A Vision Of The Future

Bill Ford unveils Blueprint for Mobility

New life for Romanian plant · 1.0-litre EcoBoost engine
The UEFA Champions League cemented its status as the best club football competition on the planet after a succession of brilliant games and record breaking performances in the Round of 16.

QUALITY PERFORMERS
An astonishing 4-0 victory for AC Milan over Arsenal FC in the first leg at the San Siro paved the Rossoneri’s way into the next round, despite a spirited fight-back from The Gunners in London. Elsewhere, APOEL FC emerged as the first Cypriot team ever to reach the Quarter-Finals, after they triumphed over Olympique Lyonnais in a dramatic penalty shoot-out.

Perhaps most spectacularly of all, Lionel Messi became the only man ever to score five goals in a UEFA Champions League game as FC Barcelona hammered Bayer 04 Leverkusen 10-2 on aggregate. The first five-goal haul of Messi’s career took his UEFA Champions League tally to 49 and moved him to joint fourth on the all-time top-scorers list.

THE NEW LINE-UP
Ford also pushed the boundaries last month by unveiling six new additions to its line-up at the Geneva Motor Show. “We’re delivering strongly on our commitment to keep the Ford product line-up the freshest in the business,” remarked Stephen Odell, chairman and CEO, Ford of Europe. Alongside the revolutionary B-MAX were the Fiesta ST and the all-new cutting-edge Kuga. Fiesta ST will be 20 per cent more powerful than its predecessor and its 1.6-litre EcoBoost engine reaches 0-100km/h in less than seven seconds. The new Kuga, designed to be smarter, more stylish and more spacious than ever, improves on the current model with exceptional technology features. The hands-free automatic tailgate opens and closes with a simple ‘kick action’ under the bumper – encouraging a display of nifty footwork among consumers that even the UEFA Champions League’s best could be proud of.

ON TOP OF THE WORLD
With cutting-edge products such as these available throughout its line-up, Ford continues to underline its commitment to quality. Likewise with its UEFA Champions League partnership, Ford has been supporting quality since the competition began in 1992. With a growing global audience of over one billion cumulative viewers and more than 150 million tuning in to watch the Final in 2011, the UEFA Champions League is highly regarded as the finest club football competition. Each week players like Lionel Messi and Cristiano Ronaldo delight audiences with their class and ability.

Next month Ford, as Official Vehicle Supplier, will be welcoming two of the best teams in Europe to the Fußball Arena München on Saturday 19 May. It remains to be seen whether FC Barcelona will break another record and win the trophy in back to back seasons, or if the likes of APOEL FC can make history for their fans. Regardless, Ford’s partnership with the best of the best on the ultimate stage and its line-up of global vehicles continue to showcase the Blue Oval’s commitment to quality enjoyed throughout the world.
Ford has a proud history of innovation; of pushing the boundaries of design, engineering and technology. Going all the way back to Henry Ford, the great periods of success for Ford always have been driven by great ideas well executed.

As I looked over our show stand at the Geneva Motor Show last month, I was impressed and encouraged by the innovation on display. The obvious example, of course, is our all-new B-MAX, a one-of-a-kind vehicle that will be among the most technologically-advanced small cars in Europe when it goes on sale around the middle of this year. The B-MAX features a very clever door system that provides an unobstructed opening measuring more than 1.5 metres wide. The B-pillar is an integral part of a vehicle’s structural integrity and safety, so removing it called for new thinking. And that is what our designers and engineers delivered – integrating the B-pillar into the doors while still delivering excellent safety protection.

There is more innovation under the car’s hood, where the 1.0-litre EcoBoost engine shows Ford powertrain technology at its best. Small, green and powerful, it is our most fuel efficient petrol engine ever. Through clever use of turbocharging and direct fuel injection, the engine achieves a combination of power and low CO2 emissions that is unmatched by competitors in its segment. Compact and lightweight, the cylinder head is so small that it can fit onto the front cover of this magazine.

Available now in the Focus, the engine has been receiving astounding media praise in recent weeks. “Remarkable,” “incredible,” and “game changer” are just some of the superlatives writers have used to describe its impressive performance.

The B-MAX also will be the first car in Europe to feature SYNC, Ford’s answer to those consumers who want to stay in touch, entertained, informed and reassured when they are in their cars. Bill Ford announced our plans to roll out SYNC in Europe earlier this year at Mobile World Congress in Barcelona, drawing positive reviews from the tech media used to reviewing the latest smart phones and tablets.

The range of features the high-tech system provides is extensive. Using voice commands, motorists on the move can make phone calls, browse and play music from their audio library, get directions and receive news and much more. SYNC can even read aloud text messages and allow drivers to answer with a list of pre-programmed voice activated responses.

And if they are involved in an accident, SYNC’s Emergency Assistance feature swings into action and alerts local emergency services operators, in the correct local language based on GPS coordinates from the vehicle.

Today’s auto market has never been more challenging, but with innovations like these, and more to come, installed in our expanding range of new vehicles, we can face the future with confidence and will remain a strong and leading player in Europe.
The new Ford B-MAX has been awarded an “Internet Auto Award” for Technology by motoring website Autoscout24. B-MAX was honoured for its unique body concept with integrated B-Pillar. The award was presented to Wolfgang Booms, managing director, Marketing, Sales & Service, Ford of Germany.

