



## **Ford au Chicago Auto Show 2010**

### **Contenu:**

	<b>page</b>
<b>Ford Shelby GT 500</b>	<b>2</b>
<b>Ford Edge Limited &amp; Sport</b>	<b>8</b>
<b>Ford Transit Connect Taxi</b>	<b>16</b>
<b>Ford Transit Connect Electric</b>	<b>21</b>

## **2011 FORD SHELBY GT500 GOES LIGHTWEIGHT WITH ALUMINUM ENGINE, OFFERS ULTIMATE IN HANDLING**

- **With 550 horsepower and 510 ft.-lb. of torque, Ford's Special Vehicle Team (SVT) delivers the new Shelby GT500® with a 10 horsepower increase; an all-new 5.4-liter all-aluminum engine is 102 pounds lighter than the previous cast-iron engine and uses Ford-patented plasma-coating technology**
- **For 2011, Shelby GT500 offers EPA-projected improved fuel economy in city and highway from 2010, eliminating the gas guzzler tax**
- **The addition of Electric Power Assist Steering (EPAS), a new optional SVT Performance Package, enhanced convertible rigidity and a lowered ride height contribute to improved driving dynamics and handling**

**Chicago, February 2010** – Ford's Special Vehicle Team (SVT) engineers are taking high performance to a new level with the 2011 Ford Shelby GT500, resulting in a car that has an all-new aluminum-block engine, even better driving dynamics and handling, improved fuel economy and more horsepower than ever.

“The SVT team continues to push the performance standards of the Shelby to even higher levels and better refinement,” said Jost Capito, director of global performance vehicles and motorsports business development. “All the changes we made reflect a desire for even better handling and outstanding driving dynamics – from weight savings to improved balance.”

## **Weight savings, new technology headline all-new aluminum engine**

The 2011 Shelby GT500 is powered by an all-new aluminum-block 5.4-liter supercharged V-8 engine, which produces 550 horsepower and 510 ft.-lb. of torque, a 10 horsepower increase versus the 2010 model. The engine also is 102 pounds lighter than its predecessor, delivering a better power-to-weight ratio, improved fuel economy, acceleration, handling and steering precision.

“Cutting weight to improve performance is a tradition among hot rodders,” said Carroll Shelby, founder of Shelby American. “It might not be as sexy as adding more horsepower or bigger brakes, but shaving pounds off of a car is the single smartest move you can make.”

The new engine uses state-of-the-art Plasma Transferred Wire Arc (PTWA) liner coating, a process that applies a 150-micron composite coating that contains nanoparticles on the internal surfaces of engine cylinder bores, replacing cast-iron liners typically used in aluminum engine blocks. The Intellectual Property Owners Education Foundation honored the inventors of the Ford-patented PTWA technology with the 2009 National Inventor of the Year Award.

This is the first Ford application of the technology, and it offers improved overall performance and durability, along with functional benefits of reduced friction between piston rings and cylinder bores, improved heat transfer due to increased surface contact area and a weight savings of 8.5 pounds compared to a typical steel-sleeved aluminum block. A mechanical roughening process provides higher material adhesion for the spray coating.

The PTWA process uses air and electricity to create a plasma jet of 35,000 degrees Fahrenheit, which melts a steel wire that is fed into a rotating spray gun. Using atomized air, the melted steel wire is blown into a specially machined surface of the aluminum-block engine cylinder bore. In the process of melting and applying the metal to the surface, the steel wire oxidizes, creating a composite coating consisting of both iron and iron oxide.

“Ford’s Global Research and Advanced Engineering looks to all industries for advanced technologies – and this comes from aerospace. It’s the same technology you would find on aircraft engines,” said Glenn Jorgensen, SVT powertrain team leader. “We’ve invented a coating as a replacement for cast iron that delivers improvements in power and performance and fuel economy.”

The new engine also has its roots in the iconic Ford GT. The new 5.4-liter engine is an evolution of the GT engine, with improved block structure through the use of a unique bulkhead chilled process and six-bolt billet main bearing caps. This new advanced engine will exceed Ford GT performance with its traditional supercharger technology.

“The Ford GT has solidified itself as one of the world’s most coveted supercars. To make improvements to the engine from this supercar and make it available in a Mustang is impressive,” said Kerry Baldori, SVT global performance vehicle chief functional engineer. “The aluminum-block engine is robust and strong enough to produce the performance numbers and durability our customers demand.”

