

# INNOVATION IN SITE ACCESS

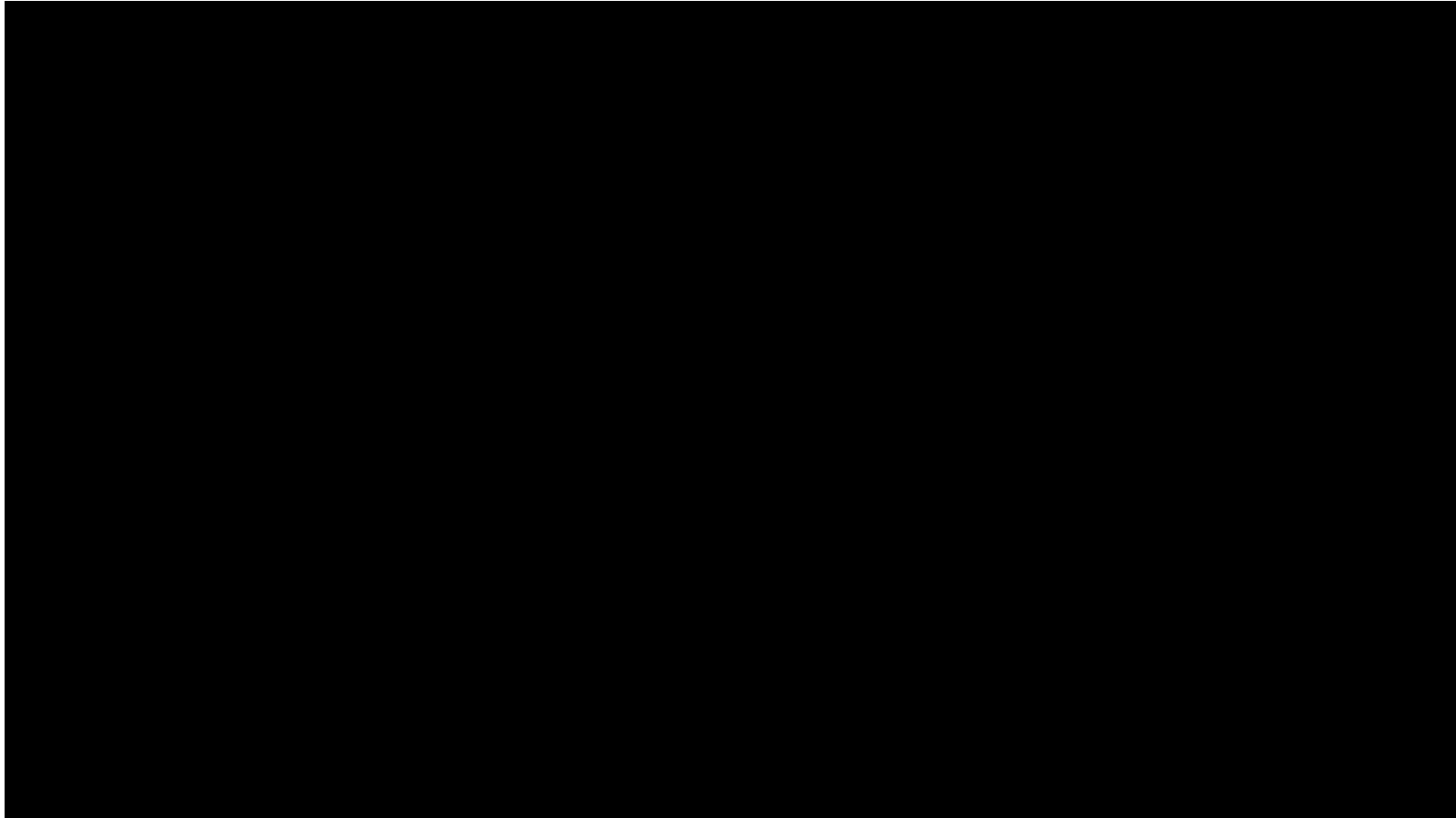
EFFICIENCY MEETS SUSTAINABILITY

August 27, 2018



**STERLING**

# The Pines







GREAT.

