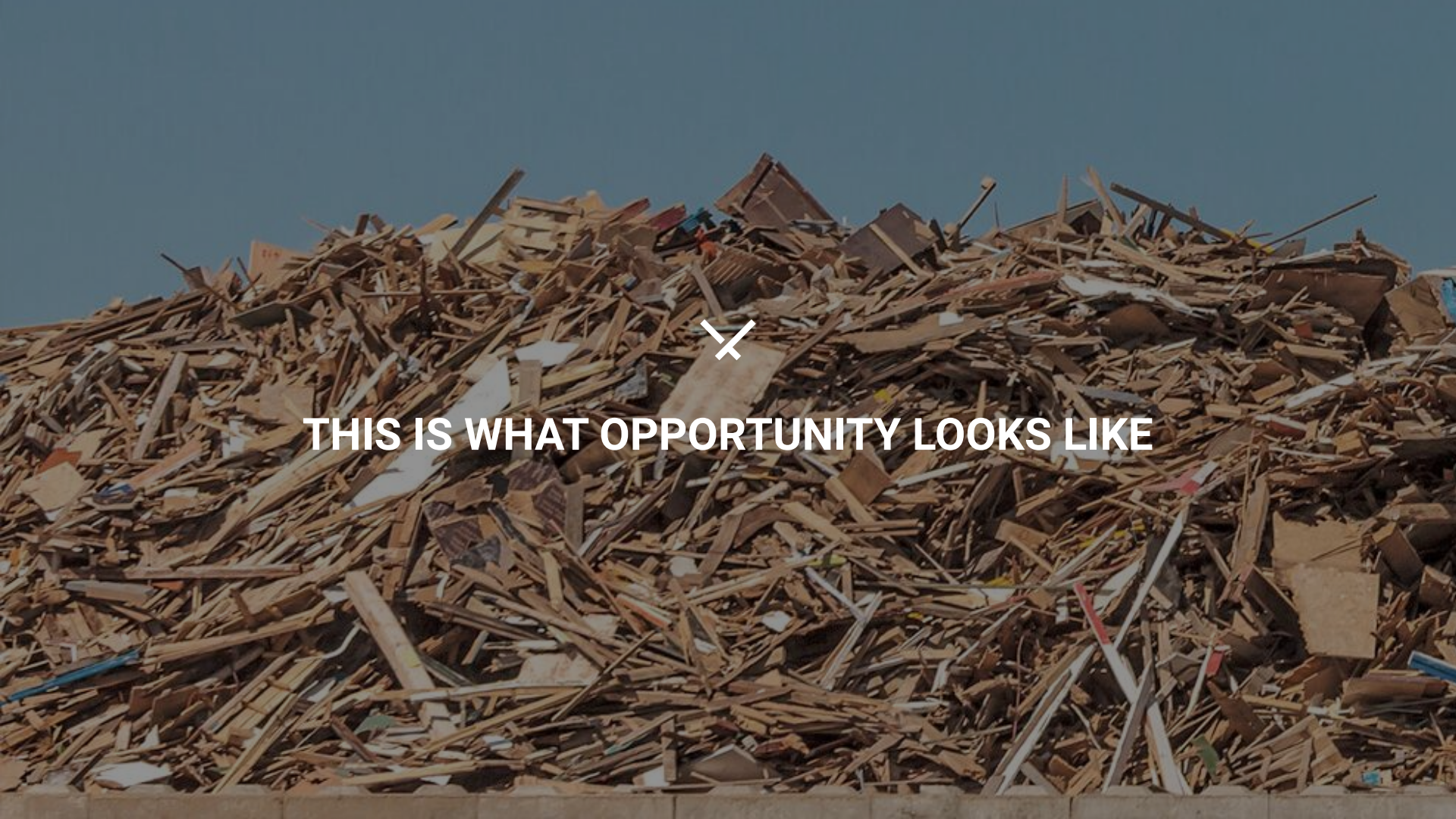
Corporation





The world generates 2.1 billion tonnes of waste, annually.

