

Sustainability in hardwood furniture manufacturing



The key elements

- The forest
- Quality furniture
- Utilization of raw material
- Energy



The forest

SUSTAINABILITY

- While forests are dynamic eco-systems in which species composition will shift over time, regular forest inventories undertaken by the federal government demonstrate that there is rapid growth in the volume of nearly all commercial hardwoods in U.S. forests. This growth is also well distributed throughout the United States.
- According to the latest statistical update by the [United States Department of Agriculture \(USDA\)](#):
 - Between 1953 and 2012 the volume of U.S. hardwood growing stock increased from 5.2 billion m³ to 12.0 billion m³, a gain of over 130%.
 - Between 2007 and 2012, the volume of hardwood standing in the U.S. increased at a rate of 124 million m³ a year (even after harvesting and natural mortality is taken into account) – that's about 4 m³ every second.
 - U.S. hardwood forests are aging, and more trees are being allowed to grow to size before being harvested – the volume of hardwood trees with diameters 18 inches or greater increased nearly four-fold from 0.73 billion m³ in 1953 to 2.7 billion m³ in 2012.
 - The total area of hardwood and mixed hardwood-softwood forest types in the U.S. increased from 244 million acres in 1953 to 274 million acres in 2012. This area increased consistently throughout the 60-year period and continued at a rate of 990,000 acres per year between 2007 and 2012 – that's equivalent to adding an area the size of a football field every minute.
- Information from the American Hardwood Export Council website

INTERACTIVE FOREST MAP

Our unique, interactive map uses published U.S. Forest Service data to show national and regional distribution, growth and removal information for most of the main commercial American hardwood species.

Select data map

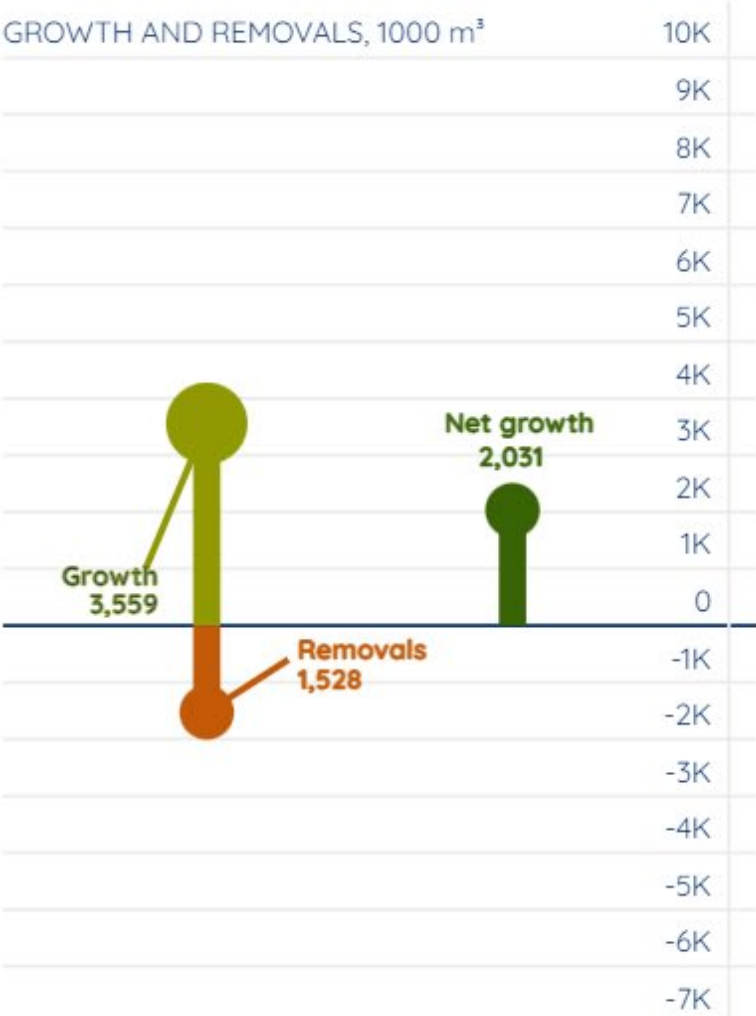
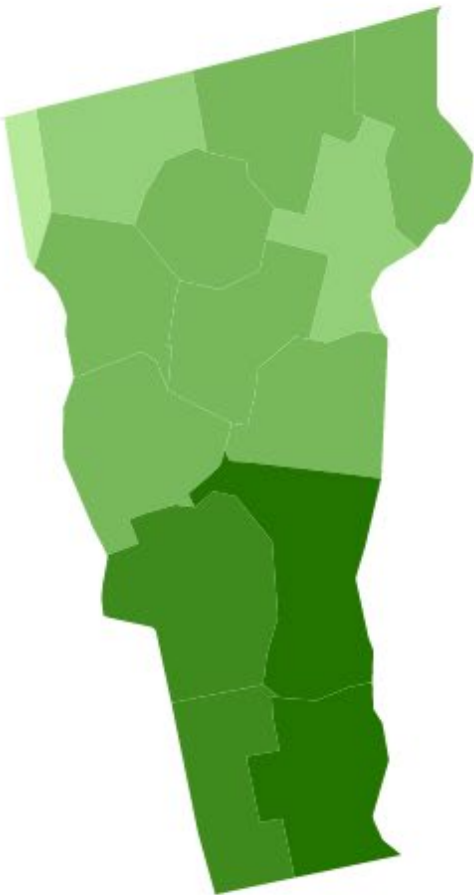
FOREST VOLUME