BUT WHO CARES?

“We continually seek ways to enhance our operations in the areas of environmental and resource protection and conservation.”



“We created an independent environment, safety and health (ESH) organization to address the shifting stakeholder and industry focus toward environmental sustainability and provide specific responsibilities for guiding our leadership efforts.”

**Terry K Spencer**

President & Chief Executive Officer



“Our goal is to always minimize the environmental impacts of our activities by reducing our land disturbance, carbon intensity, energy consumption and water use.”



# SUSTAINABILITY MATTERS




GREAT.  
WHAT CAN I DO?

## ANYONE INTERESTED IN...

- ✓ Cost savings
- ✓ Increased efficiency
- ✓ Safer jobsites
- ✓ Sustainable products



CHANGE  
OR  
BE LEFT BEHIND



# CROSS-LAMINATED TIMBER (CLT)

GREAT.

WHAT THE \_\_\_\_\_

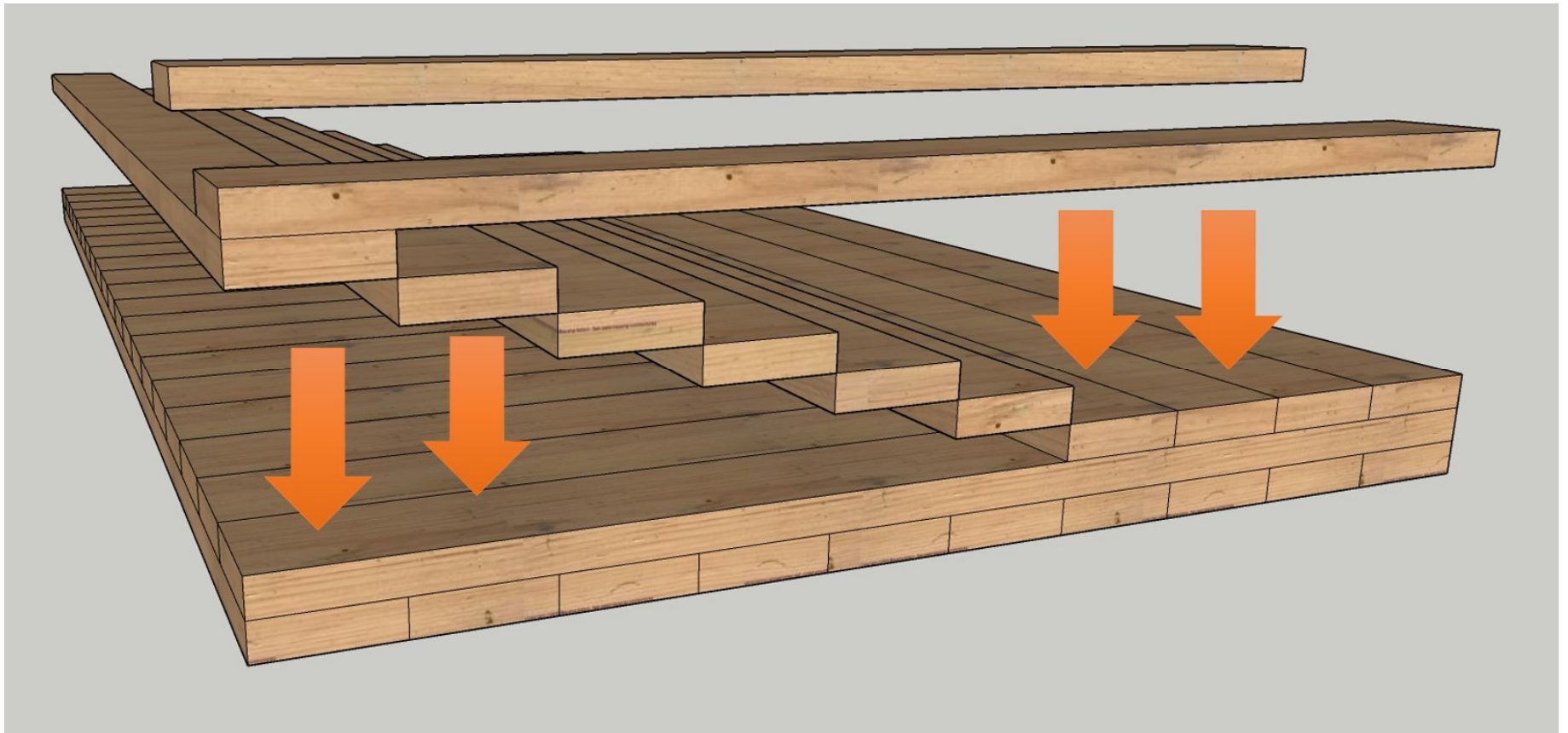
IS CLT?

