# FORD TOURNEO CONNECT BEV CONCEPT AT THE 2009 GENEVA MOTOR SHOW

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# FORD REVEALS NEW TOURNEO CONNECT WITH BATTERY ELECTRIC POWERTRAIN AT THE 2009 GENEVA SHOW

- Geneva debut for new-look Ford Tourneo Connect people mover
- Show vehicle features conceptual full Battery Electric Vehicle powertrain (BEV)
- Tourneo Connect BEV Concept shows how commercial BEV technology could be applied to a passenger model
- BEV technology developed in collaboration with Smith Electric Vehicles, part of the UK-based Tanfield Group
- Smith already converts and markets BEV versions of Ford Transit and Transit Connect commercial vehicles in Europe
- Smith Electric Vehicles confirmed also as partner for Ford in North America to convert the new Transit Connect BEV, available in 2010
- Ford's aggressive global electric vehicle plan is extending to Europe if interest in Tourneo Connect BEV is high, it could become production reality

A new look Ford Tourneo Connect is being revealed at the 2009 Geneva Motor Show introducing new interior and exterior design details that will be introduced across the Connect range later this year.

But the Geneva Show vehicle has a unique added extra – a conceptual but fully operational Battery Electric Vehicle (BEV) powertrain that shows how Ford is extending its aggressive global electric vehicle plan to Europe.

The full BEV powertrain showcased in the Tourneo Connect has been developed in collaboration with Smith Electric Vehicles, the European market's leading battery electric specialist converter of commercial vehicles, which is part of the UK-based Tanfield Group of companies.

Since 1920, Smith has converted tens of thousands of vehicles to battery electric power. In the UK and select European markets, Smith already offers battery electric versions of the Ford Transit medium commercial vehicle to fleet customers, and later this year will introduce a battery electric version of the Ford Transit Connect small commercial. It is this technology that has been adapted for the Tourneo Connect BEV concept.

"The Tourneo Connect BEV concept shows how Ford's collaboration with Tanfield is extending the company's global electric vehicle plan to Europe," said John Fleming, Chairman and CEO, Ford of Europe, "The technology is already available for commercial vehicle applications, and at the 2009 Chicago Show we confirmed that we will launch, with Tanfield as our partner, the Transit Connect van as a full BEV in North America in 2010.

"Although conceptual for now, if there is sufficient interest, this silent, zero emission technology could be applied to the Tourneo Connect quite quickly. We think it would be an ideal solution for taxi use, as a hotel shuttle vehicle or similar inner city application," Fleming added.

"Offering the Ford Connect vehicle family with battery electric power represents the next logical step in our pursuit of even greater fuel economy and sustainability," said Derrick Kuzak, Ford's group vice president of Global Product Development. "We know a growing number of our fleet clients have expressed interest in electrification as a sustainable mobility solution. By leveraging our global team and asset portfolio, we're able to bring this environmentally friendly, strong 'silent type' quickly to market as a van, and we believe there are enormous possibilities for a Tourneo Connect passenger model as well."

#### Developed with an established partner for electrification

The Tourneo Connect BEV Concept has been developed in collaboration with a proven partner for electrification - the UK-based specialist company Smith Electric Vehicles, part of the Tanfield Group.

Since 2007 Ford has collaborated with Tanfield on the development of battery-electric vehicles on Ford chassis, including the Transit medium commercial and Transit Connect. In the UK and select European markets, Tanfield already offers battery electric versions of the Ford Transit medium commercial vehicle to fleet customers, and expects to deliver its first Transit Connect BEVs later this year.

For the Tourneo Connect BEV Concept, latest level battery electric technology was chosen. A 21 kWh Lithium-Ion Phosphate battery pack accumulates the energy to drive a 50 kW permanent magnet motor, while the drive torque is transmitted to the driveshafts by a single-speed transmission. Using this set-up, Smith Electric Vehicles is targeting a range of up to 160 km (100 miles), and a top speed of 113 km/h (70 mph).

Recharging the vehicle is also an easy exercise: the onboard battery charger can be plugged directly into a standard mains socket, and a full battery charge is accomplished in 6 to 8 hours.

"We strongly believe that the Tourneo Connect BEV Concept is pointing in the right direction," said Fleming. "It demonstrates a more than reasonable blend of environmentally responsible performance, day-to-day practicality, and low cost of ownership. We will monitor feedback from the public and the media to this concept very closely, and if there is sufficient interest we will work with Tanfield on a plan to put the vehicle into production."

#### **Global Commitment to Sustainable Mobility**

The use of the now global Transit/Tourneo Connect vehicle platform showcases Ford's ability to deliver products with worldwide marketing opportunities.

Powering Ford Motor Company's electrification drive is its "One Ford" global product vision. The company's aggressive new electric vehicle plan announced last January at the North American International Auto Show will see a number of pure battery-powered vehicles, hybrids and plug-in hybrids to market in the US initially and potentially around the world over the next four years.