### **Increased power and increased fuel economy**

The 2011 Shelby GT500 combines power and fuel economy into one impressive package. This 2011 Shelby GT500 will be the first modern Shelby without the gas guzzler tax, thanks to the EPA-projected 23 mpg highway and 15 mpg city it will deliver. This is up from 22 mpg highway and 14 mpg city for the 2010 model.

The 5.4-liter V-8 achieves 80 percent of its torque between 1,750 and 6,250 rpm, giving the car a higher level of performance feel. A larger two-row intercooler for the supercharger system has 40 percent more cooling capacity, helping to make power more consistent in higher ambient conditions.

Fuel economy gains come from the new 102-pound-lighter aluminum-block engine, EPAS and detailed aerodynamic changes to the underside of the vehicle.

## **Dramatic performance upgrades**

New for 2011 is an SVT Performance Package for enthusiasts who want even more performance out of their Shelby GT500 for racetrack-ready driving dynamics. Complete with all-new Goodyear Eagle<sup>®</sup> F1 SuperCar G: 2 tires that SVT engineers worked directly with Goodyear to develop, the car is ready to race. The tires offer superb dry traction and precise handling, complete with a race-inspired high-performance tread compound.

The optional package also offers unique styling, lighter wheels, a higher rear axle ratio and stiffer springs, and it is available on both the convertible and coupe. Data show the 2011 coupe with the SVT Performance Package is 3.0 seconds faster per lap than the 2010 Shelby GT500 on a 2.3-mile test track.

Carried over from 2010, the 2011 Shelby GT500 features AdvanceTrac<sup>®</sup>, Ford's stability control system with several options for performance. Calibration of the system for the 2011 Shelby has been uniquely tailored to each vehicle configuration (base or optional) to optimize the performance.

SVT has worked very hard to make EPAS better than the outgoing hydraulic steering system. The addition of EPAS makes for a dramatic contribution to Shelby GT500 driving dynamics, with improved torque build-up and road feel that delivers quicker and more precise steering, increased effort on the racetrack or winding roads, and reduced effort in low-speed parking maneuvers.

Slotted brake dust shields were added to improve brake cooling and handling, and a new pedal box improves clutch and pedal efforts even more. A lowered ride height of 11 millimeters in front and 8 millimeters at the rear provides a sportier attitude and improved handling.

### **More engine sound, less road noise**

For 2011, Shelby GT500 also benefits from NVH (noise, vibration and harshness) improvements. Overall road noise is reduced by 20 percent versus the 2010 Shelby. Actions undertaken to achieve this improvement include additional sound-deadening material on either side of the instrument panel, additional sound absorption behind interior trim panels, and a rear wheel arch liner to reduce noise on gravel or wet surfaces – all resulting in the driver hearing more exhaust and engine sound and less road and air noise.

The Shelby GT500 convertible model features enhanced structural rigidity, with lateral stiffness improved by 12 percent versus the 2010 model. The V-brace has been stiffened by adding gussets. The secondary crossmember also has been stiffened, while a front Z-brace has been added, connecting primary and secondary crossmembers. A-pillar stiffening foam has been added to increase rigidity.

The structural improvements to the convertible gave SVT the opportunity to be more sport-oriented in the chassis tuning, without trading comfort. Along with the chassis and structural improvements, the 2011 model also will get standard 19-inch aluminum wheels.

“One of the biggest changes for this Shelby is that the convertible acts and feels like a coupe,” said Jamal Hameedi, SVT chief nameplate engineer. “Before, they had a very different character, and the convertible is taking a big step in the sportiness and handling precision area, without degrading the ride.”

GT500 gets a new exhaust for 2011, roaring with an even more aggressive sound than the 2010 model. The 2.75-inch exhaust with all-new tuning helped to deliver the additional 10 horsepower.

### **Added convenience content**

New for 2011 is an optional glass roof, providing customers with a less expensive option than a convertible and without compromising the coupe's versatility, headroom or climate-controlled environment.

The specially formulated glass also protects interior fabric material from solar radiation deterioration and discoloration by reducing solar light transmittance. To help improve acoustics and interior quietness, the glass features a layer of vinyl that reduces noise, vibration and harshness.

Other new convenience technologies include:

- Standard HID (high-intensity discharge) headlamps
- MyKey<sup>™</sup> programmable vehicle key
- Integrated spotter mirror
- Fold-down rear headrests

“Whether you’re looking to take the GT500 out on the streets or have some fun at the track,” Capito says, “this car will satisfy the most discriminating performance driving enthusiasts.”

