

Protecting Our Environment

For Cars, Study Reveals Benefits Of Sticking With Steel

(NAPSA)—Escalating fuel prices and concern over automotive emissions have prompted automakers to step up the search for ways to design more fuel efficient and environmentally friendly vehicles.

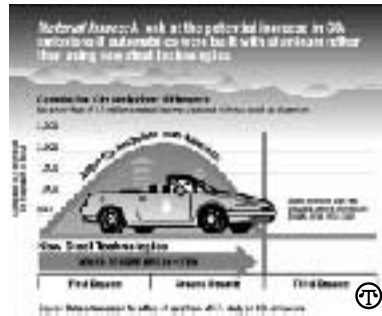
One aspect under the scrutiny of manufacturers is the material choice in vehicle production. For as long as automobiles have been around, steel has been the predominant material in auto manufacturing because of its strength, safety and cost effectiveness.

In the race to unseat steel as the material of choice for automobiles, aluminum companies have invested vast resources into marketing aluminum as the material of the future for cars. Aluminum industry representatives have claimed that because aluminum is lighter than steel, automakers can use it to build cars that will burn less fuel during their lifetimes and thus, emit fewer harmful tailpipe emissions, including carbon dioxide.

According to research by the Massachusetts Institute of Technology (MIT), when compared to the latest steel technologies, it would take more than two decades of aluminum-intensive vehicles to try to offset the amount of CO₂ put into the atmosphere by the production of the aluminum needed to build those vehicles.

The MIT study examined the comprehensive environmental impact of CO₂ emissions and other polluting substances resulting from the production and use of various automotive, manufacturing materials, including aluminum, steel and composites.

The study, which reaches beyond previous research, takes into consideration the CO₂ emit-



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ted when generating electricity, the amount of time required to offset the initial atmospheric burden created when producing aluminum, and the amount arising from the manufacture of the vehicle itself, versus any environmental benefits derived from the use of aluminum, among other factors.

According to the study, the production of one ton of virgin aluminum generates approximately 10 times more CO₂ emissions than the production of a ton of steel, which conserves energy and resources by recycling old steel to make new steel.

According to the EPA, using recycled steel to make new steel reduces air emissions by 86 percent, water use by 40 percent, water emissions by 97 percent, and mining waste by 97 percent.

The steel industry claims that the scales will tip further in their favor as automakers implement new steel technology, which reduces car body weight up to 36 percent while maintaining its strength and integrity.