

InventWood[®]

Introductory Presentation

February 2024

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The World Today



The World That's Possible



Introduction to InventWood®

We are committed to transforming the world by creating cellulose materials that are high-performance, cost-effective, and environmentally sustainable.

INNOVATIVE

Portfolio of game-changing material technologies

PRINCIPLED

Committed to offsetting 1 gigaton+ of CO₂ per year

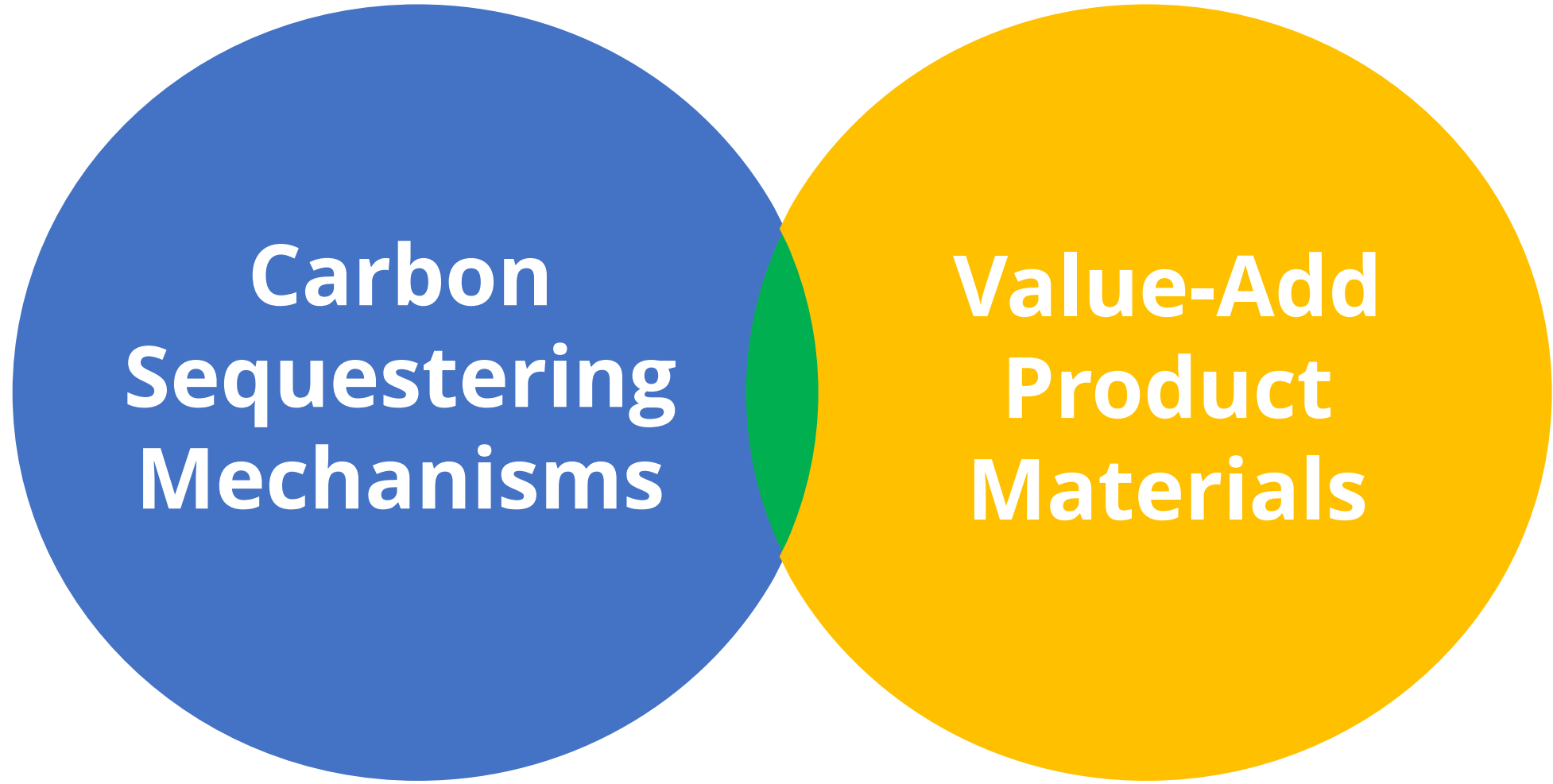
TRANSFORMATIVE

Dynamic, rapidly growing with profound impacts

Key Facts & Milestones

- Founded in 2016; venture-backed
- Awardee of multiple accolades for innovation in climatetech space
- Recipient of \$25 M in federal awards
- Expanding into ~89,000 sf² (8,200 m²) facility
- Awarded 10 patents; over 100 applications in process
- 6 active commercial collaborations across industries

The Traditional Dilemma