# # #

## **2011 FORD EDGE BLENDS TECHNOLOGY, DESIGN AND CLASS-LEADING POWERTRAINS IN REVAMPED PACKAGE**

- **Dramatic freshening of the 2011 Ford Edge and Edge Sport includes extensive exterior redesign, improved materials and craftsmanship on the interior, class-exclusive technology and new powertrains**
- **With available MyFord Touch™ driver connect technology, the 2011 Ford Edge crossover wraps an engaging package with superior craftsmanship, capability and performance**
- **Ford's advanced engine valvetrain technology – Ti-VCT (Twin Independent Variable Camshaft Timing) – helps Edge achieve best-in-class power and torque for an uncompromised driving experience**
- **All-new powertrain lineup includes North America's first application of Ford's global 2.0-liter EcoBoost I-4 engine, delivering class-leading fuel economy, plus the new 3.5-liter Ti-VCT V-6 with unsurpassed fuel economy and 3.7-liter Ti-VCT V-6 for Edge Sport**

**Chicago, February 2010** – Style and technology – the hallmarks of Ford Edge since it took the midsize crossover segment by storm starting in 2006 – come together in an all-new way, offering customers even more of what they love for the 2011 model year.

“Customers told us how much they like Edge's design and dynamic driving quality,” said Mark Fields, Ford's president of The Americas. “We listened and made sure the new 2011 Edge delivers that and more – including fuel economy leadership, unexpected levels of



quietness, a strong new design with quality materials, and MyFord Touch driver connect technology that will change how people experience their vehicles.”

Customers made the Ford Edge the No. 1-selling vehicle in its segment in its first full year on the market, and more than 330,000 have been sold since its launch in late 2006. The 2011 Ford Edge now aims to redefine the segment with a wide-ranging scope of improvements.

“The new Edge demonstrates how a refresh at Ford has become more than just a few design and interior tweaks,” explains Elaine Bannon, chief engineer. “We have taken every element of the Edge and completely reworked it, including three new powertrains, two new transmissions, a bold new exterior design and a completely new interior. If you add in our industry-exclusive MyFord Touch system, you have a vehicle that will continue to stand out above all the competition on the road.”

#### **Improved power; expected to be a fuel economy leader**

In addition to delivering customer-focused technology, the new Edge also showcases Ford’s impressive drive to bring new powertrain options to the customer. Both the Edge 3.5-liter V-6 and Edge Sport 3.7-liter V-6 use advanced engine valvetrain technology (Twin Independent Variable Camshaft Timing, or Ti-VCT) and clever control strategies to increase horsepower and torque to best-in-class levels. This beats competitors such as the BMW X5, Lexus RX350 and Audi Q5, all while delivering unsurpassed fuel economy of 27 mpg (3.5-liter V-6 highway).

The 3.5-liter V-6 produces 285 horsepower and 253 ft.-lb. of torque while the 3.7-liter V-6 delivers 305 horsepower and 280 ft.-lb. of torque – all on regular fuel. Edge’s unsurpassed fuel economy is not at the expense of power and performance. For example, the 3.5-liter V-6 with Ti-VCT technology delivers highway fuel economy that is 15 percent better than the Nissan Murano but produces 20 horsepower more.

Both engines are mated to a six-speed automatic transmission. The SelectShift Automatic<sup>TM</sup> transmission is standard on the 2011 Edge SEL and Limited series, with class-exclusive paddle activation of the SelectShift standard on the 2011 Edge Sport.

In addition, the arrival of the new 2.0-liter EcoBoost I-4 engine in the months ahead will give customers still more choice and will deliver class-leading fuel economy with impressive power and torque.

The new EcoBoost I-4 will be mated to a six-speed transmission that will help channel the impressive performance from the new EcoBoost engine. With the introduction of the 2.0-liter EcoBoost I-4, fuel economy on the new Edge will be 30 percent better than it was in 2006. Plus, Ford's newest EcoBoost engine will deliver on the promise of 15 percent fuel economy improvements versus the Edge's current 3.5-liter V-6 engine while offering the performance feel of a six-cylinder.

In all, the Edge will go from one engine and one transmission to three powertrains – all delivering what's expected to be class-leading or unsurpassed fuel economy and class-leading power and torque for a real win-win for the customer.

### **A more connected driving experience**

New 18-inch tires, standard on the Edge SEL and Edge Limited, and new wheels that are one-half inch wider than the outgoing product provide a more engaging steering feel. Twenty-inch tires with new wider wheels are optional on the Edge Limited while the Edge Sport has class-exclusive 22-inch wheels standard.