Ford of Britain invited a group of lifestyle and motoring journalists to the Italian ski resort of Courmayeur recently to put the new Ford Ranger through its paces in snowy conditions. Here’s what they thought:

Jonny Smith, Fifth Gear: “I drove a Hilux last week, a current, new Hilux, and this knocks spots off it for ride. Totally. Because this drives like a car rather than a commercial vehicle. If you get in this and you’ve never driven a pick-up before you’ll be spoilt.”

Jon Quirk, Acting editor, Auto Trader: “I’m very impressed. It’s a much more refined proposition. It’s very confidence-inspiring to drive. I think it is a big leap forward.”

Sam Hardy, News Editor, Auto Express: “You definitely notice the quality interior and the road manners, and it’s much quieter on the motorway as well. It’s a much more viable prospect for people who want something that’s a bit utilitarian, can do a lot of things, but can also do a road-going job too.”

Ford Motor Company, together with its Chinese joint venture Changan Ford Mazda Automobile (CFMA), has launched the all-new Focus in China. Focus is built at CFMA’s newly launched Chongqing Assembly Plant 2 and will be available in two bodystyle – five-door hatchback and four-door sedan. “The all-new Focus is the first true global car under the One Ford strategy. It is also the first of 15 vehicles that Ford plans to bring to China by 2015. The new Focus delivers on our ongoing commitment to bring to China the newest and best products which our customers truly value and want,” said Marin Burela, CFMA president.

Ford has revealed its most luxurious Mondeo ever – the new Mondeo Titanium X. The Titanium X delivers a high-specification that includes a premium, leather-wrapped instrument panel for the first time in a European Ford vehicle. The flagship model also introduces full-leather seating packages, improved equipment levels and high-quality interior and exterior styling options. “The new upgrades to our top series underline and reinforce Mondeo’s luxury style,” said Chris Bird, design director, Product Development, Ford of Europe. “In addition, Mondeo delivers the advanced technology package customers have come to expect from Ford.” Mondeo Titanium X is now available in Germany, Belgium, Finland, the Netherlands, Norway, Sweden, Switzerland, Czech Republic, Hungary and Romania as well as selected import markets.
Ford has been honoured with a Climate Leadership Award at the inaugural United States Environmental Protection Agency Climate Leadership Awards Ceremony and Conference. Ford was the only automobile manufacturer to receive an award. Ford was recognised with a Goal-Setting Certificate for its publicly stated manufacturing greenhouse gas emissions reduction goal, which is part of the Company’s global manufacturing CO2 strategy. Ford had previously established vehicle CO2 goals based on its contribution to achieving 450 ppm atmospheric CO2 concentration. Applying this stabilisation goal to its manufacturing operations helped the Company develop its stated goal of 30 percent reduction per vehicle built between 2010 and 2025.

Ford Motor Company executive chairman Bill Ford has met with King Juan Carlos of Spain at the Royal Palace in Madrid. Ford presented the King with a special model of the Model T to commemorate the historic meeting. He was joined at the Royal Palace by Stephen Odell, chairman and CEO, Ford of Europe, Ziad Ojajki, Ford group vice president, Government Affairs, and Jose Manuel Machado, president of Ford of Spain.

The European Commissioner for Climate Action, Connie Hedegaard, has visited Ford of Europe’s manufacturing facilities in Cologne as the Company shared its progress in significantly reducing fleet CO2 emissions. Hedegaard toured the Cologne-Niehl Fiesta plant, where the forthcoming Fiesta ECONetic Technology model will be produced; she also drove three green Focus models: 1.6-litre TDCi ECONetic Technology and 1.0-litre EcoBoost versions; and Focus Electric. By the end of 2012, half of all Ford cars, more than 30 models, will carry the ECONetic Technology badge which indicates they are leaders, or among the very best, in terms of CO2 emissions and fuel efficiency; this will be extended to more than two-thirds of models in 2013.

The Ford Focus has been named “2012 Car of the Year” by popular Spanish TV motoring programme “Más que coches” (More than cars). The programme is screened weekly on Telecinco, one of Spain’s major national TV channels. The award was presented to José Manuel Machado, managing director of Ford of Spain, by Paolo Vasile, the CEO of Telecinco at a ceremony attended by members of the Spanish Minister of Industry and executives from the automotive sector.

The new Ford Focus was named the best in its class according to users of top Russian internet site auto.mail.ru. The technology-packed Ford model collected approximately 80,000 votes, leaving its main competitors (Lancer and Golf) far behind. “This is a very important award for us. When Ford started producing the Focus at the Vsevolozhsk (St. Petersburg) plant for the first time, it completely changed the way Russians viewed mass-produced cars,” said Mark Simpson, vice-president, Marketing, Sales and Service, Ford Sollers. The national automobile awards give internet users the opportunity to choose their top vehicles from a list of more than 300 models in 22 categories. Only cars available in official dealerships in Russia in 2011 were eligible for the award.

Paul Thomas, Ford of Europe’s vice president of Marketing, is retiring this month after a 38-year career with the company in which he served in several senior positions. Gaetano Thorel, 44, currently the chairman and managing director of Ford of Italy, is appointed Ford of Europe’s new vice president of Marketing. Both positions were effective from April 1, 2012.
Ford unveils vision for future mobility

The number of cars on the world’s roads is forecast to grow from one billion now to up to four billion by mid-century. To plan for that future and avoid traffic gridlock, Ford Motor Company executive chairman Bill Ford has called on automakers, mobile technology companies and governments to work together. He presented his vision for the future at a recent congress in Barcelona.