That figure is expected to rise to 3.4 billion tonnes per year over the next 30 years.



THIS IS WHAT OPPORTUNITY LOOKS LIKE

*A greener planet
requires innovative
businesses to lead
the change.*

- ChopValue Team





Our Vision: Lead by Example

We are redefining *waste to resource*,
for a viable circular economy.

One chopstick at a time.

Why it Matters: Working Towards a Circular Economy

CLIMATE POSITIVE, CARBON NEGATIVE

We harvest urban resources for circular engineered, second life products which extends the duration of the carbon retained in the wood and bamboo material, and avoids virgin resources (trees) to be cut down for new wooden furniture. When recycled, processed, and engineered, our material is created for a new, extended and circular lifetime.

We collect from thousands of restaurants, food courts and hotel partners globally. Collections are free of charge and our partners are able to meaningfully improve their environmental footprint.

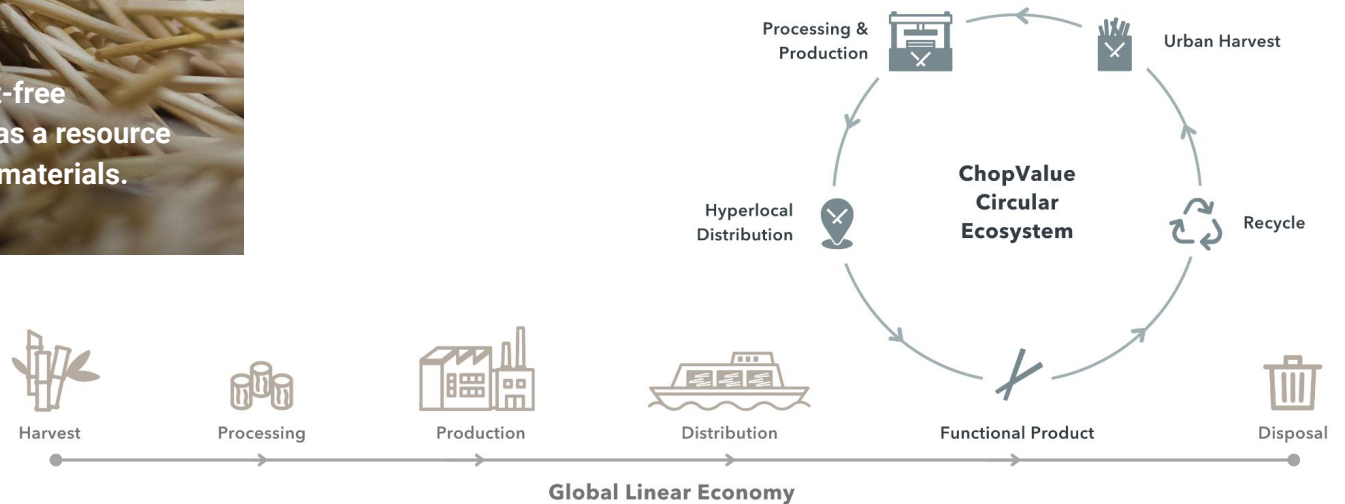




ChopValue recognizes that **these perfect, slender, defect-free chopsticks** can be reutilized as a resource to develop novel engineered materials.

A circular economy creates the system to turn *waste* into *resources*.

We made it our mission to operate within that framework and work on the problem directly.



80 Billion

disposable chopsticks are used worldwide - every year.

Most travel 9000+ km for a 20-30 minute single use, and then sent to landfills.

We have the responsibility to do better and take care of our beautiful, renewable natural resources with bamboo leading the way.



Our Leadership Team

Our diverse management team is working with you towards a viable, circular economy - one chopstick at a time.

- **Focus:** we relentlessly pursue our vision with clarity, efficiency, and quality.
- **Balance:** we create connections and collaborate locally and globally.
- **Community:** we strive for a healthy balance between work and home.
- **Accountability:** we are reliable, and take responsibility for the outcome.
- **Authenticity:** we are sincere, approaching every situation with empathy and honesty.