# CLT HISTORY

- Concept developed and proven in Austria in Germany in the early '90s
- Extensive research and documented history of success
- Growth attributed to better efficiencies and green building movement



# CROSS-LAMINATED TIMBER (CLT)



## PRIMARY SITE ACCESS USES

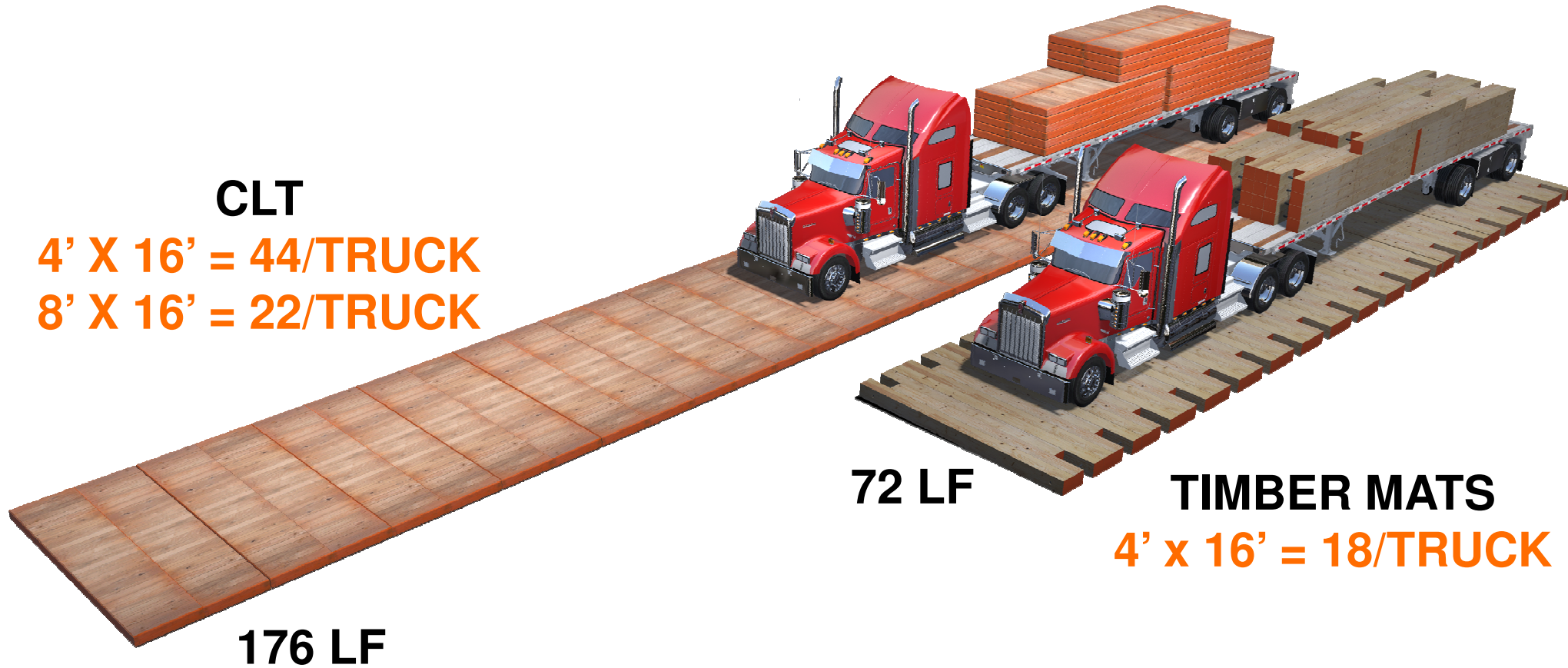
- Temporary roads
- Work platforms / cribbing
- Equipment & staging yards