Delivering his “Blueprint for Mobility” plan at the 2012 Mobile World Conference, the great-grandson of Ford Motor Company’s founder, Henry Ford, said: “If we do nothing, we face the prospect of ‘global gridlock’, a never-ending traffic jam that wastes time, energy and resources and even compromises the flow of commerce and healthcare.”

“Blueprint for Mobility” defines the start of Ford’s thinking on what transportation will look like in 2025 and beyond, and the technologies, business models and partnerships needed to get there.

NEAR-TERM (5-7 YEARS)
Ford Motor Company to be at the forefront of developing increasingly intuitive in-car mobile communications options and driver interfaces that proactively alert drivers to traffic jams and accidents.

Developmental projects, such as the vehicle-to-vehicle warning systems currently being explored at Ford’s Research and Advanced Engineering Centre in Aachen and intelligent speed control features, to grow in capability.

The delivery of a better-connected, safer and more efficient driving experience with limited autonomous functions for parking and driving in slow-moving traffic.

Further development and defining of new vehicle ownership models, as already demonstrated through the Ford collaboration with Zipcar, the world’s largest car sharing and car club service.
Connectivity news

Ford Motor Company has announced that AppLink, a feature which delivers voice control of smartphone apps from the driver’s seat, will be introduced globally as part of its voice-control and in-car connectivity system SYNC.

Emergency Assistance won the “Best Mobile Innovation for Automotive, Transport or Utilities” category at the 2012 Global Mobile Awards in Barcelona. Ford’s Emergency Assistance alerts local emergency services operators, in the correct local language based on GPS coordinates from the vehicle, after an accident. It is the most advanced system of its type and forms a key part of Ford’s voice-activated in-car connectivity system SYNC, which makes its European debut in the all-new B-MAX.

In Sao Paulo, Brazil, traffic jams regularly exceed 100 miles (161km) and the average commute lasts between two and three hours a day. Despite this, car buying is growing at a rate of 7.5 per cent annually.

In China, the world’s longest period of gridlock was registered at 11 days during 2010.

The problem is not restricted to emerging markets, either. For example, it is estimated that the cost of congestion to the economy in England will rise to around $35 billion (€26bn) annually by 2025. In Germany, sustaining a town of 300,000 people is estimated to require 1,000 truck deliveries daily.

MID-TERM (2017–2025)

The introduction of semi-autonomous driving technology, including driver-initiated “auto pilot” capabilities - technologies that will provide improved safety and driver assistance features, but allow the driver to take control, if needed.

Significantly more interaction between individual cars on the road through utilisation of ever-increasing computing power and numbers of sensors in vehicles, helping to reduce the number of accidents at intersections and enabling limited semi-autonomous and autonomous highway lane changing and exiting.

The arrival of vehicle-to-cloud and vehicle-to-infrastructure communication contributing to greater time and energy efficiency by enabling vehicles to recommend alternative transport options when congestion is unavoidable and to pre-reserve parking at destinations.

The emergence of an integrated transport network, featuring cars plugged into public databases.

New city vehicle options as more one-, two- and three-passenger vehicles are introduced to help manoeuvre city streets.

LONG-TERM (2025+)

A radically different transportation landscape where pedestrian, bicycle, private car, commercial and public transportation traffic will be woven into a single connected network to save time, conserve resources, lower emissions and improve safety.

Smart vehicles capable of fully autonomous navigation, with increased “auto pilot” operating duration, plus the arrival of autonomous valet functions, delivering effortless vehicle parking and storage.

Development of a true network of mobility solutions, with personal vehicle ownership complemented by greater use of connected and efficient shared services, and completely new business models contributing to improved personal mobility.

Intelligent Vehicles

Connected cars will contribute to greater time and energy efficiency by increasing information for drivers and reducing traffic congestion.
Our people at the Craiova plant, both hourly and salary, are enthusiastic and excited about our upcoming launch. We have prepared and trained and now we are on target to start a new chapter at our facility. The dedication and the drive of our people will show in the quality of the B-MAX.

Vic Startek, general manufacturing manager, Vehicle Operations

The team here is outstanding – the Craiova and the Ford of Europe team – and together we will make it happen. Regarding the B-MAX, from my perspective it is the best combination of practicality, appearance and functionality. It has an outstanding interior design and an outstanding exterior design.

Klaus-Peter Tamm
chief programme engineer, B-MAX

Since becoming part of Ford Motor Company we have had the opportunity to further develop our skills and we, as an organisation, have improved our teamwork. During this same period we have pursued continuous improvement in our performance. Of course, the biggest challenge facing us now is the B-MAX launch and I am very confident we will deliver a product that will exceed expectations. Everyone here is involved in delivering quality and very enthusiastic about our future.

Ion Ifrim, B232 Quality Launch Leader

I have been working here since 1981. When Ford arrived in 2008 we learned how to approach our work differently – to listen more closely to the employees and to work together with them. Our investment in people is delivering results and working in teams is creating success. Now we can see everywhere the new, advanced installations and equipment which will enable us to face the challenges of the future.

Janin Dumitrel, central maintenance manager
Ford transforms Romania plant into one of most modern in Europe

We had a number of challenges that we faced. They were around people and facilities. All these were tackled with meticulous planning by all functions working together as one team. Our energy and focus is on quality, quality, quality.

