



Automakers, Academics Examine Cars' Sustainability

William Diem | WardsAuto

Assuming the industry and world survive, historians and economists of the future will decide where leadership in sustainability came from. The general perception here that the U.S. will not be the leader.

“Experience Becomes Trap”

The fuzziness of the subject matter helps delay substantial change, yet climate change is resoundingly considered to be real. Throughout history, says Guido Palazzo, professor at the University of Lausanne in Switzerland, people have tended to rely on strategies that worked before, but that is the wrong response to sudden massive change.

“Experience becomes a trap,” he says. “If there is a crisis and you don’t understand the crisis, you react by relying on more of the same routines. Humanity is going through the fastest change we have gone through in our history.”

While the academic world sees the current rate of change as incredibly rapid and threatening, automobile manufacturing requires a minimum 3-year development cycle with returns coming over the following seven years. That focus on money can make it hard to deal with less familiar ideas like saving tons of CO₂.

A big success at the Venice conference was a presentation that ties cash to environmental performance. For several years, students of Frank Figge, a professor at the Kedge Business School in Marseille, France, have been combing automotive sustainability reports for details with which they can establish industry norms.

While the results don’t state whether activities are sustainable, they show how companies compare against each other. A company that emits 10 tons of CO₂ for an operating profit of €100 (\$128) has a CO₂ efficiency of €10 (\$12.80) per ton of CO₂ used. If the industry average is €6 (\$7.68) of profits per ton, then the company earns €4 (\$5.12) per ton more than its competition, and with 10 tons of CO₂, it has generated a value of €40 (\$51.20).

People may have a hard time relating to 10 tons of CO₂, but they understand much better what €40 is. BMW, the automotive leader in CO₂ efficiency in 2010, has done more for sustainability than the industry on average for a decade. GM, according to Figge, never has been as good as average.

For environmental indicators, the researchers used nitrates of oxygen, oxides of sulfur and volatile-organic-compounds emissions, as well as waste and water used. They used work accidents and employees for social sustainability indicators, and operating profit and total assets as economic indicators.

Looking at companies individually in the sustainability comparisons highlights problems and opportunities. Renault and PSA, says Figge, rank relatively poorly for VOCs because they have outdated paint shops. Those companies rank well



for CO2 performance, however, because a significant number of their plants are in France, where CO2-free nuclear plants dominate electric production.

Using this value-added approach that is common in the financial world helps corporate leaders understand sustainability, Figge says. Boragno said after the conference he probably will start looking at ways to filter Alcantara's sustainability programs with the operating-profit approach.

Assuming the industry and world survive, historians and economists of the future will decide where that leadership came from. California and Tesla are exceptions to the general perception here that the U.S. will not be the leader.

Tesla won praise at the conference for doing more than making fast, pretty, expensive electric cars. It also sells in new ways, builds recharging corridors in Europe and North America and its customers think their electric car is "cool," from its door handles to its marketing material.

PSA's Henry praises Tesla faintly, as "a very nice car, with real autonomy. It could be a real niche car for people with no kids, a bling-bling car." But for Eugene Lolli, in charge of Alcantara sales in America: "They created a car, a company and a system. They are selling like crazy, more Teslas than BMW (5-Series) in California."

California is a leader in promoting electric cars, fuel efficiency and clean air, but the U.S. in general appears less serious about sustainability.

"We (in Europe) all feel that the U.S.A. is more profligate than all of us," says Umberto Vattani, president of Venice International University and a former Italian ambassador, in his summary of the conference.

Palazzo, who opened the conference, says: "I believe this can only come from China. America will not change. What can you expect when leading politicians deny global warming?"

"In China, they have no choice. The air, water and food are toxic. They invent a radically new way of life or they collapse. It is about changing the way we live."