**LIGHTER = MORE MATS PER TRUCK = FREIGHT SAVINGS**

**CLT**

**4' X 16' = 44/TRUCK**

**8' X 16' = 22/TRUCK**



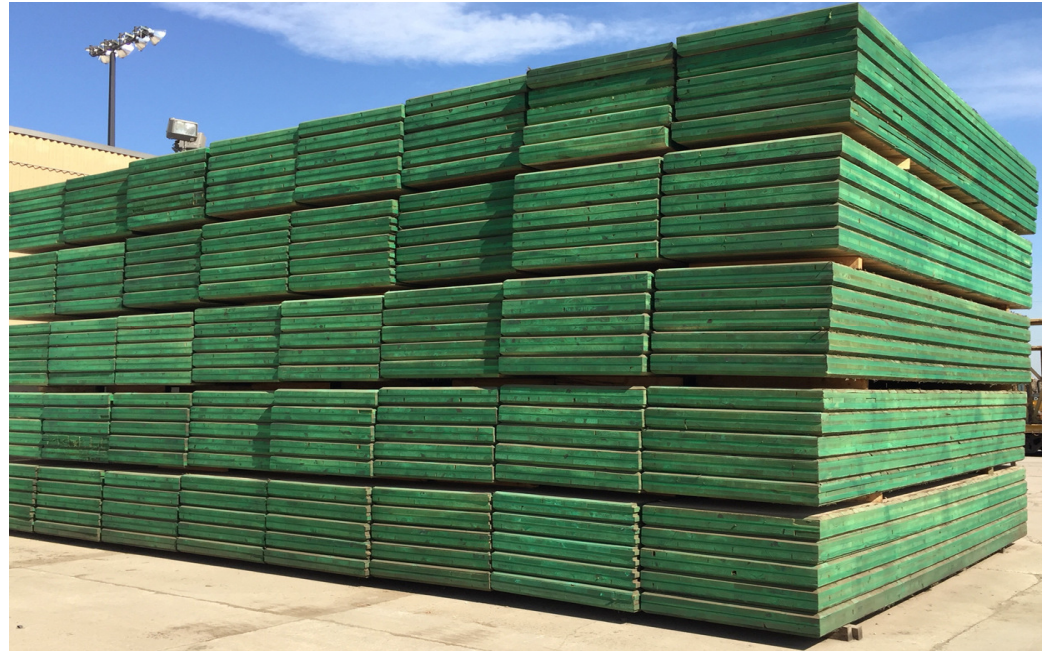
# LIGHTER = EFFICIENT MOVEMENT ON THE ROW



# SAFER - SOLID CONSTRUCTION REDUCES RISK



# CLT = CONSISTENT, PREDICTABLE PERFORMANCE



# CARBON EMISSION REDUCTION

To deliver a single mile of temporary road via truck:



