One Press of the Eco Button in a Toyota or Lexus Can Make a World of Difference

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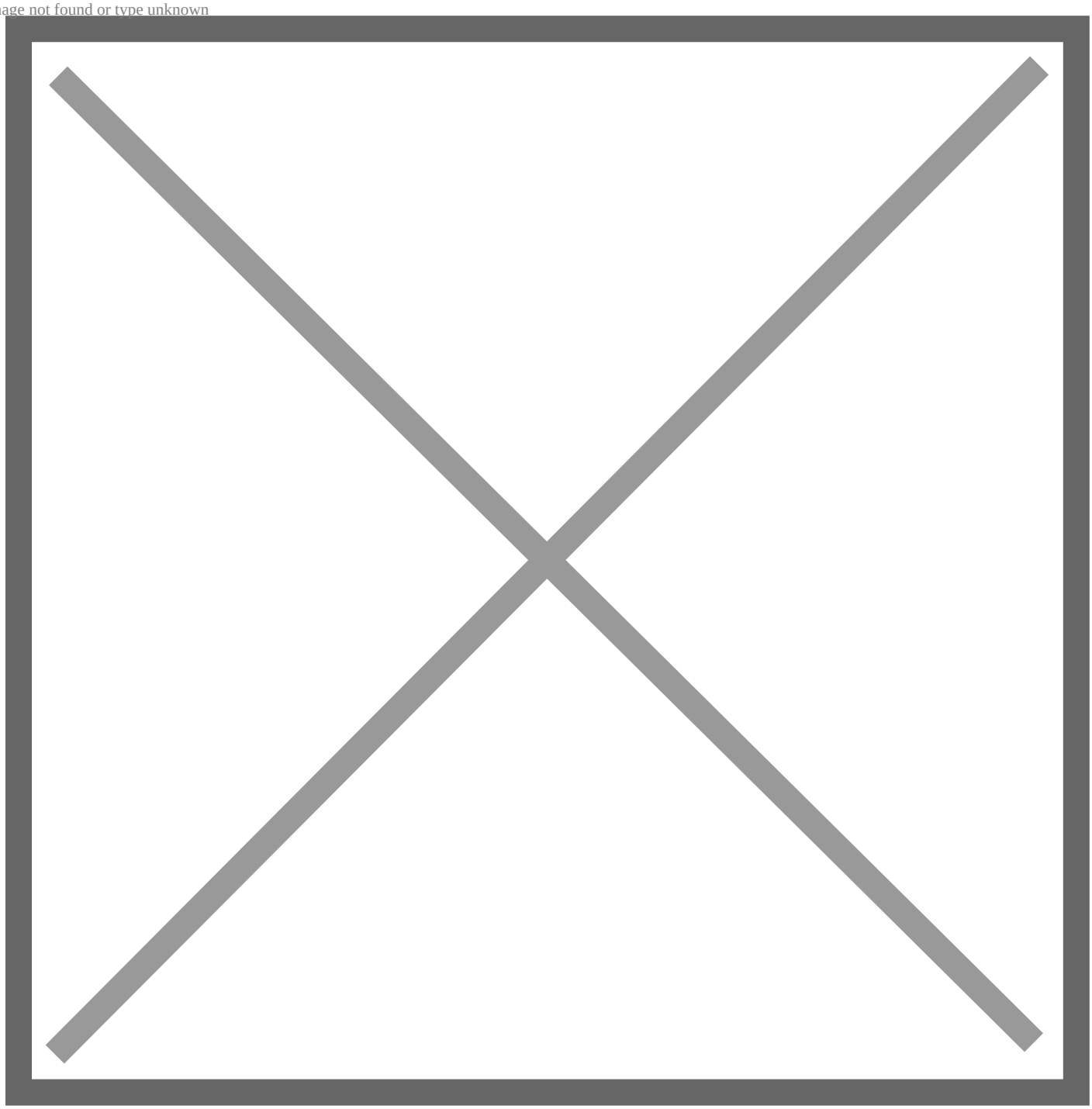

PLANO, Texas (May 18, 2023) – It can feel overwhelming thinking how to do your best to minimize your impact on the environment. Did you remember to recycle? Turn off the lights when you left a room? Compost your leftovers?

In a world of more than 8 billion people, it turns out that even making the smallest changes can make a positive collective impact. Case-in-point: Driving in Eco or EV mode in gas and hybrid vehicles.

Engineers and data scientists from data and mobility services company Toyota Connected North America (TCNA) set out to see how much one push of a button could reduce drivers' carbon emissions. From April 19-25, TCNA recorded data in real-time from more than 2,000 participating corporate-owned Toyota and Lexus vehicles, recording more than 483,000 miles in Eco or EV mode throughout the week. Data scientists compared data from driving in Eco mode a baseline of daily driving taken before the campaign to measure improvements. The TCNA team sifted through more than 2.5 million miles from all participating and non-participating vehicles.

From that sample, the estimated collective impact of the study participants' emission reductions were:

- The equivalent of 748 trees sequestering carbon for 10 years
- 45,235,623 g of CO2 reduction of greenhouse gases compared to the baseline
- 5,091 gallons of gasoline saved
- $18,304 of fuel cost savings based on the national average

"We have the ability to use data to help empower customers so that they can make a difference," said Brian Kursar, chief technology officer, TCNA. "While this study focused on Toyota-owned vehicles, we know there are millions of connected Toyota and Lexus vehicles in the U.S. If everyone drove in Eco mode, it could help greatly reduce our collective CO2 output. Given how successful this internal campaign was, we'd love to see where we can take this initiative, and we hope we inspire other automakers to do the same."

Kursar continued: "Toyota and Lexus drivers come from all walks of life and live in all kinds of places. Some have long commutes; some may live in rural areas with little fueling infrastructure. Our goal is to meet them where they're at and use our expertise to help them today, no matter what they drive."

TCNA found in its initial study that using the Eco mode could reduce tailpipe CO2 output in a hybrid by 4% — because it already captures energy from brakes and downhill coasting. Or, in a full internal-combustion engine vehicle, data scientists found using the Eco button could reduce tailpipe CO2 by up to 26%. The benefit of Eco mode is that it remaps throttle inputs for gentler acceleration and optimizes the HVAC to conserve energy.

"Toyota companies are dedicated to helping reduce carbon emissions to advance achieving a net-zero society and are challenging ourselves to how we can continually help our drivers do the same," said Olarinre Salako, senior data scientist, TCNA. "Connected cars open up a world to see how we can use data for good and how we can unlock the full potential of our Toyota and Lexus vehicles."

"To get to a carbon-neutral society, we're all going to have to pitch in," said Kursar. Pressing one button in your car to activate Eco mode is one small contribution that our data scientists have shown can benefit everyone."