Complementing the new tire and wheel lineup is a retuned suspension. Shocks, springs and stabilizer bars were adjusted to tighten handling. The shocks now feature a high-flow piston, which allows engineers to tune for both road loads and driving dynamics, without compromising ride for handling or vice versa. The result is a flatter response through turns and over hills while still providing a comfortable ride.

New four-wheel disc brakes provide enhanced stopping power. Key brake system upgrades include steel pistons, larger rear rotors, revised brake friction materials, revised brake booster gain and revised pedal ratios, all of which enable more initial bite and a firmer, more confident feel when customers press on the brake pedal.

The 2011 Edge offers several new brake-related features: Hill Start Assist, which reduces rollback on hills; Trailer Sway Control, which provides greater towing stability when equipped for trailer tow; Hydraulic Brake Assist, which provides greater braking force in emergency stops; and available segment-first Adaptive Cruise Control and Collision Warning with Brake Support, which helps reduce speed and automatically pre-charges brakes and engages an electronic brake assist system to help drivers stop more quickly when the system detects a collision is imminent.

#### **New subframe mounts enhance drivability, help reduce road noise**

The original Edge set numerous benchmarks in overall quietness, and that tradition continues as the 2011 Ford Edge has better wind noise than many premium vehicles such as the Lexus RX350, Audi Q5 and Acura MDX. Both the front and rear subframe mounts have been upgraded, adding to the increased tunability of the suspension and improving NVH (noise, vibration, harshness). The larger rear subframe bushing's rubber volume was increased by more than 500 percent compared with the outgoing bushings, improving the isolation between the subframe and the body, which in turn helps decrease road noise.

Both road noise and wind noise are significantly decreased in the 2011 Edge because of improvements found throughout the interior and exterior, including powertrain. Here's a look at some of the other actions:

- **Sound pack and acoustic glass:** A more absorptive sound pack is found throughout the interior, which reduces high-frequency noise more effectively than material that acts merely as a barrier. The result is an improved articulation index, which measures how easy it is to hear and understand someone in the vehicle. The 2011 Edge also features an acoustic headliner, and the microphone for the SYNC® system has been relocated so it is closer to the driver for improved voice recognition. The

windshield also is thicker and now acoustic-laminated on all Edge models. Finally, baked-on expandable foam baffles in the fenders and D-pillars help seal out unwanted road noise.

- **Powertrain NVH improvements:** Three main actions contribute to a quieter 2011 Edge from a powertrain NVH perspective. One is the more robust engine cover. The intake and exhaust systems have been completely retuned for a crisper note corresponding to Ford powertrain DNA. Finally, a “tighter” torque converter reduces engine rpm on launch and tip-in events, reducing engine noise.
- **Aerodynamic improvements:** Both the lowered front fascia and new underbody shields contribute to improved wind noise.

### **Bold, flowing design makes Edge the can't-miss crossover**

The bolder, more seamlessly flowing exterior design freshening is mirrored by a complementary interior, characterized by increased craftsmanship, improved materials and overall better execution. Improved fit-and-finish, softer touchpoints, and flexibility in terms of stowage in the cabin and throughout mark the 2011 Ford Edge.

“To me, craftsmanship isn’t just fit-and-finish,” said Bannon. “It’s also the layout and the ergonomic experience. It’s where we put the material – the stitching, the cutlines – and all the attention to detail to give the customer a great experience.”

Increased presence is announced through a bolder grille and a chin spoiler that appears more crafted. The A-pillar flows into the hood, which adds subtle undulations to create a heightened sculptural quality. The wrapping lines emphasize both the front end and the new wheel lineup.

## **2011 Edge Sport adds more power, distinctive look**

The 2011 Edge Sport is powered by a 3.7-liter Ti-VCT V-6 engine that produces 305 horsepower and is similar to the one added to the 2011 Ford Mustang. The 2011 Edge Sport includes all of the content found on Edge SEL as well as a specially tuned suspension, paddle shift transmission and its own unique style.

The Edge Sport's class-exclusive 22-inch polished aluminum wheels have distinctive Tuxedo Black spoke accents. Other unique styling cues include a Tuxedo Black grille, smoked headlamp and taillamp treatment, body-color rocker moldings, oval chrome exhaust tips, body-color door cladding and revised body-color lower front and rear fascias.

Key interior differentiators are liquid silver smoke appliqués that are echoed in the silver smoke metallic leather seat inserts, aluminum pedals and class-exclusive paddle shifters, which activate the six-speed SelectShift Automatic transmission to give customers the option of a fun-to-shift manual experience.

In SelectShift mode, the transmission doesn't second-guess the driver, offering total control over gear selection and performance feel. Upshifts, for instance, are not commanded at redline, and downshifts are allowed at the lowest gear possible as defined by the engine speed.