Kuly Malka, launch manager

Over the past few years we rebuilt the plant infrastructure, we installed the new facilities for the B-MAX and we prepared ourselves for production using the Ford Production System. Now we have to prove the quality of work we have done through the quality products we will produce here in Craiova.

Gabi Nicolae, area manager TCF

A launch is always challenging, but to handle a launch in a different country, in a new plant, while building a strong relationship with new colleagues, is a big challenge. But I’m surrounded by great people, a great team, and I’m looking forward to the months ahead.

Robert Damoiseau, chassis

The biggest challenge right now is to support the launch and the plant ramp-up. It is a big challenge to get everything running as it should. Until a short while ago, to be honest, I knew little about Romania and Craiova, although I did hear stories from colleagues about wild taxi drivers. Seriously, though, being here, experiencing it all, I must say that I like it.

Bastian Koch, exterior trim

When the first B-MAX rolls off the production line in Romania in the summer, it will mark a major milestone in one of the most remarkable plant transformations in Ford’s history.

The story goes back to spring 2008, when Ford Motor Company acquired a dated-technology Daewoo car and engine assembly plant in Craiova, southern Romania, and announced plans to turn it into one of the most modern automotive facilities in Europe.

To handle the rebirth of the sprawling manufacturing complex, a cross-functional team from around Europe was gathered together. The task was daunting. To prepare for the large-scale production of high tech, high quality products, the team needed to install all-new vehicle and engine manufacturing facilities, establish a supply base and retrain 3,500 employees.

“IT was a very significant challenge, but it has been worth it. The Ford Craiova plant is today one of the most modern in Europe,” said Jan Gijsen, president and general director of Ford Romania. “Additionally, it is the first time that Ford is launching concurrently two completely new products – B-MAX and the new 1-litre EcoBoost engine – with all new facilities and a retrained workforce, expanded with new hires. Summarised, this means new facilities, new people and new products.”

Gijsen joined Ford Genk as an engineer in 1977 and held senior Manufacturing positions in several countries, including a spell with Jaguar Land Rover in England. He admits he needed all of those 35 years of experience on the Craiova assignment.

“For assembling the new B-MAX, we started by stripping out all the various buildings and removing the old equipment,” he explained. “Then we installed new equipment throughout. A new state-of-the-art Paint Shop and Body Shop - fully-automated with 360 robots - and a completely renewed Trim and final assembly area and Press Shop. The assembly capacity will be 300,000
vehicles per year. The whole site was transformed with one aim in mind: the efficient production of vehicles to Ford’s high quality standards.

“It was a similar story in the engine plant. All the old engine production equipment was taken out and brand new flexible assembly and machining lines installed. We installed capacity to manufacture more than 300,000 engines a year.”

Job One for Craiova’s 1-litre EcoBoost engine is scheduled for this month and the innovative, 3-cylinder power unit will be installed in the B-MAX. The engine is already in production in Cologne and is receiving outstanding media reviews.

As the plant transformation got underway, so did a major programme of retraining Craiova’s 3,500 employees. While those employees already had experience of producing vehicles and engines, they were unfamiliar with the advanced manufacturing tools and processes of the Ford Production System.

“The Craiova people were very capable, keen to learn and highly motivated, but they were used to the Daewoo system and there was a need for up-skilling and to teach them the Ford Production System,” added Gijsen. “We also needed to up-skill the maintenance people to handle the plant’s considerable automation, especially in the body shop and press shop, and as well, to handle the latest technologies in engine manufacturing.”

With the equipment installation and retraining completed, Craiova is now preparing for large-scale production.

“Our first product was the Transit Connect, which we have been producing for some time in small numbers, but our focus is on the start of volume production of the B-MAX, with Job One coming up very soon,” said Gijsen.

Currently, Ford is close to having spent the committed €675 million for transforming its Craiova site. A second vehicle is designated for Craiova in the future and at full production the plant is expected to reach its installed capacity of up to 300,000 vehicles and engines a year. As output is ramped up to that total, additional shifts will be added and a significant number of new jobs will be created.

Under Ford’s ownership Craiova has been transformed into a modern and globally-competitive manufacturing facility. Part of the global Ford family, it faces an exciting future.

What a difference four years makes.
Ford’s new global brand promise – Go Further – stands for the efficient use of the Company’s global competence, as well as for trend-setting technologies and the pursuit of continuous product improvement. BSAQ (Balanced Single Agenda for Quality) exemplifies those qualities.

BSAQ is a global process for identifying and avoiding possible quality irregularities in vehicle manufacturing. It is part of the Global Quality Improvement Process (GQIP) and, of course, part of the ONE Ford product strategy.

At the Fiesta main plant in Cologne, BSAQ was implemented for the first time in 2008, when the production of the current-generation model began. The top-selling small car is also produced in Spain, Mexico, Thailand, India, Vietnam and China, and it’s marketed in more than 100 countries.

On a daily basis, BSAQ records issues on the car that are reported by Ford dealerships around the globe: including warranty cases, the tiniest material defects and individual customer feedback. All information passes to the quality assurance department located at the Fiesta’s final assembly area in Cologne. Special Variability Reduction Teams (VRT) deal with all reported complaints, so quality irregularities are tackled immediately. These teams comprise engineers, product experts and other Ford specialists, as well as external suppliers, if necessary.