Felix Böck, Founder & CEO

Felix knocks on wood for a living. He is a seasoned wood engineer and passionate entrepreneur with 15 years of engineering and business experience in the wood/bamboo and automotive industry. He has worked in factory and capacity planning, process engineering and product development in 12 countries before settling in Vancouver with the motivation to leave a positive impact in the local forestry industry.

The decentralized micro-manufacturing vision came to Felix over sushi with his partner, where he shared his frustration about the amount of construction and municipal waste generated in our cities. As viable concept for a circular economy, ChopValue's brand was born.

Under Felix's leadership, strategy and vision his team has discovered a powerful way to grow Vancouver's story into a global brand.

He believes that leading by example with innovation and resilience will inspire others to rethink resource efficiency and reshape the future of urbanization.



Josephine Kwan
System Growth



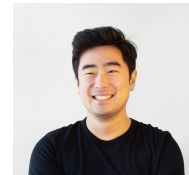
Tom Atkin
Global Operations



Heather Kerklain
Strategic Partnerships



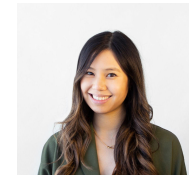
Markus Weiss
Chief Financial Officer



Michael Cha
Director of Finance



Tatiane Vita
Global Sales
& Marketing



Alison Lee
Global Brand
& Marketing



Sueun Jung
Creative Director

CHOPXVALUE

Committing to Circularity: Understanding Value Propositions



Our Viable Approach to Scale Circularity

Chopsticks are currently a vastly underutilized waste resource in cities around the world. We decided to do something about it.

We call it: **urban harvesting**.



Recycling Chopsticks

Urban harvesting disposable chopsticks as a resource to divert them from the landfill



Producing in Microfactories

Lean manufacturing using locally available resources to minimize environmental footprint



Creating Minimalistic Design

Beautiful circular economy products from an innovative high performance engineered material

ChopValue® Natural MicroFibre Performance is a highly densified, solid composite material made from compressed recycled chopsticks, and engineered to last a second lifetime, making it suitable for the toughest conditions.

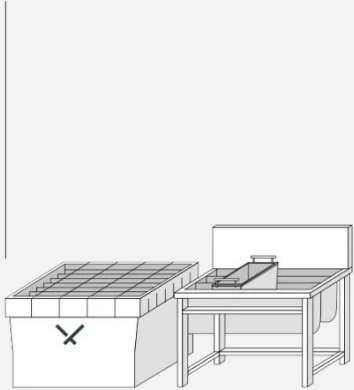


Illustration of The ChopValue Microfactory Concept

The production line is subdivided into our CV proprietary core equipment and the remanufacturing machinery from resource to finished end product for your community.

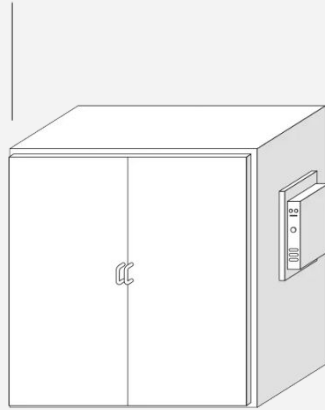
1. Sorting & Alignment

Recycled chopsticks from local restaurant partners get sorted, aligned, and preliminarily cleaned to prepare for the transformative process.



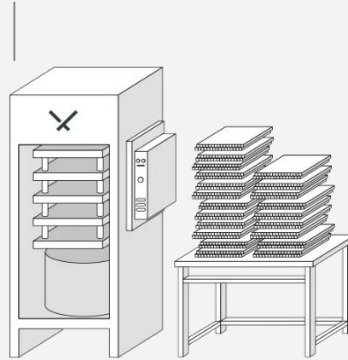
2. Drying

Batches of chopsticks are dried to reach optimal material characteristics for pressing.



