South Carolina's Forest Recovery Task Force

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Forestry Association

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South Carolina Forestry Commission

SC FOREST RECOVERY TASK FORCE

a joint initiative of the Forestry Association of SC and the SC Forestry Commission in partnership with SC forest industry leadership

Background

Two years ago, as we entered 2023, the forest products sector in South Carolina was at an all-time high. Our forests contained more standing wood inventory than ever recorded, and the forest products industry was manufacturing wood and paper products at record levels. Updated statistics had the forest industry contributing \$23.22 billion to the state's economy, employing over 100,000 citizens. With seven mills in South Carolina, the pulp and paper segment of the industry accounted for more than 60% of forestry's total economic contribution.

Then came spring 2023, as two major announcements of mill closures were made public. The Pactiv Evergreen mill in Canton, N.C., and the WestRock paper mill in Charleston closed their gates. Together these two mills sourced 3.5 million tons of fiber from South Carolina forests. As the forestry supply chain adjusted to the loss of these fiber markets, additional announcements of closures followed, impacting both sawmills and pulp and paper mills. By fall 2024, a total of 10 mills, including International Paper's Georgetown mill, had announced closures or cutbacks in production, resulting in a projected loss of 8.2 million tons of wood markets, which is roughly 25% of SC's peak timber product output.

South Carolina is not alone in the loss of forest markets in the U.S., but the level of impact to our state is more severe. The reasons for the closures include international competition with new foreign plants, a decline in housing starts due to rising mortgage rates, and a supply/demand imbalance of paper products resulting from the COVID-19 pandemic. These combinations of factors have resulted in the loss of 25% of the markets for South Carolina wood fiber.

The loss of forest product markets has broad implications beyond economic impacts, threatening SC's 12.8 million acres of forestland, 11 million of which are privately owned. Markets provide an economic incentive for landowners to maintain forests that provide critical benefits like clean air, clean water, wildlife habitat and flood control. Without strong markets and a stable wood supply chain, the viability, health and productivity of SC's forests are at risk.



Forestry community response

The South Carolina Forest Recovery Task Force was formed to lead the effort to rebuild the state's forestry-related economy. A series of focused meetings exploring emerging technologies and opportunities were held. Using information learned from these meetings, the SC Forest Recovery Task Force has developed an outline of new market opportunities for South Carolina's timberland owners and wood supply chain:

ENERGY

Internationally, a bulk shipping terminal is needed for South Carolina forest landowners to sustainably supply pellets, wood chips and biochar for bioenergy globally. Domestically, task force members are advocating the use of woody biomass to generate electricity in place of coal and other fossil fuels. Incorporating biomass energy with carbon capture (BECCS) is a rapidly growing development.

TRANSPORTATION

Renewable diesel can be made from hardwood and softwood logs or wood chips at a competitive rate. Sustainable aviation fuel is another transportation product that can be manufactured from logs, chips and mill residues. With Boeing, military bases and major airports located in close proximity, sustainable aviation fuel has a bright future. Although not a transportation fuel, biochar is a forest product that can be used in making automotive and body parts.

CONSTRUCTION

Manufacture more building materials from wood, including engineered wood products, lumber, mass timber products and oriented strand board. The EU has enacted a "green steel" requirement going into effect in 2026. U.S. steel manufacturing must change to continue exporting to the EU. Biochar is a solution for the steel industry. Biochar serves as a sustainable substitute for coal and coke. Biochar can also be used as an amendment to strengthen asphalt and concrete.

AGRICULTURE

Wood vinegar and biochar are byproducts of wood biomass transformation. Wood vinegar has many applications, including use as an organic fungicide, pesticide and herbicide. Wood vinegar can also be used as a fertilizer to improve soil quality and control plant growth. Biochar is used in agricultural applications as a soil additive, feed additive for livestock and as a soil amendment to increase drought tolerance by improved water and nutrient retention.









Plan of Action

RECRUITMENT OF FOREST PRODUCTS MANUFACTURERS

State officials should recruit forest products manufacturers that complement existing industry. Currently, there are active economic development projects that would produce lumber, veneer, fiberboard, pellets, horse bedding and renewable diesel, representing 4.5 to 5 million tons of wood consumption, interested in locating in South Carolina.

FORESTRY RECRUITMENT PERSONNEL

Advocate for funding an economic development position dedicated to the recruitment and retention of forest products industry at the SC Forestry Commission in next year's state budget.

TRADE MISSIONS

The SC Forestry Commission has plans for trade missions and industry recruitment trips to India, Dubai, Germany, Vietnam and possibly South Africa in 2025 to explore export opportunities for SC forest products. The Task Force endorses these trade missions.

BIOECONOMY

South Carolina should position itself as a leader in the sustainable bioeconomy. Economic development officials should start immediately recruiting renewable diesel and biochar operations to locate in South Carolina.

SUSTAINABLE AVIATION FUEL PRODUCTION STUDY

Senator Chip Campsen sponsored a Senate budget proviso to authorize the Department of Commerce to pay for a sustainable aviation fuel production study not to exceed \$250,000. This study should address the role that the state's forest industry can play in the production of sustainable aviation fuel. A comprehensive strategy should be developed to recruit sustainable aviation fuel manufacturing in South Carolina after the study is completed.

BULK LOADING FEASIBILITY STUDY

Dr. Steve Richards with Clemson University is conducting a study for the SC Forestry Commission that will help guide future decisions and actions regarding a bulk terminal in SC.

SOUTH CAROLINA'S ENERGY FUTURE

Forestry advocates should advocate and support favorable bioenergy policies in relevant energy legislation during the upcoming legislative session.

<u>SYNGAS</u>

Further study should be conducted on syngas, or synthesis gas, a combustible mixture of hydrogen and carbon monoxide used to create fuels and chemicals. The Task Force should examine the use of syngas as a feedstock in producing electricity, liquid fuels, green chemicals and plastics.

RESEARCH

Encourage South Carolina universities to become partners in advancing the new bioeconomy in the state and support funding for research that advances this area. Seek opportunities to work with SC NEXUS on new bioenergy technologies.

In closing, South Carolina needs fair and reasonable legal, regulatory and tax policy to be competitive in attracting new forest industry and maintaining/expanding its existing forest industry. Understanding that 87% of forestland in our state is privately owned, market-based solutions will be key to sustaining South Carolina's forests. Action is needed now to stabilize our industry and ensure the future of our forests.