Thanks to BSAQ, the latest Fiesta has achieved significant quality improvement rates of up to 40 per cent (related to product details). In terms of customer satisfaction the improvement is some 25 per cent.

Christian Schmitz, quality manager, Fiesta assembly in Cologne, explains: “Warranty cases are relatively easy to classify. However, more subjective customer feedback is much harder to analyse; one customer likes the size of a drinks holder, while another thinks it’s too small. BSAQ puts us in the position to identify all relevant issues and attack them as soon as possible. Our success speaks for itself.”

The case of the drinks holder demonstrates the potential difficulties in fulfilling all customer desires. Nevertheless, every single piece of feedback is valuable and is pursued. With 400,000 Fiestas being manufactured worldwide each year, there is a huge amount of information. BSAQ makes it possible to categorise and evaluate all feedback in a defined sequence – to find an immediate solution for quality irregularities.

“We’re selling Fiesta in more than 100 countries around the globe,” said Dr. Bernd Harbolla, manager, plant vehicle team, Ford of Germany. “All product complaints and customer feedback are reported to BSAQ, even those that appear negligible. At the same time we share all information with every Fiesta plant around the world.” BSAQ is clearly a vital tool in ensuring outstanding quality for the world’s most successful small car.
Interview

More from less

Ford’s innovative three-cylinder 1.0-litre EcoBoost petrol engine has been winning glowing reviews from the European media. The praise does not surprise Roland Ernst, who led the team which developed the compact, highly efficient power unit.

How would you sum up the media response to the Focus 1.0-litre EcoBoost?
It has been remarkable and we are, obviously, delighted by it. It is driven by the fact that the engine has the right product ingredients. The market demand is for a very economical and clean engine that also offers performance and driveability; that is what the 1.0-litre EcoBoost delivers. Over the past four to five years we have worked on reducing every gram of CO₂ and increasing every fraction of fuel efficiency. While we did that, we refined and polished every element of the engine to remove friction, reduce weight and make it highly efficient.

How was the engine conceived and developed?
The concept has a long history; it really started in the early 1990s, when the next-generation small engine team, of which I was a member, started looking at downsizing and direct injection. In terms of development, it was a joint initiative between engineers in Merkenich and Dagenham. It was one team working harmoniously and focused on the attributes and delivery of the concept.

What were the engineering challenges faced?
Firstly, it was an all-new engine, not a refinement of an existing unit, so that in itself was a major challenge. Getting such high power density, 125PS from a 1.0-litre capacity, meant that we went to the limits on our design specifications on so many fronts, particularly temperatures and pressures. Additionally, everything was smaller and tighter, with less space between components. One of the most significant challenges was around the decision not to use a balance shaft. Three-cylinder engines are inherently unbalanced, so removing the balance shaft while still meeting NVH (Noise, Vibration, Harshness) targets was a big challenge. We achieved it by distributing the masses on the rotating parts to emulate the function of the balance shaft. That saved cost, weight and friction and allowed us to meet our NVH targets without compromising fuel economy or driveability.

How else is the engine innovative?
Among the building blocks of the engine’s success are reduced friction, turbocharging, direct-injection and variable cam timing. In addition, we have a number of detailed innovations. The integrated exhaust manifold gives us fuel efficiency at high speed and is important for achieving real-world fuel economy. We also have split-cooling, which allows us to only cool those locations that get really hot, such as the cylinder head during cold start. By not cooling the rest of the engine, we reach the optimal operating conditions more quickly and save fuel. Another important feature centres on the primary drive. We’ve implemented a so-called “belt in oil” system. The belt is durable for life and delivers impressive NVH levels and, again, boosts fuel consumption performance.

Biography
Roland Ernst is chief programme engineer, Powertrain Engineering, based at the Dagenham Diesel Centre. He joined Ford of Germany in Cologne in 1990 and subsequently held senior positions in Powertrain Engineering.

“It’s received some of the best reviews I’ve read in my career”
The most efficient

The Focus 1.0-litre EcoBoost is Ford’s most fuel efficient petrol-engined vehicle ever. The engine uses turbocharging and direct fuel injection to extract impressive levels of power and fuel efficiency from its three-cylinder engine design. The cylinder head is so small it can fit on a sheet of A4 paper. This combination of power and low CO₂ emissions is unmatched by competitors in its segment.

The engine’s high torque of 170Nm between 1,400rpm and 4,500rpm (or between 1,400rpm and 4,000rpm in 100PS version) supports a fuel efficient driving style and delivers a good performance feel and diesel-like torque experience.

What about durability?
The engine has been subjected to the same very demanding test requirements as any other. There are no durability issues.

Did the engine present any special manufacturing challenges?
It was an all-new engine and the plants manufacturing it, Cologne and Craiova, also had to be all-new. Like the engine itself, those plants are as environmentally-friendly as possible. For example, the amount of energy consumed to produce the engine is reduced by 60 per cent. Producing such an innovative engine demanded a lot, but Manufacturing delivered. For example, the engine has challenging sealing concepts which demand a much cleaner plant environment.

The engine is in the B-MAX and Focus, will it power other models?
It is definitely a contender for bigger vehicles. When you see the success of the 1.0-litre in the Focus, you can imagine it going one step further.

There is media speculation about a higher performance 1.0-litre EcoBoost, is that something under consideration?
We are reviewing opportunities, as you would expect. The engine has strong potential for further development.