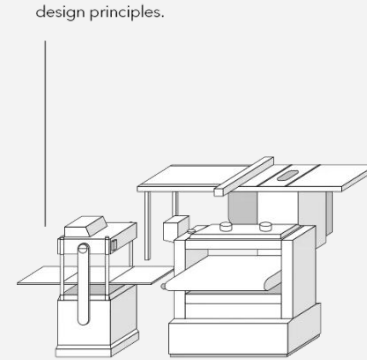
3. Pressing into ChopValue Performance Material

Loose chopsticks are transformed into new uniform ChopValue Performance Material under high heat and pressure. Any bacteria or contamination are removed from this process.



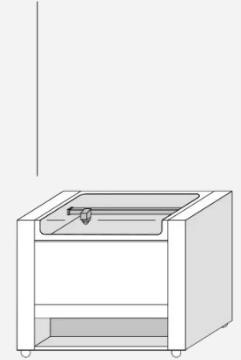
4. Remanufacturing & Finishing

Beautiful and innovative ChopValue products are manufactured using standard woodworking machineries and processes. The uniform material size and properties makes projects big or small possible with modular design principles.



5. Lasering & Customization

Flexible laser engraving options (logos, artworks, and special messages) and customized finishing options provide value-add services for customers.



Proprietary Core Equipment

From Resource To End Product

ChopValue Process



Responsible manufacturing. Custom solutions. Sustainable storytelling.

Global network of Microfactories to meet demand and deliver on short lead times.

Local sourcing, manufacturing, and distribution as close as possible to our clients to reduce carbon footprint.

Full service design, logistics and installation support.

Dedicated co-marketing and storytelling, helping our partners translate impact into brand equity and education.



The image shows a modern interior space. The main wall is covered in light-colored wood panels arranged in a grid pattern. To the left, there is a dark grey wall. The floor is a light grey color. The text is centered on the wood wall.

Committing to Circularity: Design Opportunities

Sustainability Solutions without Compromising Quality and Design

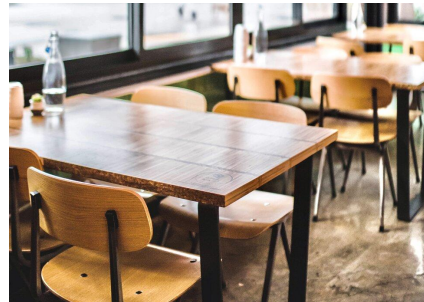
To keep the circular economy in motion, and as part of our global zero waste strategy, we work directly with our partners in a variety of industries to design and manufacture modular, versatile and environmentally conscious solutions of any size and scale.

Closed Loop Restaurant & Hospitality Solutions

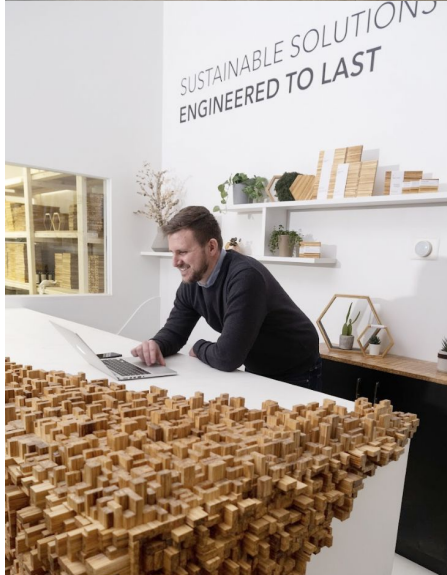
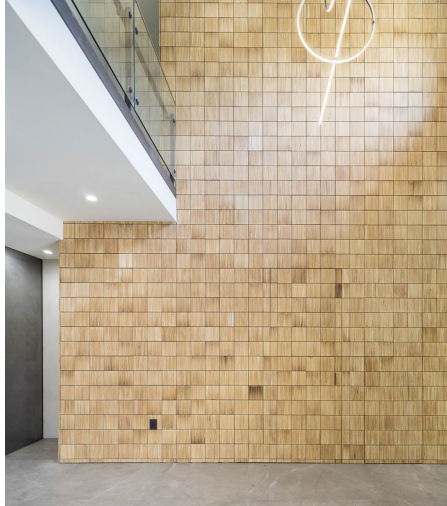
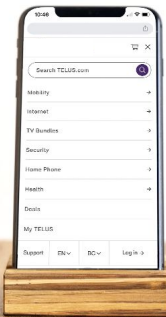
Corporate Offices & Contract Furniture