When the system is in manual mode, engine speed matching provides faster and smoother downshifts, and customers get the gear they request within the limits of the rev limiter.

When a lower gear is selected while descending a long downhill grade, the 2011 Ford Edge Sport in SelectShift mode will hold that gear until the driver manually upshifts or returns to the fully automatic setting. To ensure safe shifting, the transmission will downshift to the lowest acceptable gear, based on a calculated maximum speed. That means if a vehicle were traveling at highway speeds, the driver could not downshift to first gear in SelectShift mode.

“The 2011 Ford Edge Sport, with its exceptional powertrain, specially tuned suspension and unique style, offers a driving experience not seen in other crossovers, and really appeals to the driving enthusiast,” said Bannon. “Like the rest of the 2011 Ford Edge lineup, it perfectly blends technology and style.”

### **MyFord Touch ushers in new era of interaction**

The industry-first MyFord Touch driver connect technology provides a smarter, safer, simpler way to connect drivers with in-car technologies and their digital lives. It replaces traditional vehicle buttons, knobs and gauges with clear, crisp LCD screens and five-way controls like those found on cell phones and MP3 players.

Standard on the 2011 Edge Limited and 2011 Edge Sport, the MyFord Touch system displays information using two 4.2-inch full-color LCD screens flanking an analog speedometer and an 8-inch touch-screen LCD at the top of the center stack. A five-way switch on each side of the steering wheel crossbar controls the information displayed on the corresponding instrument panel screens. The screens can be personalized to display information relevant to each individual driver using a simple button click, voice command or touch-screen tap.

The steering wheel has all the necessary functions available in a very compact area, right where the driver’s hand falls as he or she grabs the wheel. The five-way buttons feel familiar to anyone who has used a mobile phone or MP3 player.

### **Like the song? You can tag it**

Also new on the 2011 Ford Edge is the world’s first use of iTunes® Tagging in an available factory-installed HD Radio™ receiver. iTunes Tagging provides customers with the ability to “capture” a song they hear on the HD Radio receiver for later purchase from iTunes. With a simple push of a “TAG” button on the MyFord touch-screen display, the song information will be stored in the radio’s memory.

Once a song is tagged and customers dock their iPod to the SYNC system, the tagged song information will transfer to that iPod. Up to 100 tags on SYNC can be stored until the iPod is connected. When the iPod is then synced to iTunes, a playlist of tagged songs will appear. Customers then can preview, and if they desire, purchase and download tagged songs from the iTunes Store.

One significant benefit of HD Radio technology is that the sound quality of the broadcast is dramatically better because of the digital transmission – FM sounds like a CD and AM sounds like today's FM broadcasts. Unlike analog broadcasts, digital broadcasts aren't susceptible to interference, fadeout and other issues.

### **2011 Ford Edge brimming with standard and class-exclusive technologies**

MyFord driver connect technology headlines the list of 12 class-exclusive standard and available features and technologies for the 2011 Ford Edge, joining SYNC; Easy Fuel<sup>®</sup> (standard); SecuriCode keyless entry keypad; Blind Spot Mirrors (standard); MyKey<sup>™</sup> (standard); AdvanceTrac<sup>®</sup> with RSC (Roll Stability Control<sup>™</sup>, standard); Adaptive Cruise Control and Collision Warning with Brake Support; Cross Traffic Alert; and 22-inch wheels and paddle activation on the 2011 Edge Sport.

Here's a closer look at some of the technologies:

- **Adaptive Cruise Control and Collision Warning with Brake Support** allows the driver to set the vehicle's speed and maintain it without using the accelerator pedal, and warns the driver of a potential collision risk. It also helps reduce speed and automatically pre-charges brakes and engages an electronic brake assist system to help drivers stop more quickly when the system detects a collision is imminent.
- **Blind Spot Information System (BLIS<sup>®</sup>) with Cross Traffic Alert** is a feature that can help detect vehicles in blind spots during normal driving and traffic approaching from the sides when reversing out of parking spots.

- **MyKey** is designed to allow parents to encourage teenagers to drive safely and more fuel efficiently, and increase seat belt usage. The standard MyKey feature allows owners to designate keys that can limit the vehicle's top speed and audio volume.
- **Easy Fuel Capless Fuel-Filler System** is a standard Ford-exclusive feature that uses an integrated spring-loaded flapper door to eliminate the need for a fuel tank screw cap.