Is Ford a leader in such powertrain technology?
The media is telling us we are in the leadership area. I don’t see anything in the market at the moment that matches our 1.0-litre EcoBoost. We can be very proud of what we have achieved with this engine.

So, is the EcoBoost range a game-changer for Ford?
It is too early to say, but I believe it has the potential to be a market leader. Journalists were sceptical initially but once they had driven the 1.0-litre Focus they were impressed. Similarly, once the model rolls out into the market, I believe it will gain an impressive reputation with consumers.

Finally, the EcoBoost shows how much more, in terms of fuel efficiency and CO₂ reductions, it is possible to gain from the internal combustion engine – do you expect to see further advances?
There is considerable potential. We still have some fuel efficiency improvements that can be expanded. But it will be a case of evolution rather than revolution.

What the Press says

L’Express, France: 
Excellent driving enjoyment and remarkable fuel consumption levels.

Auto Bild, Spain: 
it will amaze you.

Autocar, UK: 
Remarkable.

What Car?, UK: 
What’s it like to drive? Extraordinary is not too strong a word.

La Stampa, Italy: 
Brilliant in all situations.

Il Messaggero, Italy: 
It’s incredible.

Auto Bild, Germany: 
Responsive and lively.

Auto Declics, France: 
We tested the 125PS version. Frankly, the results were nothing short of astonishing.

Bild Am Sonntag, Germany: 
Ford’s new three-cylinder engine will revolutionise the world of cars in 2012.
These are exciting yet challenging times for Ford Export and Growth (E&G) - exciting because it has just marked its 15th consecutive month of record sales and challenging because it will need to Go Further to surpass record-setting totals from the past two years.

Bringing that vision to life is at the centre of plans for this year and beyond. In fact, E&G benchmarked some of the best global companies from a variety of industries as it developed the “E&G Better Plan”, which was presented to senior leadership last autumn.

Director Hal Feder says the best global companies share five important characteristics:

- A strong passion for growth – they’re constantly looking for new markets and new opportunities.
- A highly recognised global brand promise that is consistent around the world.
- A strong connection to the customer that is as emotional as it is rational, so customers do a lot of the work in promoting the brand.
- A clear vision of success that’s shared across the organisation.
- A culture of adaptability that permits it to quickly adjust to new opportunities and challenges.

Each of these five characteristics of great export companies line up perfectly with the E&G Better Plan, which includes five strategic priorities – growth, brand, ownership, products and people.

Success could be defined as what E&G already enjoys – increasing sales and market share. E&G is forecasting 165,000 sales in 2012, an increase of 13 per cent versus 2011, and is targeting market share gains in all four regions.
In addition, E&G has plans to enter four new markets in 2012 and will build 28 new facilities across the globe, including traditional sales and service facilities as well as multiple Quick Lanes and Quick Parts outlets.

But for the team at Export and Growth, that’s not enough. While talking to dealers, Feder emphasises the need to stay focused on serving customers.

To do that, E&G is launching new initiatives, such as the Consumer Experience Movement, which is designed to help forge an emotional connection with customers, and a Ford Fleet Preferred programme that will help differentiate the Ford Fleet brand in E&G markets. Both initiatives are in the developmental phase and will be finalised and implemented with dealer input.

The dealer point of view is particularly important, as they’re the ones who interact directly with customers. To better tap into their knowledge, not just of customers, but of international business and exporting, Feder is forming a new E&G Dealer Strategy Board.

Focused on helping E&G become a great export company, the intent is to work collaboratively on strategic issues, improve programmes and be certain that when future programmes are rolled out that they work in all regions, Feder says. “Business practices vary from region to region, so we need to ensure that we are incorporating the voice of the dealer into our decision-making process.”

Feder adds that the ten dealers appointed to the board will meet at least twice a year with the Export and Growth Operating Committee and senior Ford leadership to discuss strategic opportunities and priorities.

Obviously, great vehicles are another key to the E&G vision. Those sold in its markets are sourced from Europe as well as other locations around the globe. Dealers got an up-close look at four new products launching this year in E&G markets – the all-new Ranger, the 2013 Fusion, which will be badged as Mondeo in some markets, the all-new Escape (Kuga) and the new EcoSport.

All drew rave reviews from dealers throughout E&G markets. “I heard over and over again that our dealer partners love the new products we have coming this year,” said Feder.

Because the markets within E&G are far flung, meetings such as the one in Las Vegas are particularly important as they provide a rare opportunity for the dealers and the E&G team to work collaboratively to address common areas of concern.

“I know we have a lot of work to do to become a ‘great export company,’ but I believe our best days are right in front of us,” said Feder.

“The fact is, when you combine the core strategies of our E&G Better Plan, with the new products we are launching and our E&G dealers –the best in the business – it is a formula that is unmatchable, and perfectly positions us to take advantage of the tremendous growth opportunity in our E&G markets.”

Ford does not have a manufacturing presence or a National Sales Company. E&G is designed to nurture new and emerging markets to maturity and provide future incremental profit streams to One Ford.