Educational Institutions

Home & Accessories



Our work: Circular by Design



A close-up photograph of a person's hands, wearing a dark grey sweater, pointing at a large stack of small, rectangular wooden blocks. The blocks are arranged in a grid pattern on a wooden surface. The background is blurred, showing a factory or workshop environment. The text "Committing to Circularity: Environmental Impact" is overlaid in white, bold font across the center of the image.

**Committing to Circularity:
Environmental Impact**

24,917,333

capacity of chopsticks that can be transformed into circular products in each Microfactory, annually.

=



74,752 kg

solid waste conversion per year



1,212,253 kg

of CO2 emissions saved per year



3,738

equivalent # of desks per year

Decentralized Manufacturing - Our Hyperlocal Concept



Decentralized Manufacturing



VS

Centralized Manufacturing



Hyperlocal
Urban Harvesting



Hyperlocal
Remanufacturing



Hyperlocal
Distributing

Made local on a global scale.

Lean manufacturing of high-value products under shared ownership, using locally available resources to minimize our society's environmental footprint: Our expansion philosophy ensures that ChopValue is manufacturing and delivering premium, circular products globally: carbon neutral or better.

Environmental Impact - Leading with Transparency

ChopValue's business decisions are motivated by our desire to be an inspiring leader in environmental impact and transparency. As the business expands, it is vital to us to ensure that expansion decisions, including the addition of new chopstick collection partners, incorporate our core aim of sustainability.



-113% less CO2

Through choosing waste streams over virgin materials as **resource**



-41% less CO2

Through choosing a lean **manufacturing** process



Single Microfactory has the potential to process

24,917,333

recycled and urban harvested **chopsticks** annually.

This saves up to

1,212 TON CO2

annually



-39% less CO2

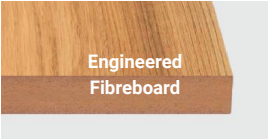
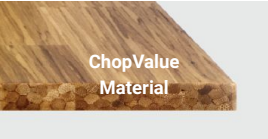
Through decentralized manufacturing and localized **logistics**