“You can jump in the 2011 Ford Edge and bring your technology – your lifestyle – with you and have everything at your fingertips,” said Bannon. “The 2011 Ford Edge gives you all the capability and flexibility you want along with great style.”

The 2011 Ford Edge will be built at Oakville Assembly Complex in Ontario, Canada, and will be available in dealers this summer.

# # #



## **FORD TRANSIT CONNECT TAXI ‘ON DUTY’; NEW PEOPLE MOVER RUNS ON GREEN FUELS WITH NEW ENGINE OPTION**

- **Transit Connect Taxi goes into production and will be available for the 2011 model year**
- **Transit Connect is built on a dedicated commercial vehicle platform, tested to Ford’s toughest truck standards, offers a fuel-efficient 2.0-liter four-cylinder gas engine and is designed to meet the extreme demands of taxi service**
- **A new engine prep package allows conversion to efficient, clean-burning compressed natural gas (CNG) or propane (LPG, or liquefied petroleum gas)**
- **Transit Connect’s roomy, easy-to-access interior provides passenger comfort and ample luggage storage space, even after modification to contain CNG/LPG fuel tanks**

**Chicago, February 2010** – The Ford Transit Connect Taxi will go into production and arrive in dealerships later this year as a 2011 model, adding to Ford Motor Company’s leadership in the North American taxi market.

Making the announcement today at the Chicago Auto Show, Ford also said it will introduce engine prep packages on all Transit Connect models – base and taxi – allowing conversion to efficient, clean-burning compressed natural gas (CNG) or propane (LPG, or liquefied petroleum gas). Both CNG and LPG are popular among taxi operators because of their low cost of ownership.

The roomy, flexible interior of the Transit Connect – the 2010 North American Truck of the Year – is perfectly suited for taxi service and conversion to CNG and LPG. The vehicle's 135 cubic feet of cargo space accommodates a compressed gas tank while leaving ample passenger legroom and cargo capacity.

“While meeting with taxi operators in cities throughout the U.S., we found considerable interest for vehicles that run on alternative fuels,” said Mark Fields, Ford's president of The Americas. “The Transit Connect Taxi, combined with an engine modified by Ford to use CNG/LPG, is designed to meet that need. This marks a new era in ‘green’ transit.”

To further serve taxi operators, Ford will provide required calibration specifications for the CNG or LPG conversion. By properly following Ford's specifications, the conversion can be completed without voiding the engine's warranty.

### **The alternative fuel advantage**

According to the U.S. Environmental Protection Agency, CNG is less expensive and burns cleaner than gasoline, resulting in 30 percent to 40 percent less greenhouse gas emissions. Propane also burns cleaner than gasoline.

“Compressed natural gas and propane offer more than sufficient power for vehicles because they are high-energy fuels,” said Rob Stevens, Transit Connect chief engineer. “Another natural benefit for these fuels is they provide an overall lower emission of greenhouse gases compared to gasoline. Additionally, operating on CNG or LPG provides the operators lower fuel/operating costs for their fleet.”

Furthermore, nearly 87 percent of natural gas used in the United States is domestically produced. There also are government tax credit incentives for fleets to convert to alternative fuels.

Since October 2009, CNG prep packages have been available on E-Series vans with 5.4-liter and 6.8-liter gas engines.

### **A conversion-ready interior**

The Transit Connect Taxi offers an outstanding interior package for people and cargo. With its open architecture, the taxi provides excellent interior headroom and passenger visibility. The vehicle's rear seat has been moved back three inches to maximize passenger comfort. Plus, with 6.5 inches of ground clearance, passengers step easily through the dual sliding doors. Additional climate control ventilation has been added for rear seat passengers.

The Transit Connect Taxi also features a wiring upfit package with a hole in the roof for signage, vinyl front and rear seats, rubber rear floor, sliding second-row windows and standard third-row windows – all of which are factory installed. Additional installation of technology and other taxi modifications such as roof signage and the optional seating partition are handled by taxi upfitters in local markets.

The vehicle's cargo area easily accommodates compressed natural gas tanks directly behind the second-row seat, still allowing ample luggage storage.

### **Technology on the go**

Ford is collaborating with Creative Mobile Technologies, LLC (CMT), to integrate premier payment processing and passenger information technologies in the Transit Connect Taxi.

Ford and CMT also are developing strategies for potential integration of Ford Work Solutions, a suite of productivity technologies for business owners providing a wireless in-dash computer with full high-speed Internet access and navigation.

“Ford has demonstrated a significant commitment to support the taxi industry with not only a dedicated product but also with the commitment to work with the technology companies that support the industry,” said Jason Poliner, chief operating officer, CMT. “Ford understands that the taxi business is not just the vehicle but a complete technological solution.”