Select species

ALL SPECIES

Select state (list or click on map)

VERMONT



INTERACTIVE FOREST MAP

Our unique, interactive map uses published U.S. Forest Service data to show national and regional distribution, growth and removal information for most of the main commercial American hardwood species.

Select data map

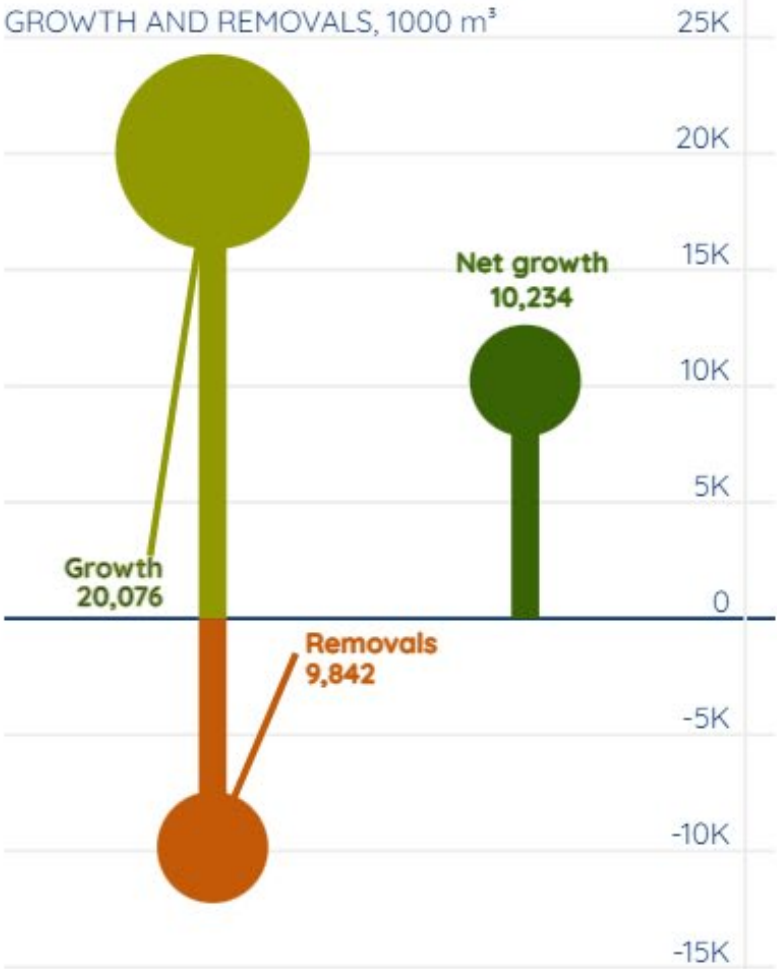