3 times extended

Lifetime through the use of solid material

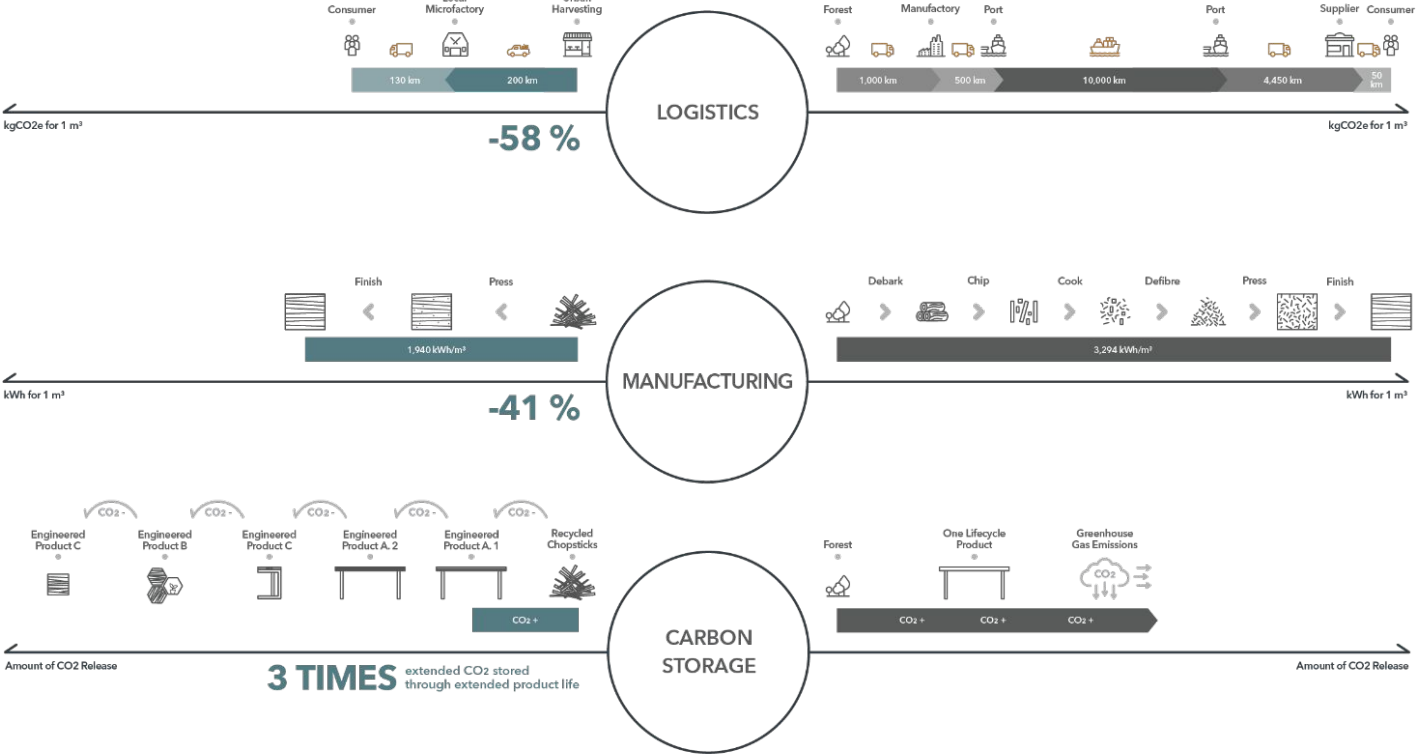
A Comparative Material Analysis



ChopValue Material vs Fibreboard

This shows a comparative analysis of the carbon footprint of a tile produced from ChopValue Material vs. Melamine Fibreboard. On logistics, our approach in collecting chopsticks from restaurants locally, transporting them to the closest microfactory and then to local consumers shows a 58% decrease in CO2 emissions in comparison to the process of sourcing, producing and shipping fibreboard products.

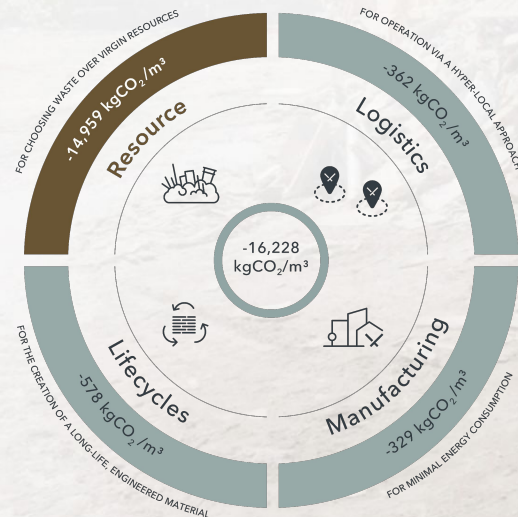
On manufacturing, our simple process (press and finish) represents a 41% decrease in CO2 emissions compared to a 6-step process to manufacture fibreboard. In addition, by engineering our products into other products, we are able to maintain the CO2 emissions stored through the extended product life.



As Forests Shrink, Landfills Grow.

With ChopValue's approach, up to 16,228 kg of CO2 emissions can be saved per cubic meter of furniture by choosing ChopValue Engineered Material over conventional commercial materials.

