## GM Fast Facts

## "The CAFE debate":

- We want to be part of the solution. For the first time in three decades, autamakers...including imports...are calling for increased fuel economy mandates.
- Automakers support the Hill-Terry bill that calls for responsible but aggressivie increases ...raising the fuel economy of cars and trucks by more than 30 percent -- to $32-35$ miles per gallon by 2022 for cars and trucks combined
- Hill-Terry recognizes something congress doesn't-that cars and trucks are different. Stretches automakers but doesn't break them.
- Requires automakers to increase the mileage on each vehicle they sell-car or truck-by 8-9 mpg.
- Hill-Terry supports more alternative fuel and advanced technology vehicles.
- Current proposal passed by the Senate would place the single greatest regulatary burden on one industry - \$114 billion over the next ten years -in the history of the U.S. This comes at a critical time when autamakers are undergoing a transformation and are showing progress and momentum.


## Fuel Efficiency...we're not standing still

- Dver last 3 ㅁ years, GM's new vehicle fleet fuel econamy has more than doubled for passenger cars and increased more than 6 percent for light trucks
- For the 2007 madel year, GM offers 24 vehicle madels that achieve 30 miles per gallon or more on the highway. as estimated by the Environmental Protection Agency (EPA), this is more than any other automaker...(For comparison, VW has 14; Toyota I2; Honda E; Hyundai 5; and, Nissan 3)
- For lower/small segment of passenger cars, GM leads in mpg fuel economy in 8 out of IG models, or $56 \%$...as compared to Honda (3 out of B, or 50\%) and Tayota (3 out of 8, or 38\%)
- For large pick up trucks, GM leads in mpg fuel economy in 7 out of ID models, or $70 \%$....as compared to Toyota (I out of 3 , or $33 \%$ ). For example: The new Chevy Silverado and GMC Sierra, 4 WD, 5.3L V8 has a combined mpg of 20.48 as compared to the new Tundra, 4 WD, 5.7 V8 has a combined mpg of 18.69.
- For sport utilities, GM leads in mpg fuel economy in 17 out of 26, or 65\%...as compared to Toyota (6 out of 12, or $50 \%)$
- For the 2007 model year, GM offers 14 E85 FlexFuel vehicles, more than any other autamaker.
- GM is increasing its E85 vehicle production by 25 percent. Taday, GM has more than 2 million E85 flexible fuel vehicles on the road in all 50 states, and by the end of the decade GM will more than double that amount.
- To help expand the availability of E85 ethanal in the U.S.. GM has announced partnerships in I3 states and the District of Columbia to locate more than 235 new E85 ethanal fueling pumps at stations in these areas. GM will continue to work on establishing more partnerships to do the same.


## Technology/Innovation

- In 20®. GM will offer eight hybrid madels, with 5 madels available at the end of this year, on its highest valume car and truck platforms, and deliver those vehicles with no compromises in performance.
- Upcoming hybrid vehicles:
-Will intraduce the world's first 2-mode hybrid system-the only hybrid system designed and built in America-- in 2007 with the 2008 Chevrolet Tahoe and 2008 GMC Yukon. The hybrid system will be mated with Active Fuel Management to provide at least 25 percent improved fuel economy (based on unadjusted composite fuel economy).
- GM is a leader in fuel cell technology and we have demonstrated our fuel cell vehicles around the world in places like Washington, D.L., Tokyo, Berlin, Shanghai and Korea. In fact, in September 2006. GM announced plans for the largest market test of fuel cell vehicles in the world. "Project Driveway" will entail the loan of ICO Chevrolet Equinax Fuel Cell vehicles to every day drivers, celebrities, and other dignitaries to gauge interest, consumer reaction, and vehicle performance.
- The Chevrolet Valt cancept electric vehicle is the first variant off GM's E-Flex system. The E-Flex System is a family of electric vehicle propulsion systems built into a common chassis. An on-board engine or fuel cell creates electricity and extends the range of the vehicle. The Chevrolet Valt, for most daily commutes, could nearly eliminate going to the gas station altogether and greatly reduce tailpipe emissions. For example:
- 4 D Mile Daily Driving Pattern - The Chevy Valt will use zera gasaline and produce zero emissions and could nearly eliminate going to the gas station altogether.
- 6 Mile Daily Driving Pattern - Drivers who travel 60 miles a day (over 21,000 miles per year) would save nearly 570 gallons of gasoline annually (compared to a similar size vehicle that averages 30 mpg ) averaging about 150 mpg .
- Extended Road Trips: The Chevrolet Valt has an impressive range of 640 miles averaging nearly 50 mpg. The range extending power source will continuously recharge the Valt's battery for the duration of the trip.
- The E-Flex System is a Flexible propulsion system that produces electricity and fits into a common chassis. Its on-board generator is capable of converting and storing electricity from energy carriers such as hydrogen, gasaline, E85 ethanol, bio-diesel and diesel.
- Configured as a pure fuel cell, the E-Flex system reduces the size of the lithium-ion energy batteries and eliminates the internal combustion engine.