Our Advantage

InventWood® Materials

- ✓ Higher Performance
- ✓ Lower Cost
- ✓ Carbon Sequestering

Introducing MettleWood®

Redefining Possible

Perhaps the strongest and toughest material to ever grow on trees, MettleWood® provides a light-weight solution that performs in the most demanding of environments — while simultaneously addressing some of the world's most challenging environmental hurdles.

Climate-conscious

Net-negative production

Ultra Strong

50% stronger than steel

Lightweight

80% lighter than steel

Price Efficient

Significantly lower cost than steel



Carbon Impact: Steel vs. MettleWood



**Steel
I-Beam**

Raw Material

Ecologically
disruptive
strip-mined

Sustainably
harvested



Manufacturing

Energy
Intensive
(1,800° C)

Energy
Efficient
(~160° C)



GHG Emissions

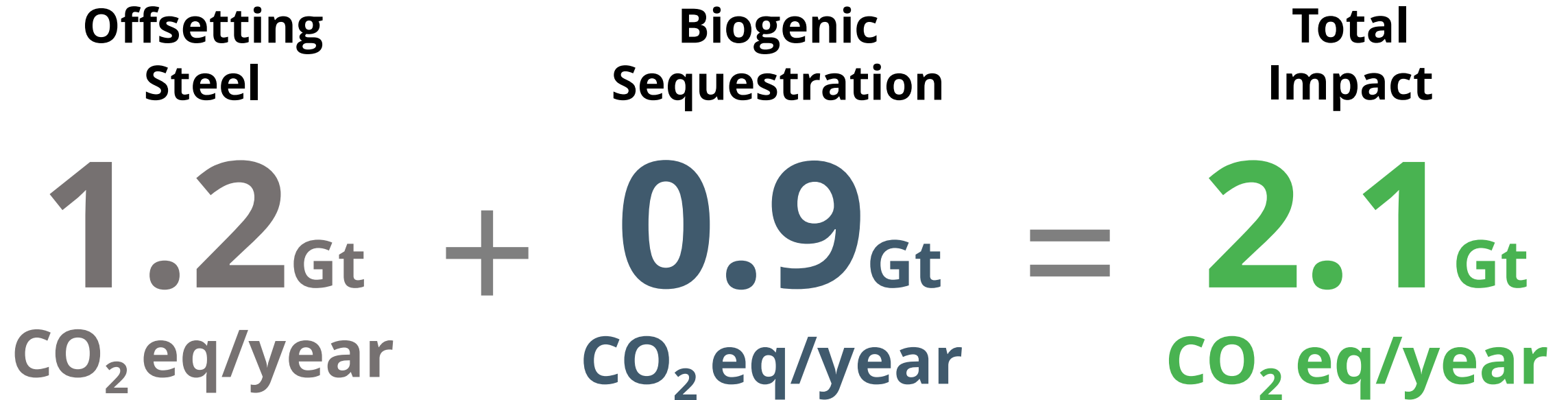
1.8 kg
per kg of steel

-0.6 kg
per kg of steel
(equivalent)



