



Climate Policy Principles

USTMA members are committed to reducing greenhouse gas (GHG) emissions throughout a tire’s life cycle, including focusing on:

- Manufacturing products that contribute to the reduction of CO2 emissions;
- Research and development of materials with lower carbon footprints;
- Proactive measures to reduce GHG emissions from our manufacturing facilities; and
- Advancing the circular economy for scrap tires.

Product – The greatest opportunity to reduce CO2 emissions related to tires is through our products.

- **The “in use” phase of a tire represents over 80% of total CO2 emissions from a tire’s lifecycle.¹**
- **USTMA supports policies that incentivize the purchase of fuel-efficient tires, which contribute to reduced CO2 emissions.**
 - A 1 to 2% improvement to the fuel economy of passenger and light truck vehicles through the use of low rolling resistance tires would save about 1 billion to 2 billion gallons of fuel per year of the 130 billion gallons consumed by all consumer vehicles.² This is the equivalent to the amount of energy needed to power over 1.5M homes or 1.9M passenger vehicles for an entire year.³
 - USTMA has worked with the federal government over many years to promote more fuel-efficient tires including setting minimum performance standards for tire efficiency and wet traction.
- **USTMA supports policies that incentivize the utilization of tires with advanced technologies that offer drivers and fleets the ability to improve fuel efficiency through sensors and other performance tracking and communications technologies.**

Materials – We support incentives for the development of materials that have a lower carbon footprint than virgin materials.

- **Developing renewable and recycled materials that can be used in tire manufacturing reduces CO2 emissions associated with the manufacture and transport of virgin materials.^{4 5}**
 - Reducing Transportation CO2 Emissions in Our Supply Chain: For example, utilization of renewable plant-based materials that can be grown closer to manufacturing facilities.

¹ See e.g., [Goodyear Corporate Sustainability Report at 10 \(2018\)](#); [Bridgestone CDP Report at 60 \(2019\)](#); [Nokian Tyres Rises to Climate-Change Challenges by Reducing the Environmental Effects of its Products \(2019\)](#).

² <https://www.nap.edu/catalog/11620/tires-and-passenger-vehicle-fuel-economy-informing-consumers-improving-performance>

³ <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

⁴ <https://sustainability.ustires.org/environment/#vision-3>

⁵ See e.g., [Goodyear Corporate Sustainability Report at 13 \(2019\)](#) noting that the use of biobased synthetic rubber as an alternative to petroleum based synthetic rubber can help reduce Goodyear’s carbon footprint.

- Reducing CO2 Emissions Associated with Manufacturing Tire Materials:
 - For example, development of renewable materials such as rice husk to replace silica in tires would create a reduction in CO2 emissions associated with the production of the material, which traditionally would depend on fossil fuels for production.⁶
 - For example, an analysis determined that pyrolysis and devulcanization of scrap tires to produce recycled carbon black produces 81% less CO2 per ton as compared to virgin carbon black.⁷
 - For example, retreading truck and bus tires reduces CO2 emissions by 24% from manufacturing, while also reducing water and natural resource consumption.⁸
- **Non-emitting petroleum-based feedstocks should be exempt from climate regulation.**
 - While USTMA members are researching the development and use of renewable and recycled materials, there continues to be a need for petroleum-based feedstocks to manufacture tire materials. These should be exempt from climate regulation.

Manufacturing – Tire manufacturing is a low energy intensive industry but is highly trade sensitive.⁹

- **We support incentives for research and development to create innovation in energy efficiency technologies.**
 - The U.S. Department of Energy has recognized U.S. tire manufacturers for widely adopting currently available energy efficiency technologies to save energy.¹⁰
 - As outlined in the DOE report, further R&D is needed to improve energy efficiency for U.S. tire manufacturing.
- **To ensure a competitive U.S. tire manufacturing industry, border adjustment mechanisms should be evaluated.**
 - Border carbon adjustment can be an important tool to ensure U.S. manufacturers are not placed in a competitively disadvantaged position and to incentivize environmental performance improvements globally.