**59.06**

METRIC TONS  
OF CO<sup>2</sup>

**TIMBER MATS**

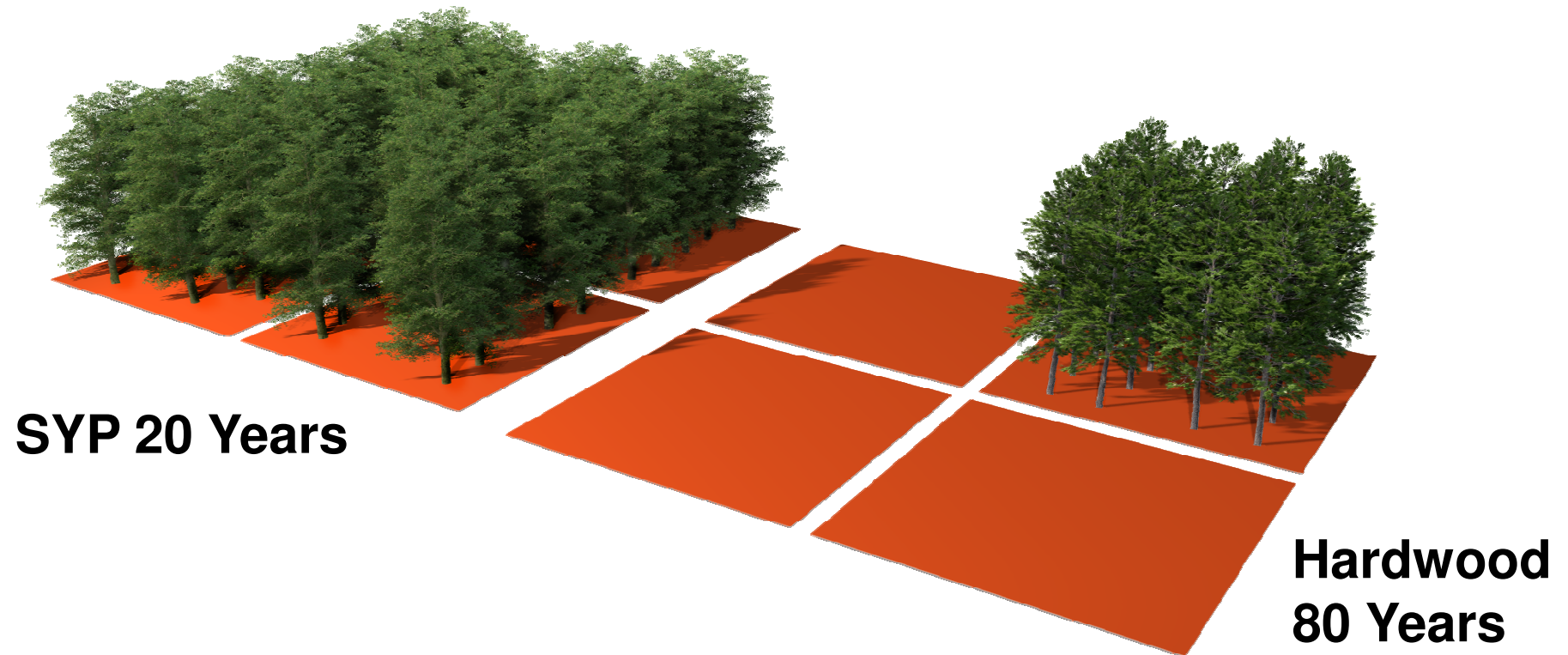
**24.27**

METRIC TONS  
OF CO<sup>2</sup>

**CLT**

**59%  
Less!**

# SUSTAINABILITY – GROWTH TO HARVEST



## SUMMARY BENEFITS OF CLT MATS

**Lighter**



**Save on freight**

**Efficiency On Site**



**Save time & money on labor**

**Safer**



**Crew health, safety ratings**

**Consistency**



**Reliable performance**

**Carbon Emissions**



**Improved environmental practices**

**Sustainability**



**Slower rate of deforestation,  
supply available**

# Q&A

THANKS.  
THIS WAS GREAT.