## Quality

GM's vehicle quality is competitive and continues to improve according to both our internal measures and independent surveys.

- Warranty repairs - reduced by 40 percent over the past five years
- JD Power accomplishments (2007 results)
o Initial quality has improved 25 percent over the past five years;
- Silver plant quality award - GM has earned the gold/silver awards for five out of last six years
- Three segment winners
- GM powertrains are industry leading for most of our brands
o Long-term quality - Buick \& Cadillac placed in the top five in the Vehicle Dependability Study
o Customer Service \& Satisfaction - GM dealers are among the industry best
- Strategic Vision Tatal Quality Index - GM Ied the industry far twa consecutive years
- 7 of ID all-new launch praducts are ranked "Recommended" by Consumer Reports ... proves our all-new launch capability has improved

Because we are confident in the quality of our vehicles, we now offer the best coverage of any full-line manufacturee (beginning with all 2007 madels)

- 5 Year/IID, OLD Mile limited powertrain warranty
- mo deductible
- fully transferable
-     + courtesy transportation
-     + roadside assistance


## SUV v. Small Lar Stereotype

## (Following article appeared in LNN Maney an June 7, 20D7)

## Why we need big hybrid SUJVs

Think a GMC Yukon Hybrid sounds silly? It can save more gas than a Civic Hybrid. By Peter Valdes-Dapena, CNNManey.com staff writer
June 7 2007: 7:04 PM EDT
NEW YDRK (CNNMoney.com) -- Dutrage. Disbelief. Downright disgust. Those were readers' reactions to our recent story about 13 great fuel efficient cars, which featured several trucks and SUVs.

Many of the emails went something like this: "Did you sell your soul to Detroit? Since when is IF/24 'great' fuel-efficiency?"
Actually, IG miles per gallon in city driving and 24 on the highway is really good for a large SUV. That's what the GMC Acadia gets.

Compare that to another big General Motors (Charts, Fortune 50]) SUV, the GMC Yukon, which has similar interior space. The Yukon gets 14 miles per gallon in the city and 19 on the highway.

Yes, I know. That's a difference of anly 2 miles per gallon in city driving. In overall driving - city and highway combined - the difference between the Acadia and the Yukon is 3 miles per gallon, according to EPA estimates.

Whoop-dee-don?

Look at it this way, though. Dver $15,0 \mathrm{OD}$ miles - about a year's worth of driving - someone who drives the Acadia will use 148 fewer gallons of gas than someone who drives a Yukon. (By the way, all the EPA estimates used in this article are based on new testing procedures that result in lower, but more realistic, mileage figures for all vehicles.)

Now let's look at another car on the list, the Nissan Altima Hybrid. It gets 34 miles per gallon overall compared to 26 miles per gallon for the similar non-hybrid Altima. That's a difference of 8 miles per gallon.

But someone who decides to buy the Altima Hybrid instead of a regular Altima will save just l3B gallons of gas a year. That's still a lot, but not as big of a difference as a mere 3 mpg improvement in a large SUV.

Vehicles like DaimlerChrysler (Charts)'s Dadge Durango Hybrid and GMC's Yukon Hybrid, both due out later this year, are expected to make an even bigger difference. (We got to read lots of angry email when we wrote about the Durango Hybrid: "You folks are either morons ar faols to run an article on a hybrid engine that only gets 25 mpg. What kind of reefer are you clowns smoking?")

I'm not trying to hide from the obvious here. Someone who switches from a non-hybrid GMC Yukon to a Tayota (Charts) Prius will save about Bill gallons of gas a year. That switch would make a huge difference.

But how many people do you think could actually do that?
That assumes that all consumers are able to buy the smallest possible vehicle and that no one who drives a large SUV ar other full-sized vehicle actually needs one.

Even as consumers have been ditching mid-sized SUV's for smaller SUVs and cars amid rising gas prices, sales of large SUVs have stayed relatively flat. That indicates that these buyers can't easily switch.

I didn't have to go very far to find a perfect test case: my sister. She lives in Cape Cod, Mass., where it snows heavily in the winter. She has three bays who all play hockey, a dog and a husband; and she usually has a couple of her kids' friends - and their hockey equipment - tagging along wherever they go.

Try fitting that life into a Prius. My sister drives a GML Yukon XL not because she thinks it's cool but because it does what she needs her vehicle to do even when there's a foot-and-a-half of snow on the ground.

The gas mileage, on the other hand, she's not so crazy about.
But when she goes to trade in that vehicle she might be able to get a Yukon XL Hybrid. GM estimates it should get about 20 miles per gallon overall. That means it would use 237 fewer gallons of gas a year than the Yukon XL she drives now.

That's a lot of gas. And, if that hybrid Yukon XL isn't available, you think she'll buy a Honda (Charts) Civic? No. More likely, she'll buy another Yukon, a non-hybrid one. That would be another 237 gallons of gas per year not saved.