End-of-life – We support policies that ensure recycling and reuse of scrap tires.

- USTMA members share a common goal that all scrap tires generated enter sustainable and circular markets. Markets for scrap tires are critical to keep tires out of landfills and stockpiles which pose fire and disease threats.

⁶ Pirelli 2019 Sustainability Report at 90

https://corporate.pirelli.com/var/files/EN/PDF/PIRELLI_ANNUAL_REPORT_2019_ENG.pdf

⁷ <https://www.bridgestoneamericas.com/en/newsroom/press-releases/2019/Bridgestone-Brings-First-At-Scale-Use-of-Recovered-Carbon-Black-to-Tire-Market>

⁸ Golden, J.S., Handfield, R., Daystar, J. and, J. Woodrooffe, *Retread Tires in the United States & Canada: An Analysis of the Economic & Environmental Benefits for Fleet Operators and the U.S. Government* at 15 (2018).

⁹ See e.g., Tire Business articles: [US International Trade Commission \(ITC\) votes to keep duties in place on China P/LT tire imports \(Jan. 26, 2021\)](#); [Commerce OKs dumping duties on tires from Korea, Taiwan, Thailand, and Vietnam \(Dec. 30, 2020\)](#).

¹⁰ https://www.energy.gov/sites/prod/files/2017/12/f46/Plastics_and_rubber_bandwidth_study_2017.pdf

- In 2019, USTMA's Scrap Tire Management report found that 76% of all annually generated scrap tires in the U.S. entered end-use-markets. Of that 76%, 37% of all annually generated scrap tires were used as tire derived fuel (TDF).
- Scrap tire market development takes time. As we work to grow sustainable and circular markets for scrap tires, it is important to ensure current scrap tire markets are available to reuse and recycle scrap tires.
- **It is important to consider waste disposal issues in climate policy to prevent unintended national waste disposal challenges.**
 - Climate policy that disincentivizes TDF use by pulp and paper mills and cement kilns, the primary users of TDF, could create a national waste disposal challenge for scrap tires.
 - EPA has recognized the biogenic, or natural rubber fraction, in TDF as carbon neutral, reducing the CO2 emissions profile of TDF.¹¹
- **We support incentives to develop circular solutions for end-of-life products, such as the use of recycled carbon black from scrap tires that can be utilized in new tire manufacturing, which keeps valuable materials in use.**
- **We support retreading for truck and bus tires to reduce tire-casing disposal volumes.**

Infrastructure - We support investment in sustainable transportation infrastructure and research of the utilization of recycled materials to build roadways with the future in mind.

- **USTMA is encouraged by the documented benefits of using scrap tires in rubber modified asphalt and stormwater infiltration galleries. We support additional scientific research to better understand the performance and environmental impacts and benefits of these technologies.**¹²
 - Studies show that use of rubber modified asphalt leads to:
 - Longer lasting roads that crack and rut less than traditional asphalt leading to better long-term cost effectiveness.
 - Asphalt itself is one of the most recycled products in the U.S. and rubber modified asphalt can be recycled in the same way, advancing the circular economy.
 - A 2006 study, conducted by the Arizona Department of Transportation, found that rubber-modified asphalt can reduce tire wear particles by up to 50%.¹³
- **USTMA supports the development of electric vehicles and the infrastructure to support electric vehicles.**
 - As with any new technological developments, additional research and development is needed to implement new technologies. USTMA members are committed to research and development of tire technologies to advance the development of electric vehicles.

¹¹ <https://www.ustires.org/ustmas-commitment-ghg-reductions>

¹² <https://www.ustires.org/sustainable-infrastructure>

¹³ <https://azdot.gov/sites/default/files/2019/05/tire-wear-emissions-for-asphalt-rubber-portland-cement-concrete-April2006.pdf>