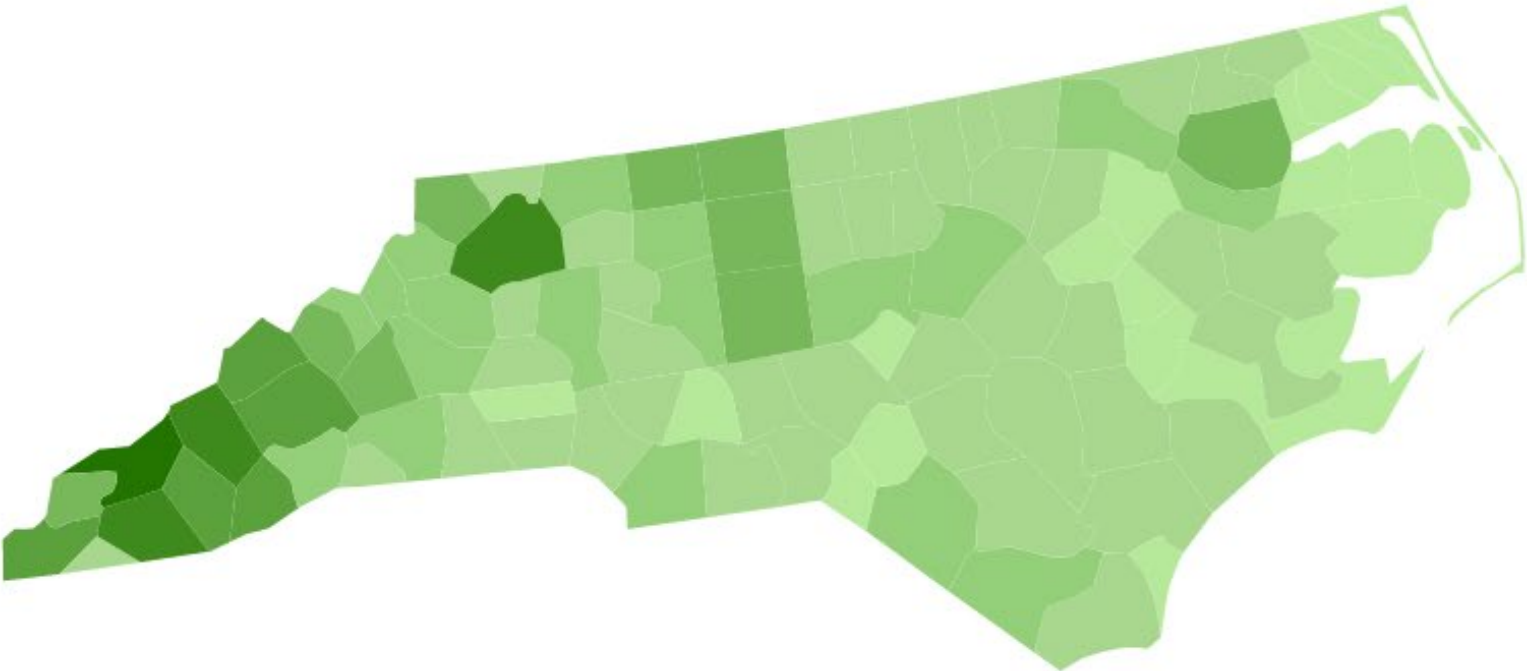
FOREST VOLUME

Select species

ALL SPECIES

Select state (list or click on map)

NORTH CAROLINA



INTERACTIVE FOREST MAP

Our unique, interactive map uses published U.S. Forest Service data to show national and regional distribution, growth and removal information for most of the main commercial American hardwood species.

