Energy-Efficient Cars

There are a range of cost-effective technologies available to reduce or replace petroleum fuel use in light-duty vehicles, including cars and pickups. Among these, hybrids deliver the most substantial reductions, by pairing an electric motor and battery with an internal combustion engine.

QUICK FACTS

- Hybrid technology allows a vehicle to regenerate braking loss and operate both engine and motor at greater efficiency, improving fuel economy and lowering emissions.
- According to Georgia Department of Transportation, there are about 8.5 million vehicles registered in Georgia. The vast majority of these vehicles are light-duty vehicles (cars, SUVs, pickups) that have traditional internal combustion engines.
- Federal regulations, including Corporate Average Fuel Economy (CAFE) standards, have helped drive down the amount of CO2 emitted per mile by the average light-duty vehicle. According to the U.S. Environmental Protection Agency, vehicle emissions fell by about 14% between 2009 and 2018.

BEYOND CARBON

- Energy-efficient cars create environmental and public health benefits from localized air quality improvements.
- Consumers benefit from increased fuel economy, paying a smaller share of household income on net travel expenses.
- This solution can also create jobs associated with the automotive supply chain. However, mode shifts to hybrids and EVs displace jobs in gasoline-car manufacturing and reduce gasoline tax revenues that are used to maintain roadways.
- Issues to watch include sustained low fuel prices, which is a deterrent to investing in efficiency. Higher upfront costs for fuel economy technologies can also make access to these vehicles challenging for under-resourced communities.

GEORGIA'S 2030 MEGATON OPPORTUNITY

We could reduce 1 Mt of CO2e in Georgia by exceeding regulatory requirements on fleetwide fuel economy for light-duty vehicles by just 3% through 2030.

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