

# Featured in your next car: bamboo

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Nanjing, China – You’ve probably sat on it, built with it, and maybe even eaten it, but did you know that your car could be next to benefit from bamboo.

While investment in research has led to breakthroughs in new materials like super strong carbon fiber and lightweight aluminum, nature’s wonder material may have been growing all along– at up to one meter in a day – in our own backyard.



“Bamboo is amazing,” said Janet Yin, a Materials Engineering Supervisor at Ford’s Nanjing Research & Engineering Centre. “It’s strong, flexible, totally renewable, and plentiful in China and many other parts of Asia.”

The benefits of bamboo have been recognized for more than a century – Thomas Edison even experimented with it when making the first light bulb. In building, its tensile strength (or how much it can resist being pulled apart) is well known, as it can rival or even better some types of metal. And, because it grows to full maturity in just two to five years, bamboo also regenerates easily.

Over the past several years, Yin and her team have worked with suppliers to evaluate the viability of using bamboo in vehicle interiors and to make extra strong parts by combining it with plastic. The team has found that bamboo performs comprehensively better than other tested synthetic and natural fibers in a range of materials tests, from tensile strength tests to impact strength tests. It’s also been heated to more than 100 degrees Celsius to ensure it maintains its integrity.

While tests on bamboo continue, Ford is already making use of sustainable and recycled materials in the company’s vehicles in Asia Pacific.

Ford's commitment to reduce, reuse and recycle is part of the company's global sustainability strategy to lessen its environmental footprint while accelerating development of fuel-efficient vehicle technology worldwide. In recent years, Ford has increased its use of recycled non-metal and bio-based materials.

With cellulose fiber-reinforced console components and rice hull-filled electrical cowl brackets recently introduced, Ford's bio-based portfolio now includes eight materials in production. Other global examples are coconut-based composite materials, kenaf fiber composite for door trim inner, and soy foam seat cushions, and head restraints.