Select data map

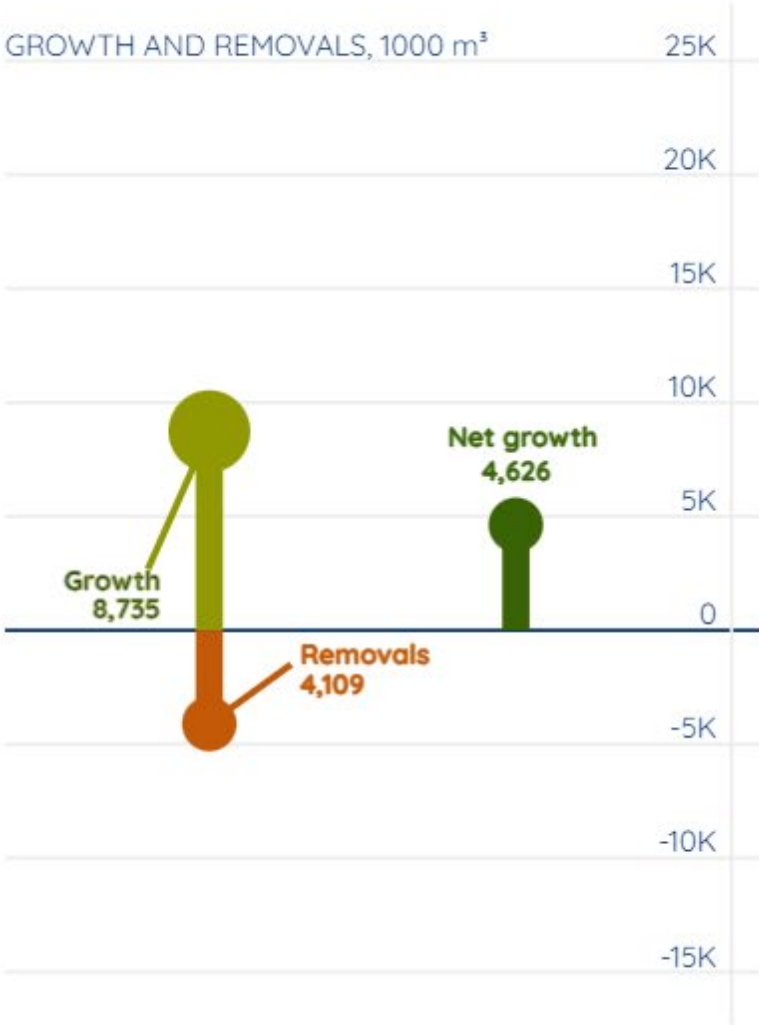
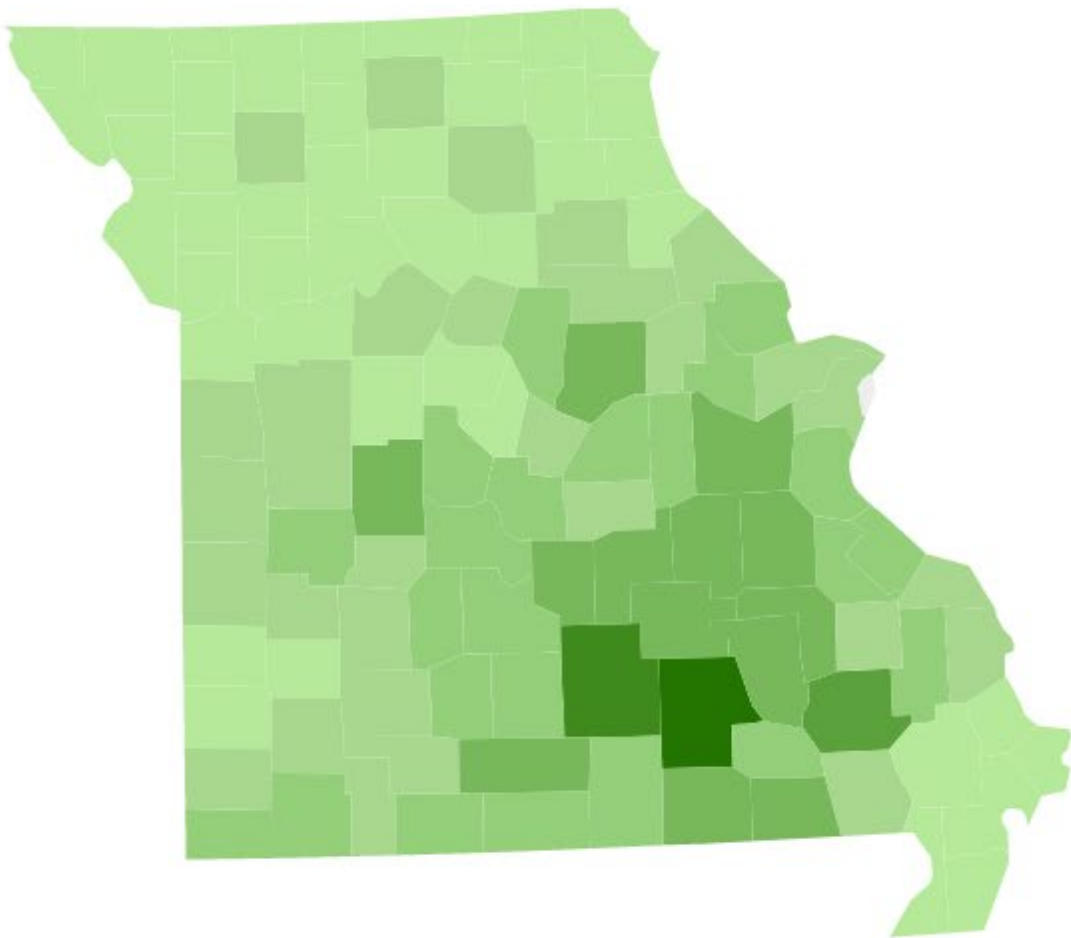
FOREST VOLUME