E&G provides sales, marketing, service, logistics, planning and financial support to Ford dealers and distributors in 87 countries outside of Ford's main consumer business groups – markets where Ford does not have a manufacturing presence or a National Sales Company. E&G is designed to nurture new and emerging markets to maturity and provide future incremental profit streams to One Ford.
## Ford Registrations February 2012

Total vehicles by country: (↗) higher / (↘) lower than February 2011

<table>
<thead>
<tr>
<th>Country</th>
<th>Volume</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Austria</td>
<td>1,884</td>
<td>(↘)</td>
</tr>
<tr>
<td>B - Belgium</td>
<td>3,074</td>
<td>(↘)</td>
</tr>
<tr>
<td>CH - Switzerland</td>
<td>1,585</td>
<td>(↗)</td>
</tr>
<tr>
<td>CZ - Czech Republic</td>
<td>1,038</td>
<td>(↘)</td>
</tr>
<tr>
<td>D - Germany</td>
<td>17,530</td>
<td>(↗)</td>
</tr>
<tr>
<td>DK - Denmark</td>
<td>1,330</td>
<td>(↗)</td>
</tr>
<tr>
<td>E - Spain</td>
<td>5,643</td>
<td>(↗)</td>
</tr>
<tr>
<td>F - France</td>
<td>10,695</td>
<td>(↗)</td>
</tr>
<tr>
<td>FIN - Finland/Baltics</td>
<td>1,250</td>
<td>(↗)</td>
</tr>
<tr>
<td>GB - Great Britain</td>
<td>11,290</td>
<td>(↗)</td>
</tr>
<tr>
<td>GR - Greece</td>
<td>247</td>
<td>(↗)</td>
</tr>
<tr>
<td>H - Hungary</td>
<td>537</td>
<td>(↗)</td>
</tr>
<tr>
<td>I - Italy</td>
<td>11,252</td>
<td>(↗)</td>
</tr>
<tr>
<td>IRL - Ireland</td>
<td>1,445</td>
<td>(↗)</td>
</tr>
<tr>
<td>N - Norway</td>
<td>1,107</td>
<td>(↗)</td>
</tr>
<tr>
<td>NL - Netherlands</td>
<td>4,756</td>
<td>(↗)</td>
</tr>
<tr>
<td>P - Portugal</td>
<td>549</td>
<td>(↗)</td>
</tr>
<tr>
<td>PL - Poland</td>
<td>1,893</td>
<td>(↗)</td>
</tr>
<tr>
<td>S - Sweden</td>
<td>1,242</td>
<td>(↗)</td>
</tr>
<tr>
<td>RUS - Russia</td>
<td>9,211</td>
<td>(↗)</td>
</tr>
<tr>
<td>TR - Turkey</td>
<td>5,478</td>
<td>(↗)</td>
</tr>
<tr>
<td>RO - Romania</td>
<td>450</td>
<td>(↗)</td>
</tr>
<tr>
<td><strong>EUROPE 22</strong></td>
<td>93,486</td>
<td>(100,562)</td>
</tr>
</tbody>
</table>

## Segment shares total Europe

YTD December 2011

<table>
<thead>
<tr>
<th>Car Model</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fiat Panda</td>
<td>15.5%</td>
</tr>
<tr>
<td>2. Fiat 500</td>
<td>12.8%</td>
</tr>
<tr>
<td>3. Ford Ka</td>
<td>15.5%</td>
</tr>
<tr>
<td>4. VW Polo</td>
<td>11.6%</td>
</tr>
<tr>
<td>5. Ford Fiesta</td>
<td>11.4%</td>
</tr>
<tr>
<td>6. GM Corsa</td>
<td>10.3%</td>
</tr>
<tr>
<td>7. GM Meriva</td>
<td>24.6%</td>
</tr>
<tr>
<td>8. Citroën C3 Picasso</td>
<td>12.3%</td>
</tr>
<tr>
<td>9. Ford Fusion</td>
<td>3.4%</td>
</tr>
<tr>
<td>10. VW Golf</td>
<td>21.4%</td>
</tr>
<tr>
<td>11. VW Caddy</td>
<td>13.0%</td>
</tr>
<tr>
<td>12. Ford Focus</td>
<td>12.5%</td>
</tr>
<tr>
<td>13. Nissan Qashqai</td>
<td>22.2%</td>
</tr>
<tr>
<td>14. Dacia Duster</td>
<td>13.9%</td>
</tr>
<tr>
<td>15. Ford Kuga</td>
<td>7.2%</td>
</tr>
<tr>
<td>16. Renault Scénic</td>
<td>16.4%</td>
</tr>
<tr>
<td>17. Ford C-MAX</td>
<td>13.0%</td>
</tr>
<tr>
<td>18. VW Touran</td>
<td>12.4%</td>
</tr>
<tr>
<td>19. VW Passat</td>
<td>21.7%</td>
</tr>
<tr>
<td>20. Skoda Octavia</td>
<td>16.3%</td>
</tr>
<tr>
<td>21. Ford Mondeo</td>
<td>7.9%</td>
</tr>
<tr>
<td>22. Ford S-MAX</td>
<td>4.5%</td>
</tr>
<tr>
<td>23. VW Sharan</td>
<td>36.8%</td>
</tr>
<tr>
<td>24. Ford Galaxy</td>
<td>22.2%</td>
</tr>
<tr>
<td>25. Seat Alhambra</td>
<td>13.6%</td>
</tr>
<tr>
<td>26. Ford Transit</td>
<td>12.8%</td>
</tr>
<tr>
<td>27. VW Transporter</td>
<td>11.4%</td>
</tr>
<tr>
<td>28. Fiat Ducato</td>
<td>8.9%</td>
</tr>
</tbody>
</table>
SALES COMMENT

“We are driving up customer satisfaction”

by Roelant de Waard, vice president, Marketing, Sales & Service, Ford of Europe

Customer satisfaction is critical for our business. Ensuring our customers are satisfied, not only with our products but also with the purchase and service experience, will build customer loyalty and advocacy, thus enhancing the Ford brand.