Drawing a big circle around one number - say 35 miles per gallon - and saying "a vehicle isn't fuel efficient unless it gets 35 miles per gallon" is silly, simplistic and pointless. It's counterproductive because it keeps car companies focused an saving fuel where the savings are needed least. The best way to an get eye-papping miles-per-gallon number is by piling advanced hybrid technology inta an already-efficient small car. It gets headlines, but it limits the real impact of the technology.

Car companies such as General Motors, which sells 70 percent of all large SUVs, and Chrysler are doing the right thing by putting their best fuel economy technology where it's actually going to do the most good: in vehicles that really need the help.

## Climate

- Since the mid-196Пs, vehicle tailpipe emissions of hydrocarbons, carbon monoxide and axides of nitragen (NDx) have decreased in the U.S. by $99 \%$, $96 \%$ and $99 \%$, respectively.
- Up to this point, the regulatary burden has disproportionately - even solely-fallen on the auta industry. ...Apprax. $19 \%$ of CD2 emissions are atributable to autos as compared to apprax. 40\% to utilities.
- General Motars joined the United States Climate Action Partnership (USCAP), becoming the first autamaker to support the non-partisan group's call for action to address climate change through advanced technology and on an economy-wide, market-driven basis. USCAP, a partnership of companies representing key sectors of the economy and non-government organizations, issued earlier this year a set of principles and recommendations toward slowing, stapping and reversing the growth of greenhouse gas (GHE) emissions over the shortest period of time reasonably achievable.
- In addition to more than doubling the fuel economy of its fleet over the last 3 B years, GM's North American facilities have reduced CD2 emissions by 23 percent in the 2000-2005 period. As a part of the EPA Climate Leaders Program, GM has committed to a new target from 2005-201D of an additional 17 percent for our North American facilities - which, when achieved, will result in an overall improvement of 4D percent since 2000.


## U.S. Damestic Auta Industry Economic Impact

The American auto manufacturers are the care of the industrial base of the U.S. economy. No other industry supports so much manufacturing ar generates more retail business and employment. DaimlerLhrysler, Fard, and General Motors not only help move Americans on the road, along with billions of dallars of goods and services, they have alsa created a livelihoad for milliinns of workers at their manufacturing plants, as well as auta parts and supplier companies, dealerships and moгe.

Because the United States is the most apen and profitable auto market in the world, many foreign based auto companies have established aperation in the United States. Despite this change, DaimlerChrys/er, Ford and General Mators continue to play a powerful role in the U.S. economy.

Here are some of the facts about DaimlerLhrysler, Ford and General Motors. The three compannies:

- Employ three-quarters of American auto workers: 340, COD in their own facilities in 30 states and up to 7 million Americans in supplier and other supporting jobs in all 50 states.
- 3\% of America's total grass domestic product (GDP) is generated by the sale and production of cars, SUVs and turcks.
- Invest more in research and development (RED) than any other single U.S. industry-- \$21 billion annually. The US automotive industry spends more on RED than the computer, electronics, and pharmaceuticals industries.
- Invest tens of billions annually in the U.S. economy. In the past 25 years, have invested-\$206 billinn-more than six times more than our foreign competitors in the United States, including new production facilities, products, and technologies.
- The three American automakers are among the nation's largest purchasers of computer chips, textiles, steel, aluminum, copper, iron, lead, plastics, rubber, vinyl.
- Domestic parts content is the highest-- averaging 76\% for all vehicles sold in the U.S.. compared to 48\% for our dapanese competitors, and much less for ather competitors.
 other manufacturers.
- Provide pensions to 739,00] U.S. retirees \& surviving spouses - about twice the number of our active workers compared to about 1,200 for all other manufacturers.
- Are among the largest exporters. U.S. automative exports rase 231\% from \$28.6 billion in 1989 to almost \$84.6 billion in 20.E.


## GM Worldwide Community Contributions

In 2015. GM and the GM Foundation contributed more than \$Bl million to charitable causes through cash contributions, inkind donations, and participation in charity events. GM typically donates products, components, and other equipment to a variety of universities, colleges, vocational schools, secondary schools, and correctional institutions with automotiveservice ar engineering programs. GM also donates non-product equipment and real estate to selected non-profit charitable institutions in the communities in which we operate. In addition, the company participates in numerous charity events benefiting a diverse group of philanthropic causes and organizations. These contributions reach their target groups through the GM Foundation and GM corporate contributions.

## 2005 Contributions Warldwide

|  | Cash Contributions <br> (Dallars in millions) | GM Foundation | GM Corporation* |
| :--- | :---: | :---: | :---: | :---: | Total


| Arts 8 Culture | 1.9 | 0.1 | 2.0 |
| :--- | :--- | :--- | :--- |
| Cther | 5.0 | 0.6 | 5.6 |
| Total Cash Contributions | 37.3 | 9.2 | 46.5 |
| In-Kind Donations | 0 | 10.5 | 10.5 |
| Tatal Contributions | 37.3 | 19.7 | 57.0 |
| Charitable Events | 0 | 4.2 | 4.2 |
| TOTAL | 37.3 | 23.9 |  |