Evidence of how this technology could work in the future is included in the Transit Connect Taxi. It also features an 8.4-inch electronic infotainment and navigation screen that shows cab fare, news, weather, sports scores and stock ticker. With the touch screen, passengers also can select their choice of programming, follow the taxi's journey on a map, or scroll through a list of points of interest along the route – including restaurants, museums and shops.

Once at the destination, the screen displays the fare with options to pay via cash, credit or debit. Cardholders can swipe their card, select a pre-calculated tip recommendation or utilize the touch screen to enter a tip amount, and complete the transaction right from their seat.

### **Building on taxi leadership**

The “green” taxi isn’t new at Ford, which has been a leader in the taxi business for decades. Ford was the first manufacturer to introduce gas-electric hybrid-powered taxis into North American fleets with the launch of the Ford Escape Hybrid in San Francisco and New York City in early 2005.

Built on a dedicated commercial vehicle platform and tested to Ford tough truck standards, the Transit Connect Taxi – including gasoline-powered versions and those modified to operate on CNG/LPG – is designed to meet the extreme demands of taxi service.

With its standard 2.0-liter, four-cylinder engine and automatic transmission, the conventionally powered Transit Connect is expected to deliver an estimated 30 percent improvement in fuel economy over many of today’s traditional taxis.

“Transit Connect already has proven that it offers tremendous versatility for commercial fleet use,” said Gerry Koss, Ford fleet marketing manager. “The Transit Connect taxi, combined with the capability for CNG/LPG conversion, further demonstrates its flexibility.”

###

## **FORD TRANSIT CONNECT ELECTRIC COMMERCIAL VAN HELPS FLEET CUSTOMERS GO COMPLETELY GAS-FREE**

- **Ford Transit Connect Electric, a pure electric-powered version of the award-winning Transit Connect small van, goes into production in late 2010**
- **Ford is collaborating with Azure Dynamics Corporation to upfit the Transit Connect Electric with Azure's Force Drive<sup>™</sup> battery electric powertrain and Johnson Controls-Saft's advanced lithium-ion battery technology**
- **Transit Connect Electric is the first product in Ford's accelerated electrified vehicle plan, and will be followed by the Focus Electric in 2011, a plug-in hybrid electric vehicle in 2012 and next-generation hybrid technology in 2012**
- **The all-electric, zero-emission Transit Connect Electric has targeted range of up to 80 miles per full charge, and will be rechargeable using either 240-volt or standard 120-volt outlets**
- **Transit Connect Electric is ideal for fleet owners that have well-defined routes of predictable distances and a central location for daily recharging**

**Chicago, February 2010** – Ford Motor Company today unveiled the all-electric version of the Ford Transit Connect – the 2010 North American Truck of the Year – at the Chicago Auto Show and confirmed the zero-emissions small van will be in fleet operators' hands later this year.

The 2011 Transit Connect Electric will use a Force Drive electric powertrain manufactured and integrated by specialty upfitter Azure Dynamics.

“Transit Connect Electric exemplifies how we are leveraging our relationships as well as our hybrid and advanced powertrain programs to bring energy-efficient technologies from the laboratory to the street,” said Derrick Kuzak, Ford group vice president, Global Product Development. “Not only is this an ideal vehicle for eco-conscious fleet operators, it is an important part of Ford’s future.”

In addition to the Transit Connect Electric, Ford plans to bring three more electrified vehicles to market by 2012 – the Focus Electric in 2011, a plug-in hybrid electric vehicle in 2012 and a next-generation hybrid in 2012.

### **Getting charged up and moving**

Transit Connect Electric is well-suited for commercial fleets that travel predictable, short-range routes with frequent stop-and-go driving in urban and suburban environments and a central location for daily recharging. The vehicle, which will accelerate at a similar rate as the gas-powered Transit Connect and will have a top speed of 75 mph, has a targeted range of up to 80 miles on a full charge.

Owners will have the option of recharging the Transit Connect Electric with either a standard 120V outlet or preferably a 240V charge station installed at the user’s base of operations for optimal recharging in six to eight hours. A transportable cord that works with both types of outlets will be available for recharging at both kinds of locations.

The vehicle’s charge port is located above the passenger-side rear wheel well. The onboard liquid-cooled 28-kilowatt-hour lithium-ion battery pack is charged by connecting the charge port. Inside the vehicle, an onboard charger converts the AC power from the electric grid to DC power to charge the battery pack.