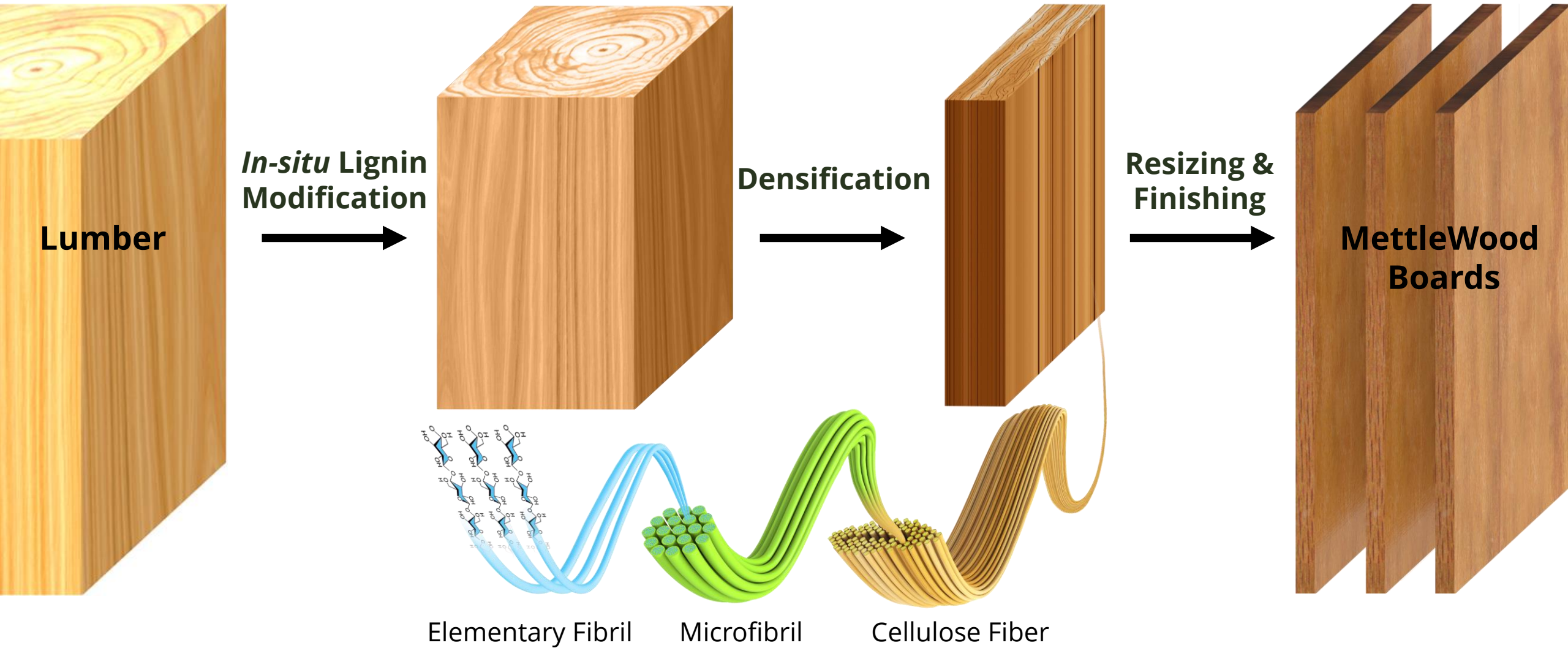
**MW
I-Beam**

MettleWood's Carbon Benefits



*Offsetting Steel assumes 40% replacement of steel, 3 GtCO₂eq/year steel emissions could be offset (and more from concrete)
Carbon Storage assumes 40% replacement of steel, 0.2 Gt of MettleWood can displace 1 Gt of steel, resulting in long-term stored CO₂.*