In the near term in Europe, the company's approach to affordable, sustainable mobility is centered on its range of **Ford ECOnetic** ultra-low  $CO_2$  diesel models, an extensive range of **Ford Flexifuel** vehicles (FFVs) and, from 2010, a new range of **Ford EcoBoost** petrol direct injection turbo powertrains offering up to 20 per cent improved fuel economy, depending on vehicle type, and  $CO_2$  reductions of up to 15 per cent.

Complementing these cost efficient powertrains are a number of new driver-focused technologies that further improve fuel economy and emissions, notably the advanced Ford PowerShift transmission system – already available in the Ford Focus and Ford C-MAX – and a new Ford Auto-Start-Stop system appearing first on the iosis MAX Concept car in Geneva and entering volume production in the Ford range in the near future.

But Ford of Europe's commitment doesn't end there.

"We're working on extending the global Ford electric vehicles plan into our European portfolio, and while the Tourneo Connect BEV is a practical start that could go into production quickly, we will have more to say on our plans for the mid-term later on this year," Fleming said.

#### Fresh looks for the next generation

The Tourneo Connect BEV Concept also introduces a new look for the Tourneo and Transit Connect range that will be launched later in 2009.

The revised front bumper and grilles feature Ford of Europe's characteristic trapezoidal shape, and new headlamps and tail-lamps enhance the fresh appearance. The interior has been reworked, with a new car-like dashboard and new improved seats. The high-series Tourneo Connect kombi model making its debut in Geneva also introduces an attractive new exterior colour 'Noisette'.

"After we introduced 'kinetic design' language to our commercial vehicle range with the new Fiesta Van, we wanted to bring the Transit/Tourneo Connect range closer to our latest family look as well," said Chris Bird, Design Director Ford of Europe. "At the same time, however, we wanted to keep the characteristic ruggedness of the exterior, but deliver a new interior design to match our latest passenger car entries. We believe the final result makes the Tourneo Connect even more attractive as a passenger use vehicle while retaining its tough, durable image."

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## Press Release Smith Electric Vehicles Reveals New Battery-Electric Ford Tourneo Connect

Geneva Motor Show debut for conceptual zero emission people mover:

- Ford Tourneo Connect battery electric vehicle (BEV)
- Ford & Smith could develop production model, if interest is high
- Target range 100 miles (160km), top speed 70mph (113km/h)
- Showcases that Smith's commercial vehicle technology can translate to passenger vehicles
- Strengthens Smith relationship with Ford
- Underlines Smith's position as market leader for BEVs
- Smith already markets BEV versions of the Ford Transit and Transit Connect commercial vehicles in Europe
- Smith also collaborating with Ford in North America on Transit Connect BEV for 2010 launch

FORD and Smith Electric Vehicles today unveil a conceptual passenger battery electric vehicle (BEV) at the Geneva Auto Show.

The zero emission Ford Tourneo Connect BEV Concept has a projected range of 100 miles (160km) on a full battery charge and a top speed of 70mph (113km/h). The people carrier demonstrates that Smith's electric vehicle technology in vans and trucks can easily translate into passenger vehicles.

Smith Electric Vehicles, a business unit of The Tanfield Group Plc, has produced commercial electric vehicles for over 80 years and is Ford's official collaborator on commercial BEVs in Europe and North America.

Darren Kell, CEO of The Tanfield Group Plc, said: "The pure electric new Tourneo Connect exists as a proof of concept, but it demonstrates how seamlessly our world-leading technology can integrate into passenger vehicles. "If the Tourneo Connect BEV generates high levels of interest, we can work with Ford on production potential and develop the vehicle relatively quickly."

The vehicle displayed at Geneva is driven by an ultra-efficient 50 kilowatt permanent magnet motor, powered by 21 kilowatt-hours of lithium-ion batteries. The Ford Tourneo Connect BEV Concept adapts technology that Smith has developed for the Transit Connect BEV light van, which is already available to order in Europe as the Smith Ampere. Smith has worked with Ford of Europe since 2007 and already produces a Ford Transit BEV, marketed as the Smith Edison.

A Transit Connect BEV van will be launched in 2010 in North America – the first vehicle to deliver on Ford Motor Company's aggressive electrification strategy announced at this year's Detroit Auto Show.

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"Although conceptual for now, if there is sufficient interest, this silent, zero emission technology could be applied to the Tourneo Connect quite quickly. We think it would be an ideal solution for taxi use, as a hotel shuttle vehicle or similar inner city application," Fleming added.

"Offering the Ford Connect vehicle family with battery electric power represents the next logical step in our pursuit of even greater fuel economy and sustainability," said Derrick Kuzak, Ford's group vice president of Global Product Development.