“We’re excited about the potential for our electrified vehicles,” said Praveen Cherian, program manager for the Transit Connect Electric, who added that today’s electric vehicle buyers are similar to early adopters of hybrid vehicles. “People were a little hesitant about

hybrids at first, but now they accept it and embrace it. We expect the same will be true of electric vehicles.”

### **Driving on electric power**

When the vehicle is operating, battery power is provided to the drive motor through the electric powertrain’s motor controller. The motor controller uses throttle input from the driver to convert DC power supplied by the battery into three precisely timed signals used to drive the motor.

The onboard DC/DC converter allows the vehicle’s main battery pack to charge the onboard 12V battery, which powers the vehicle’s various accessories, such as headlights, power steering and coolant pumps.

In the Transit Connect Electric, the battery pack has been efficiently integrated without compromising interior passenger room and cargo space. The battery pack is expected to last the life of the vehicle.

### **Collaborations are key**

Transit Connect Electric builds on the existing business relationship between Ford and Azure Dynamics, as well as their shared experience with battery supplier, Johnson Controls-Saft.

“There is an increasing interest in electrified vehicles, and we are committed to bringing these vehicles to the marketplace,” said Nancy Gioia, Ford director of Global Electrification. “Ford’s work with Azure and Johnson Controls-Saft to create a purely electric Transit Connect will allow us to offer fleet customers an additional option for eco-friendly transportation.”

Oak Park, Mich.-based Azure Dynamics develops hybrid electric and electric drive technology for shuttle buses and commercial trucks, such as the Balance™ Hybrid Electric,

which is built on the Ford E-450 cutaway and strip chassis for the medium-duty commercial vehicle segment.

“The opportunity to work with Ford on the Transit Connect Electric is a breakthrough advancement for us at Azure and for the light-commercial vehicle market,” said Scott Harrison, Azure Dynamics CEO. “For us, it’s an important evolution of our existing relationship with Ford. From an industry standpoint, we are seeing delivery fleet and utility vehicle operators move to smaller, more fuel-efficient vehicles.”

Azure Dynamics’ proprietary Force Drive battery electric powertrain will be the driving force in the Transit Connect Electric. Force Drive components have previously been deployed in more than 40 vehicle integrations and have more than 25 million miles of on-the-road experience.

Johnson Controls-Saft was selected by Azure Dynamics as the supplier for lithium-ion battery cells and battery packs for the Transit Connect Electric. Azure Dynamics and Ford both currently use Johnson Controls-Saft battery technology for other products.

### **An ideal platform**

With a unique combination of car-like driving dynamics, cargo capacity, accessibility and low purchase and operation costs, the Transit Connect is an ideal choice for electrification.

The Transit Connect Electric is expected to offer lower cost of operation, because recharging with electricity is generally less expensive than refueling with gasoline. Users may also benefit from much lower maintenance costs over the life of the vehicle. Consider the following:

- The number of components typical in an internal combustion engine and transmission are dramatically reduced in an electric vehicle to just a few moving parts in the electric motor and transaxle, which results in much fewer parts to wear out or maintain



- Electric powertrains operate with solid state electronics, which have demonstrated low or no maintenance over the life of the product
- Electric vehicles have completely sealed cooling systems that do not require refilling, replacement or flushing
- Electric vehicles require no oil changes or tune-ups
- There are no belts to wear out or break and no spark plugs or injectors to clean or adjust
- There is no exhaust system to replace and no liquid fuel system to freeze or clog
- The use of regenerative braking reduces wear and tear on brake pads

### **Common strengths**

Although there are significant differences between the Transit Connect Electric and its gas-powered twin, there are many things in common as well. Both models offer:

- 135 cubic feet of cargo volume with 59.1 inches of floor-to-ceiling load height and 47.8 inches of load width between the wheel arches
- Load length a generous 72.6 inches, or more than six feet of cargo floor space
- Split rear cargo doors that open at a standard 180 degrees, or an optionally available 255 degrees
- Lift-over height less than two feet when the vehicle is unloaded
- Power-assisted rack-and-pinion steering allows a 39-foot curb-to-curb turning circle for maneuverability in tight urban spaces
- Bulkheads, racks, bins and other upfits can be mixed, matched and configured to suit many specific commercial applications and needs

“With interest in eco-friendly vehicles stronger than ever among commercial and government fleet operators, the Transit Connect Electric promises to offer another unique solution for their needs,” said Gerry Koss, Ford fleet marketing manager.

Pour de plus amples informations:

Jo Declercq

Tél: +32 2 482 21 03

[jdecler2@ford.com](mailto:jdecler2@ford.com)