MettleWood Process and Outcomes



Lumber Demand

- **Process is Species Agnostic**

 - *Can use any wood species in our process*

 - *Looking for Low Cost, Abundant, & Sustainable*

- **Reduce Reliance on High Cost, Slow Growth Lumber**

- **Allow Lumber to Enter New Markets**

 - *Takes wood beyond natural limitations*

New Manufacturing Facility – Frederick, MD

- **89,000 sf facility**
- **Manufacturing set to begin Q2 2025**

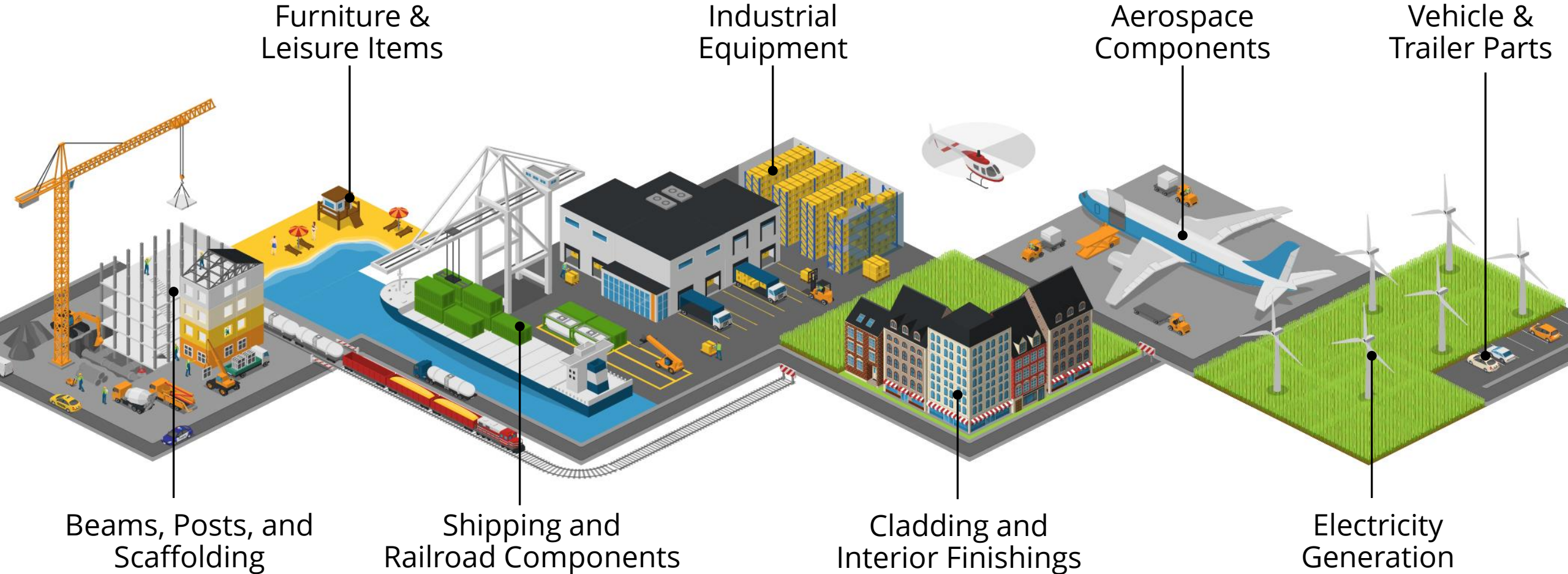


Application Focus: MettleWood as Cladding Product



- **Fire-Resistant**
→ *Enhances safety & enables wood on taller buildings*
- **Super Strong and Tough**
→ *Resilient against impact and other damage*
- **Dimensionally Stable**
→ *No expansion/contraction with temperature changes*
- **Natural Wood Aesthetic**
→ *Desirable in custom homes, offices, high rise residential*
- **Sustainable & Carbon Sequestering**
→ *Allows value-add carbon storage*

Applications for MettleWood



Material Portfolio: Future Innovation Opportunities

Structural & Support



MettleWood



Ultra-Strong Fibers

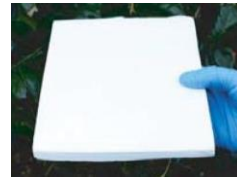


Wood Honeycomb

Thermal Management



Insulating Nano Wood



Radiative Cooling Wood

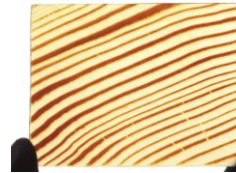


Wood Aerogel

Optical Management



Transparent Wood



Translucent Wood



Clear Nano Paper

Closing Thoughts

The 20th century was built with metals and concrete.

The 21st century will be built with cellulose.

Please join us in creating the world of the future!

Thank you!

For additional inquiries, please contact:

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