Climate change has become the issue of our time. The last seven years have been the warmest on record (which dates back to 1850), and each decade has been warmer than the last since the 1980s. The U.S. has already experienced scorching heat this summer. With climate change creating more significant weather events and warmer temperatures, here's a look at a few ways pavement companies can help fight climate change and contribute to a sustainable future.

ASPHALT

Asphalt is already the most recycled product in the world. When asphalt is reclaimed, 94% goes back into the new road or parking lot. When possible, **Full Depth Reclamation** provides the best way to recycle previously used material and provide a sustainable option.

It also takes less energy to produce asphalt than concrete and emits less greenhouse gasses in the process. **Warm Mix Asphalt** (WMA) is becoming widely accepted as a way to lower emissions, in addition to its other benefits.

The Department of Transportation's Federal Highway Administration announced the new Carbon Reduction Program (CRP) in April that releases $6.4 billion in funding to help states develop carbon reduction strategies. States can use the funds in CRP to expand transportation options for American families that can help them save money on gas. Find out more about the program at fhwa.dot.gov or connect to your local FHWA field office.

CONCRETE

Concrete can be recycled and used as **Recycled Concrete Aggregate** (RCA). RCA is growing in popularity and not only cuts down on emissions, but also saves space in landfills as concrete is reused.

Be aware of what cement manufacturers are doing to lower emissions and reduce carbon output. For example, CEMEX recently invested in Carbon Upcycling Technologies as a measure to decarbonize the industry.

GREEN TECHNOLOGY

The construction industry is responsible for 1.1% of total global CO2 emissions. One way to cut deeply into this number is through **the use of electric vehicles**. The U.S. is actively building out electric charging stations across the country, with the Biden administration's goal of building 500,000 charging stations by 2030. The switch from gas powered company vehicles to electric vehicles is one change pavement companies can make.

Electric off-road construction vehicles are on the horizon as countries around the world introduce more restrictions in an effort to reduce carbon emissions by 2050. Producers of construction machinery are already beginning to shift new models to electric, with Volvo leading the way as it shifts its entire line of compact machines to electric.

Consider using "cool pavements" to reflect sunlight through the use of permeable paving methods or reflective coatings over traditional paving methods. Cool pavement options are still being studied and explored, but they are showing some benefits to reducing surface and local air temperatures.

BUILD A SUSTAINABILITY TEAM

Creating a "green team" within your company to outline and monitor climate goals and achievements is an easy way to help shift to more sustainable practices. It also encourages voluntary involvement and brings broader ideas to the table on how to adjust and implement sustainable measures within your company and community.

Find more resources on what the paving industry is doing to fight climate change and build sustainably for the future through MIT News Concrete Sustainability Hub, The Road Forward vision by NAPA, and Roadmap to Carbon Neutrality by the PCA.