"We know a growing number of our fleet clients have expressed interest in electrification as a sustainable mobility solution. By leveraging our global team and asset portfolio, we're able to bring this environmentally friendly, strong 'silent type' quickly to market as a van, and we believe there are enormous possibilities for a Tourneo Connect passenger model as well."

#### ABOUT SMITH ELECTRIC VEHICLES

Smith Electric Vehicles is the world's leading manufacturer of zero emission vans and trucks.

Smith produces a range of commercial electric vehicles with Gross Vehicle Weights of between 2,300kg and 13,000kg. The vehicles all have impressive acceleration, top speeds of up to 70mph and a range on one battery charge of 100 miles. Smith vehicles are zero emission at the point of use, meaning no greenhouse gas emissions such as carbon dioxide, but also none of the exhaust air pollutants such as PM10s and nitrous oxide, proved by medical science to take years off the lives of city dwellers.

The Smith product range is designed for intra-urban applications such as home shopping delivery, parcel and post delivery, 3PL logistics, construction, utilities, airports and public sector operations. Smith vehicles are already in operation with major corporations and organisations such as the Royal Mail, Sainsbury's, BSkyB, Carlsberg, DHL, TNT, Scottish & Southern Energy and Balfour Beatty.

Smith has a collaboration agreement with Ford in Europe to develop and produce commercial electric vehicles. In Europe, the Edison van and Ampere light van use the Ford Transit and Ford Transit Connect chassis respectively. This allows Smith to leverage off hundreds of millions of pounds in chassis design development by Ford – and maintain focus on the core electric vehicle technology. This collaboration now extends to North America, where Ford has chosen Smith to electrify the Ford Transit Connect, for launch in 2010. This will be the first vehicle to deliver on Ford's new electrification strategy for North America. It will be badged as a Ford product and sold through select Ford dealerships.

Founded in 1920, Smith has a unique heritage and unparalleled expertise in the manufacture of commercial electric vehicles. Customers are supported by an unrivalled UK-wide service network of engineers, who already maintain over 5,000 vehicles for major fleet operators.

Smith Electric Vehicles is a trading division of The Tanfield Group Plc, which is a profitable, high growth company listed on the Alternative Investment Market (AIM) of the London Stock Exchange.

www.smithelectricvehicles.com www.tanfieldgroup.com

The Smith range:

1. Ampere Light Van / Ford Transit Connect

Chassis:Ford Transit ConnectGVW:2,300kg - 3,000kgMPH:70Payload:800kgAvailability:All regions

### 2. Edison Panel Van

Chassis:Ford TransitGVW:3,500kg - 4,600kgMPH:50Payload:1,030kg - 1,800kgAvailability:All regions excluding North America

### 3. Edison Chassis Cab

Chassis:	Ford Transit
GVW:	3,500kg - 4,600kg
MPH:	50
Payload:	1,240kg - 2,300kg
Availability:	All regions excluding North America

#### 4. Edison Minibus

Chassis:	Ford Transit
GVW:	4,250kg
MPH:	50
Seats:	15
Availability:	All regions excluding North America

### 5. Newton truck

Chassis:	Avia
GVW:	7,500kg - 12,000kg
MPH:	50
Payload:	3,360kg - 7,300kg
Availability:	All regions

#### Notes to Editors

The Tanfield Group Plc is the world's leading developer and manufacturer of road-going commercial electric vehicles and aerial work platforms. Tanfield is headquartered in Washington, Tyne & Wear, with operations in Europe, Scandinavia, North America, the Middle East, Asia-Pacific and Africa. It has two main divisions:

Smith Electric Vehicles was founded in 1920 and acquired by Tanfield in October 2004. Following its acquisition, Smith is developing into a world leader in new technology electric vans and trucks with greatly enhanced performance, speed and range capabilities. This makes them attractive for all fleet operators in large towns, cities and closed industrial environments. For the first time, these fleet operators have economically viable, zero emission alternatives to using diesel vans and trucks. Smith has an unrivalled UK-wide service and support network, which already maintains over 5,000 vehicles for major fleet operators.

**Powered Access** contains two of the world's most established aerial work platform brands, UpRight Powered Access and Snorkel International. UpRight is the UK's biggest manufacturer of self-propelled aerial work platforms (also known as "cherry-pickers", "mobile elevating work platforms", "aerial lifts", etc). UpRight has assembly facilities in the UK and USA, with products sold through a strong network of over 200 independent, full-service distributors across Europe, Scandinavia, the Middle East and Asia-Pacific regions. Snorkel, acquired in August 2007, has significant manufacturing capabilities along with strong sales and distribution, in North America and Australasia. Tanfield has successfully extended its powered access product range and is now one of only three "full line" aerial lift manufacturers to have a significant global footprint in both the North America and EMEA regions, in what is a \$7bn market. www.upright.com / www.snorkellift.com

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