

Ford makes a pitch for hybrid dominance

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Dearborn, Mich. -- It was Ford that brought hybrid technology to the public outside of the teardrop-shaped hybrid paradigm that Toyota and Honda were both establishing in 2004, back when the Ford Escape Hybrid first hit the streets.

Looking identical to the compact SUV that had become one of the best-selling vehicles in Canada, Ford takes great pride in how it became the first auto maker in the world to offer a hybrid SUV. And this was one of its own designs, not with hybrid technology rented or bought from another auto maker.

And then they seemingly pat themselves on the back for this forward-thinking move for six years, until the second generation of this system reaches the market this spring with the 2010 Ford Fusion Hybrid.

In the meantime, hybrid technology has reached several other vehicle types, including SUVs of all sizes, as well as compact and mid-sized sedans. Instead of being a market leader, Ford is now playing catch-up in the mid-size sedan hybrid market, which now encompasses entries from Toyota, GM and Nissan.

Yet Ford is bringing what it feels is the trump card to the mid-size hybrid table: the best fuel economy in its class of advanced fuel-sippers.

The official mileage numbers are undeniably impressive: averaging 5.4 L/100 km on the highway, this drops to 4.6 L/100 km in city driving, according to recently released numbers by Ford of Canada.

Our short drive of the car in and around its Dearborn proving grounds didn't provide the time nor the capability to check out real-world figures, but given the amount of time it took in cold winter temperatures for the auto stop to start auto stopping, it's likely fair to say you won't see these types of figures for at least a quarter of the year in Canada.

Still, a mid-size car offering more than 1,100 km worth of range for three quarters of the year is a very appealing prospect, even without record-high gas prices. The Fusion Hybrid achieves better overall fuel economy than the Toyota Camry Hybrid, the current class fuel economy champ, which officially averages 5.7 L/100 km in both city and highway modes.

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Many of these innovations are designed to help the Fusion Hybrid travel longer and at higher speeds purely on electric power, up to 47 mph (76 km/h), the company says. The highest we reached on our brief and cold city loop was about 30 mph, and that was babying the throttle to the point of at least one car honk for us slowpokes.

The lighter nickel-metal hydride batteries that allow for this low-speed gas-free motoring are connected to similarly advanced drivetrain components all designed around squeezing every last bit of energy from either the battery or the gasoline engine.

That engine is an Atkinson cycle 2.5-litre four-cylinder, hooked up to an electronically controlled continuously variable transmission that adjusts gear ratios to suit first the electric and then the engine loads called upon by the driver's right foot.

The regenerative braking system has been tuned to provide for nearly 94 per cent of braking needs in the city, after capturing the energy normally lost through friction on the brake discs and storing it.

There's even an automatic climate system that only runs the engine if it's needed to heat up the interior, as the air conditioning is powered by an electric compressor.

The engine is rated at 155 hp and 136 lb-ft of torque, so it's far from a powerhouse, and less than the base Fusion's 175-hp four-cylinder, although Ford doesn't quote a figure for how much the electric components boost this engine output at low speeds.

Such family-friendly hybrids are rarely built with power in mind, so be ready to approach two-lane passes extra cautiously, especially with a full load of family and gear.

The Fusion Hybrid's quest for better fuel economy extends to encouraging its pilot to drive more cautiously as well. In case the car's nicely subdued, but still noticeable, transition from electric-only silence to engine-driven motivation is not clear enough, there's a special display called the EcoGuide that uses multiple gauges on either side of the speedometer to help teach and encourage the driver to save as much fuel as possible.

There are four different quantities of info available from these so-called SmartGauges, and even Ford types admit that the amount of data can be overwhelming at first.

By far the most entertaining of the bunch is Tutorial mode, which rewards fuel-saving driving with an increasingly lush display of green leaves and vines: the less fuel used, the more green on the dash, and in your pocket.

Yet some enthusiast drivers may be unimpressed that the Fusion Hybrid smoothes out throttle inputs by 3 to 15 per cent to save fuel - "and more if you're really heavy with the pedal," said Nancy Gioia, director of Ford's hybrid programs globally.

This display itself is an impressively high-end unit, with the two LCD screens in front of the driver producing images of high-definition quality and colours.

It helps the Fusion Hybrid avoid the distinct whiff of cost-cutting that permeates the interior of many hybrids, although the leather seats of the SEL trim level, which is the closest to the Hybrid's equipment levels, are downgraded to "Eco-friendly" cloth.

The Hybrid's practicality is further hindered by its fixed rear seat, as you won't be able to open up the trunk opening for longer items.

Slated to arrive by late April or early May, the 2010 Fusion Hybrid will have an MSRP of \$31,999.

This is a statement vehicle that Ford is serious about hybrids again, and a mighty impressive statement at that.

2010 FORD FUSION HYBRID

Type: Mid-size hybrid sedan

Base price: \$31,999

Engine: 2.5-litre, inline-four-cylinder Atkinson hybrid, DOHC

Horsepower/torque: 155 hp/136 lb-ft

- Transmission: eCVT
- Drive: Front-wheel-drive
- Fuel economy (litres/100 km): 4.6 city/5.4 highway; regular gas
- Alternatives: Chevrolet Malibu Hybrid, Nissan Altima Hybrid, Toyota Camry Hybrid
- Like
- Smooth transition from automatic engine on-off-on when pulling up to a stoplight
- Best fuel economy of the mid-size bunch
- Interior has a much richer feel than most hybrids
- Three-prong 110V outlet handy for plugging in anything, including cell phones, laptops or portable DVD players
- Don't like
- Front end now looks bolder for all Fusions, but priciest Hybrid still looks like lower-rent models
- EcoGuide gauges can lead to info overload, although its ability to display green leaves as an easy indicator of planet-friendly driving is a neat party trick
- Non-folding rear seat back of Hybrid hurts practicality, as does harder-to-clean cloth seats
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