Select species

ALL SPECIES

Select state (list or click on map)

MISSOURI



INTERACTIVE FOREST MAP

Our unique, interactive map uses published U.S. Forest Service data to show national and regional distribution, growth and removal information for most of the main commercial American hardwood species.

Select data map

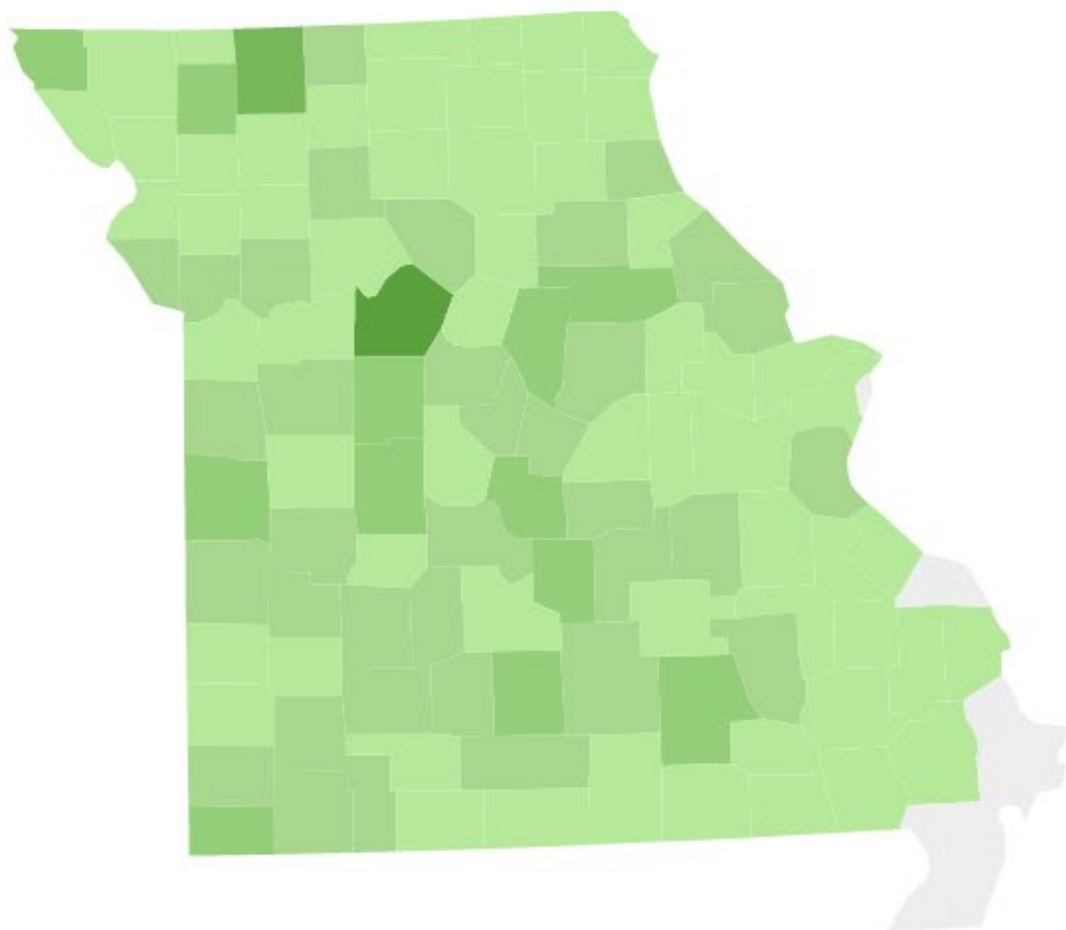
FOREST VOLUME

Select species

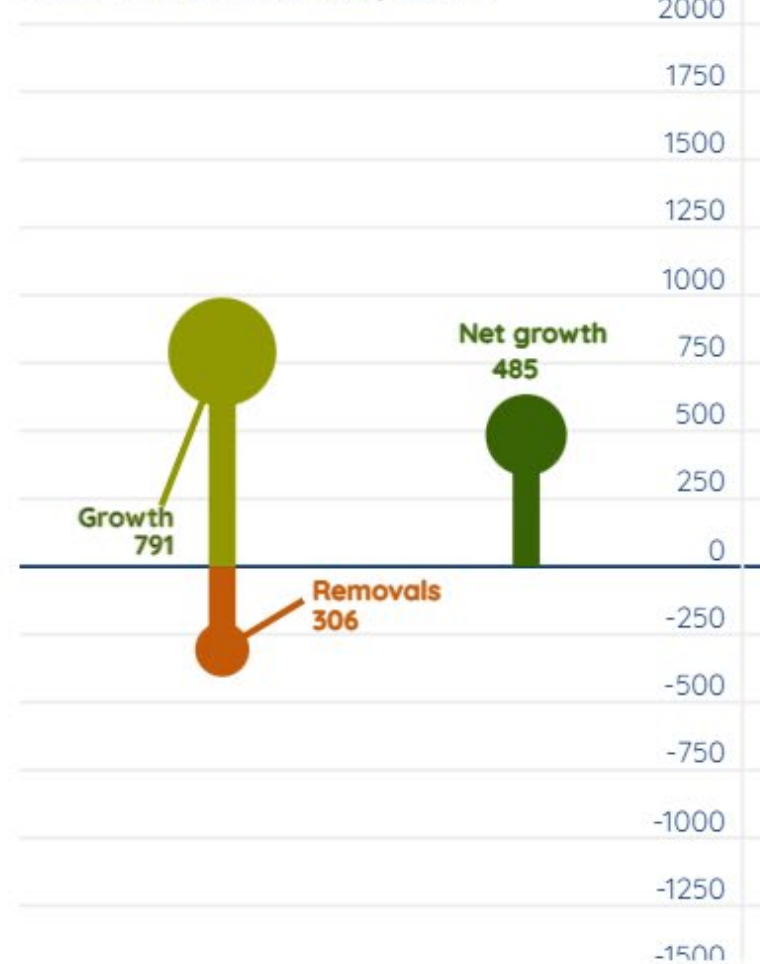
AMERICAN WALNUT

Select state (list or click on map)