Sales and Service satisfaction are key areas of focus and we are making significant progress. 2011 performance improved versus prior year by 3 percentage points, from 79 per cent to 82 per cent, on Sales. That strong improvement has continued into 2012 with YTD February at 85 per cent. On service we improved by 5 percentage points last year, from 59 per cent to 64 per cent, and, again, the improvement is continuing with YTD February at 70 per cent.

Managing performance starts with measuring it and we have introduced a new global Customer Viewpoint survey programme into all FoE markets. This surveys customers shortly after a vehicle purchase or service event. They rate their satisfaction and give feedback on the main aspects of the experience. Data is then collected and made available to dealers for review and action.

We are focusing dealers on improving the top drivers of satisfaction. For service this means repairing the customer’s vehicle right the first time. We are now doing that 96 per cent of the time and continuously looking for further improvement. For the vehicle purchase it means a perfect handover of the new vehicle. An important influence in that is our ability to predict when the vehicle will be delivered. In February we built over 95 per cent of sold orders within the initial time that we promised our customers, the highest percentage for over two years.

We’re also progressing initiatives to get the right car to our customers more quickly. A successful example is in Spain with Vehicle Holding Compounds (VHCs), which allow customers to access all available stock in the country, not just at their local dealership. And we’re getting vehicles delivered to the dealer within five days.

Another important element driving customer satisfaction is “treat me right,” a term which covers factors that relate to the way customers are handled by our dealers and call centres. We are working with global teams on this area, because the issue is important in all markets, and we are piloting new approaches to customer interaction.

While we are not yet the leader in customer satisfaction, we are progressing and rapidly closing the gap with the frontrunner. Of course, other manufacturers are also increasingly aware of the importance of customer satisfaction and are working hard to make improvements. So we cannot take our foot of the pedal on this issue and will keep moving forward.

FCSD-E
February sales came in at $232 million – down $18 million vs. the February objective and $33 million below prior year. On a year-to-date basis sales volumes are now down $86 million vs. prior year. Traffic Data for February shows an improvement over January with a year-over-year decline of workshop traffic by 2% and parts-sold-per-visit by 4%. February also saw more Dealer stock reductions and further shortfalls in the collision business due to significantly lower accident rates compared with prior years.

Additional sales support actions have been approved to further stimulate consumer demand and workshop traffic in what will continue to be a challenging market.

FCSD-E achieved a Ford Protect new vehicle penetration of 38.5% (3.7% above objective) in February, YTD February the penetration is at 37.0% (2.1% above objective).

Service Activated Roadside Assistance (SARA) marked the highest ever performance for a single month with 74,800 contracts in February. Major markets contributing to this were Russia (17,633), the Netherlands (16,729), Britain (11,243) and Belgium (9,113). YTD February 2012, 141,827 contract have been registered; that is 70% or 58,229 contracts above prior year.
Sport

Solberg shines in Mexico

Ford World Rally Team drivers Petter Solberg and Chris Patterson finished third in Rally Mexico. The Norwegian driver and his British co-driver also won the final Power Stage speed test in their Fiesta RS World Rally Car.

Team-mates Jari-Matti Latvala and Miikka Anttila retired from third place with two special stages remaining after rolling their Fiesta RS WRC when they were distracted by another crashed car. The accident damaged the car’s roll cage and the Finns had to withdraw for safety reasons.

Both Solberg and Latvala led the rally at times but their chances of victory were dashed by a series of punctures. Between them they recorded fastest times on 11 of the event’s 22 stages.

Solberg moved into third when Latvala crashed, sealing a strong performance on his first gravel rally in a Fiesta RS WRC when he won the Power Stage by a crushing 1.4sec.

“I really wanted to win the Power Stage because the bonus points are important for the championship,” he said. “The extra three points means I scored the same as the second-placed driver, so it’s like finishing a place higher. I’ve now driven on three different surfaces in the Fiesta in the opening three rallies and I was really comfortable on each, so I feel confident for the season ahead,” he added.

Ford Racing motorsport manager Gerard Quinn said: “I’m delighted Petter and Chris finished on the podium and collected a Power Stage win, but the result was tinged with disappointment following Jari-Matti’s retirement. We appear to have made a big step forward on gravel and that’s a big boost as the remainder of the season is predominantly on that surface.”

For more news about the Ford World Rally Team, visit wrcford.com
To purchase official Team merchandise, please visit wrcfordstore.com

“We go further when we design cars inspired by life.”

Eugen Enns
Senior Exterior Designer, Cologne, Germany

Eugen sketches people daily and creates a personal music soundtrack to help inspire his vehicle designs. He believes the most satisfying challenge is making affordable cars look beautiful. It’s another compelling example of how our employees around the world go further every day. At Ford, we go further to work together to create new ideas and new ways to serve our customers. We go further to make sure even our most thrilling technology is something everyone can enjoy. And we go further in taking care of not just our customers, but the communities they live in and the planet they live on.
Moment @Ford
06.03.2012, Geneva Motor Show
Stephen Odell and Alan Mulally
present the B-MAX on stand