



Below is a selection of hybrid vehicles from the major auto manufacturers

TOYOTA

Toyota has expanded its Prius family of vehicles for 2012 with the eagerly awaited Prius PHV (plug-in), said to be an excellent choice for business, combining the benefits of the standard Prius' hybrid vehicle operation with extended EV driving. With an EV range of up to 15 miles at speeds of up to 62 mph, the PHV charges up in about 2.5 hours on a standard 120v outlet—and the cost of charging is minimal, says the company. More affordable than pure electric or range-extender vehicles, it's expected to achieve an estimated 87 mpge (miles per gallon equivalent) in combined driving and 49 mpg in hybrid mode, says Toyota. Small business owners who operate their fleets within short driving distances could see significant fuel savings.



The 2012 Prius v is another good choice for business, providing 34.3 cubic feet of cargo space—58 percent more than the Prius Liftback (and more than most small SUVs, too). And it has the highest fuel efficiency of any crossover, SUV, or wagon on the market, getting 44 mpg city/40 mpg highway, the company says. www.toyota.com

HONDA

Honda offers three clean, safe, and fun hybrids for car buyers looking for a green option. Honda was the first auto manufacturer to offer a hybrid model for sale in the U.S., and its commitment to hybrids remains strong today, the company says.

The Honda Insight Hybrid is designed and priced for the masses. It gets 44 highway mpg. Next up is the Honda CR-Z Sport Hybrid that's both fun to drive and easy on the wallet. It delivers 39 highway mpg. At the top of the Honda Hybrid line-up is the Civic Hybrid. It gets 44 highway mpg.

Honda vehicles are some of the most honored. Recently, the Honda Civic was chosen as one of the 10 Best Green Cars of 2012, according to Kelley Blue Book's kbb.com.

Serving as the gateway to the Acura brand, the all-new 2013 Acura ILX Hybrid is said to offer remarkable value for the money on a luxury scale with robust

feature content and premium appeal.

The ILX Hybrid makes use of a 1.5-liter engine and an Integrated Motor Assist electric motor. Paired with a Continuously Variable Transmission (CVT), the ILX 1.5L Hybrid delivers 39 highway mpg.



The ILX Hybrid is Acura's first hybrid and comes equipped with an interior that is smart, spacious, and sporty. Standard features include Keyless Access System with smart entry and pushbutton start, along with Pandora internet radio interface and SMS text message function for smart connectivity with the world. www.automobiles.honda.com

GENERAL MOTORS

The Chevrolet Silverado 1500 Hybrid from General Motors is said to be the only hybrid in the full-size truck segment.

Compared with comparable, non-hybrid models, it delivers 33 percent greater city fuel economy and a 23.5-percent improvement in overall fuel economy, all with the capability customers want in a full-size truck, including a 6,100-pound trailering capacity, says the company.



Its 10.1 L/100 km city fuel consumption rating is the result of what the company says is one of the world's most advanced technologies—the Two-Mode Hybrid System. It can operate on a combination of Vortec 6.0L LVC V8 VVT gasoline power and electric power generated by GM's Hybrid Propulsion System, or each on its own. The system saves fuel using electric propulsion, even when towing a trailer.

GM's advanced Electrically Variable Transmission (EVT) and 300-volt nickel-metal hydride Energy Storage System (ESS) work in concert with the standard 6.0L V-8 gasoline engine with Active Fuel Management (AFM) and late intake valve closing (LIVC) technology to enable the Silverado Hybrid's efficient performance. This hybrid system not only enables the Silverado to launch and drive up to 30 mph on electricity alone, it also allows the 6.0L V-8 engine to operate in its more economical V-4 mode for longer periods. www.gm.com

FORD

Said to be lean, mean, and green, the Ford Fusion Hybrid goes light on fuel and is heavy on features, says the company. Its features include:

- 2.5L Atkinson cycle 4-cylinder hybrid engine
- 4.6 L/100km (city) • 5.4L/100km (hwy.)
- Electronically-controlled Continuously Variable Transmission • 17" painted aluminum wheels
- AM/FM/CDX6/MP3 • Ford SYNC

The Fusion Hybrid, which a leading consumer



magazine rated America's most reliable sedan of any hybrid or conventional model, has also taken hold with customers, who give it a 91 percent "overall vehicle quality".

The durability and longevity of batteries—which Ford has been developing and testing since the 1980s—is essential as the company expands its electrification plan, building on its leadership with new electrified vehicles arriving in North America and Europe.

Ford currently designs its hybrid electric vehicles with a high-voltage nickel-metal-hydride battery. The current product represents a second-generation battery design that is 23 percent lighter than the first generation.

To achieve higher fuel efficiency, Ford's Power-split technology system uses two motors and a simple planetary gearset to create an electrically controlled, continuously variable transmission that allows the use of the most efficient operating points of the engine and motors. To date, Ford's Powersplit technology has received more than 200 patents. www.ford.com

NISSAN

The new 2012 Infiniti M35h has broken new ground, as the first true luxury performance "driver's" hybrid sedan, the company says.



Featuring the all-new Infiniti Direct Response Hybrid system—a one-motor, two-clutch parallel hybrid system—the M35h delivers the performance expected from a luxury sports sedan with the fuel efficiency of a compact car. Precise, high-speed motor control technology, enabled by the powerful Lithium-ion battery, allows power to be delivered directly to the 7-speed automatic transmission. The system also utilizes an innovative hybrid electric power steering system and electric driven intelligent brake regenerative braking system, both which help conserve energy and provide a natural, enjoyable driving feel.

The M Hybrid's exhilarating driving performance greatly benefits from use of Infiniti's proven 3.5-liter DOHC 24-valve V6 engine, which paired with the 50 kW electric motor, provides a hybrid system net power of 360 horsepower. Torque figures are equally impressive, with the V6's 258 lb-ft of torque combining with the electric motor's immediately available 199 lb-ft of torque to provide strong performance. www.nissanusa.com

CHRYSLER

Chrysler Group is focusing its engineering resources on improving the performance of the internal combustion engine.

In addition to developing a new family of high-efficiency 4-cylinder engines that will leverage Fiat's MultiAir valve-actuation technology, Chrysler Group is breaking new ground by launching 8- and 9-speed transmissions to further enhance fuel economy and performance. The company is also rolling out a Jeep Grand Cherokee equipped with a diesel engine and the NAFTA market's only factory-built,



mass-produced vehicle powered by compressed natural gas—a Ram 2500 pickup. However, because there is no one solution to meet both fuel-economy mandates and consumer preferences, Chrysler Group is testing a fleet of plug-in electric hybrid vehicles. More than 160 plug-in versions of the Ram 1500 pickup and Chrysler Town & Country minivan are now accumulating real-world miles in public-sector fleets. And by year's end, the auto maker will be producing an all-electric version of its Fiat 500 minicar for the retail market. www.chrysler.com