MISSOURI



GROWTH AND REMOVALS, 1000 m³



- OWNERSHIP
- The rapid expansion of U.S. hardwood forest owes much to the fact that it is predominantly owned by a large number of private individuals and families whose primary motivation is usually not timber production or economics.
- Of the total hardwood harvest in 2012, 90% came from privately owned lands and only 10% from public lands. In the Eastern States, which accounted for 98% of all U.S. hardwood harvested in 2012, there are 9.75 million forest owners, each with an average of 37 acres. Only 5% of private forest area is owned by corporations and the average size of corporate holdings is only 328 acres.
- According to the [National Woodland Owner Survey](#) undertaken every five years by the US Forest Service, the most commonly cited reasons for owning family forests relate to the beauty and privacy the forests provide, along with wildlife and nature protection
- Information from the American Hardwood Export Council website

Suggested reading: “A Trillion Trees: How we can Reforest our World” by Fred Pearce

Quality is a crucial element of sustainability



Utilization

Hard wood lumber shorts – the bane of our existence - or a grotesque waste



Finger joint recovery of shorts.



Previously discarded 6/4 and 8/4 Walnut shorts are now used in our Modern Farmhouse Table collection.





The Linn bedroom group now consumes all of our 4/4 Walnut shorts



Energy

GREAT SCOTT!

1.21 GIGAWATTS!

Energy

- In 2015 we built a 500 kW solar field.



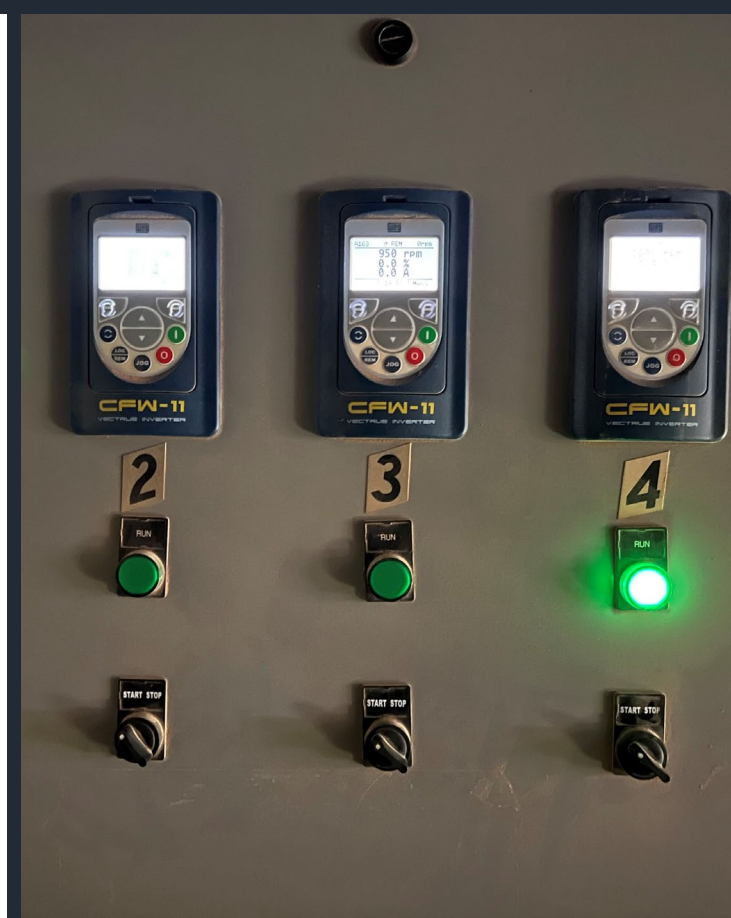
In 2021 we added 395 kW



Variable frequency
drives modulate
electrical draw.