This calculation is not intended to disparage wood as a renewable resource - renewable resources are a more sustainable choice. However, the main point is to raise awareness of the unused potential of many resources, where the input is disproportionate to the lifespan. The reuse of already processed resources is often more energy efficient and often available in the immediate vicinity, so that a hyperlocal approach can save further emissions due to the shorter transportation route. We recommend using renewable resources over non-renewables, **but consider waste streams first.**



Resource Impact:

One of our most significant positive contributions as a company is the elimination of overseas transportation for raw materials, greatly reducing carbon emissions associated with long-distance shipping. In addition, the preparation of virgin materials for production is highly energy-intensive, a step we completely bypass, further reducing our environmental footprint.

The 1.5 Billion Chopstick Vision

By 2025, we commit to having 150 Microfactories in development around the world, including Japan, Hong Kong, and Dubai. The Microfactories will provide a framework for franchise partners to establish their own business based on converting waste to resource.

1.5+ Billion Chopsticks

Ready to be urban harvested into new performance products

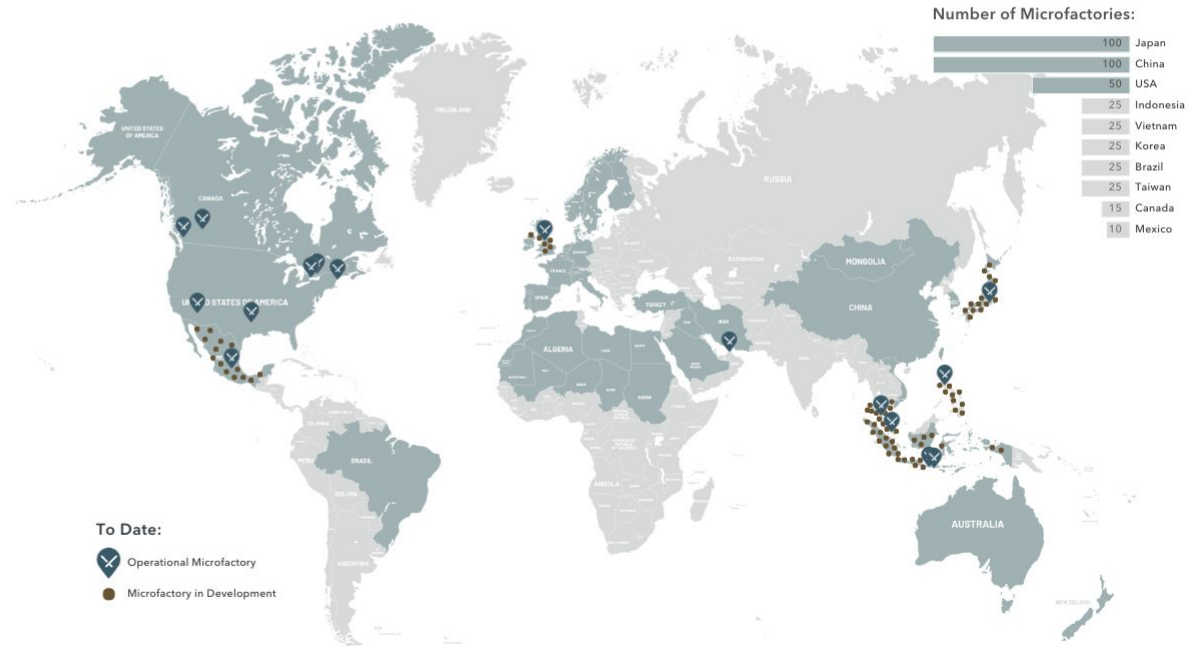
150+ Microfactories

Worldwide

1000+ Locally Employed

Trades, Designers, and Engineers

Global ChopValue Opportunity Map
10 year development plan presented to strategic partners



It's not just about chopsticks.

It's about taking the first step.

Our ultimate goal is to help support you in adopting more circular, climate positive solutions in your restaurants.

We are actively evaluating and investing in new ways to use neglected resources. Looking ahead, we can work together on custom circularity solutions that meet your specific requirements and help you reach your sustainability targets.

Together, we can lead by example.

THANK YOU