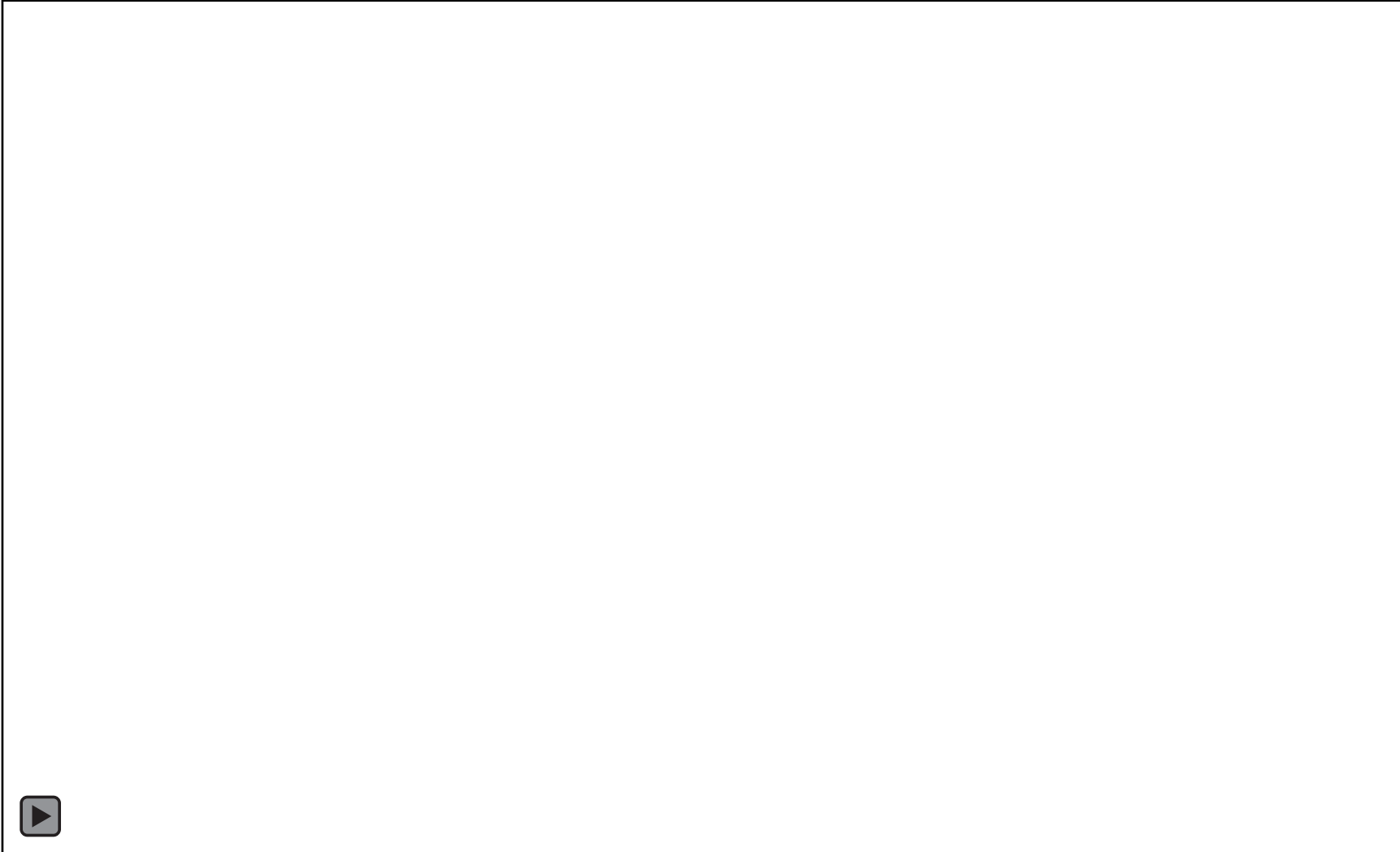
- Electric motors with more than 400 total horsepower are now controlled by Variable Frequency Drives that sense the current need and let the motor idle when little or no load is present.



High bay LED lighting



Automatic wood fired boilers burn sawdust and shavings to heat both factories.





- The forest
- Quality products
- Utilization
- Reduce energy used and use renewables where possible

