

@Ford

CONNECTING EUROPE · MARCH 2019



‘Jekyll and Hyde’

Meet the best, baddest Focus ST ever

Safety

Why Focus is perfect for pooches

Electrification

Which EV is right for you

Heritage

Celebrating 50 years of Capri

The background of the entire page is a blue-tinted photograph of a large event space. In the center, a Ford car is illuminated on a stage, with a large Ford logo above it. The walls are covered in digital displays showing various data and graphics. The ceiling has several spotlights. In the foreground, the silhouettes of a crowd of people are visible, looking towards the stage.

Ford
Go Further

Powering Up for the Future
Don't Miss it!

Ford will launch its fourth Go Further showcase event in Amsterdam on April 2, and employees can see this first - live on @FordOnline.

With exciting news on SUVs, CVs, plus Ford's Electrification strategy, this is not to be missed.

@Ford's Livestream starts at 9.00 CET (8.00 GMT) on April 2 and will be available On-Demand afterwards.

Additional coverage of Go Further 4 will be provided in a special supplement in the April edition of @Ford magazine.

#GoFurther

04 News in Brief

News and views from the world of Ford

06 Cover Story

Introducing the all-new Ford Focus ST

08 Safety

Why Focus is perfect for dog owners

09 Technology

Ford's light-based visual tech explained

10 Commercial Vehicles

Europe's best-selling pick-up just got better

11 Electrification

Which EV would you choose?

12 Interview

Aaron Rajda talks IT

14 Heritage

Celebrating 50 years of Capri

16 Sport

How Fiesta becomes an R2 rally car

17 Community

Service Learning is thriving in Cologne

18 Sales/Your Voice

Sales stats and readers views

**Ford News**

Included with this issue between pages 10 and 11

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A Product to be Proud of, a Statement of Intent

"Which products in our portfolio are the most profitable?" That's a question I'm regularly asked by employees when I visit Ford facilities across Europe.

It's no secret that our commercial vehicles (CVs) generate the most revenue for our business, followed by our SUVs. This is the reason why we're betting big on these segments going forward as part of our Reset and Redesign strategy.

We also are intently focused on how to make our passenger cars contribute more to our bottom line. One of the most effective ways to achieve this is to sell more of our higher-spec models such as the great new Focus ST that graces the cover of this magazine.

The previous Focus ST was a brilliant car, accounting for approximately five percent of all Focus sales in the European 20 markets. But this latest vehicle beats it hands down in every area. It's more powerful, more fun-to-drive, more technologically advanced, better connected and safer, too.

Performance director Leo Roeks sums it up perfectly when he describes it as the most "Jekyll and Hyde" Focus ST yet. This is a car that die-hard ST fans will adore, and a car that really will appeal to consumers who might not have considered a Focus ST before.

Alongside the Fiesta ST, this new Focus ST also injects energy into our brand. It's a statement of intent and a great example of Ford engineering at its best. Most importantly, though, Focus ST remains profitable, and that's why it is such an important product for us.

I've spoken at length about the need to redesign our business and the tough decisions that must be made to guarantee our future. One of those was the decision, following a review of spending in all areas, to suspend 2019 Discretionary Merit programs across all locations and markets.

This was a very difficult, but necessary near-term action to help reset the business in order for us to deliver a longer-term benefit and have a sustainable future, and it was not made lightly. I do recognise the significant impact this will have on many of you and deeply appreciate the sacrifice being made.

**Steven Armstrong**

Group vice president and president, Europe, Middle East and Africa

Looking ahead, I'd like to close by telling you about our fourth Go Further event we will host at the beginning of April. Our Go Further events are brand showcases and the perfect platform to share our vision for the business with our employees, dealers and media.

At this year's event, we will be announcing some exciting news about our SUV range and revealing new additions to our CV line up. Most importantly, we will be showcasing our strong commitment to electrification here in Europe, including a lot of great news about Ford hybrid models across our entire range.

Go Further will define where we are going as a company. While some key elements of the program will be broadcast live on @FordOnline, we also will be inviting a small number of employees to attend the full event, as it is important for our employees to understand and engage in our future, especially during these difficult times. We will communicate more information closer to the event.

I'm certain that Go Further 4 is going to be exiting, informative and revealing, and I look forward to you joining and sharing in our collective vision for the future.

Until next time.

News in Brief

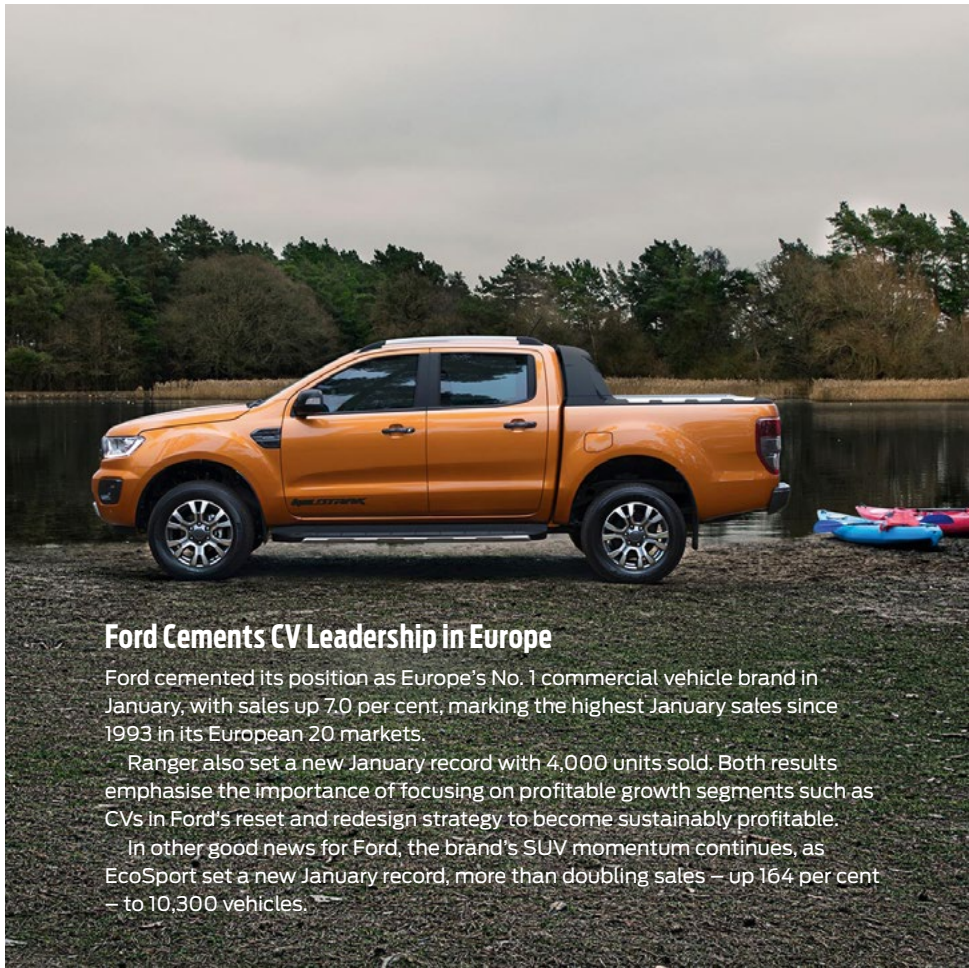
Ford trials ‘Warehouse on Wheels’

Ford is trialling a new digital parcel courier service that could help reduce congestion and speed-up deliveries in urban areas. The company has partnered with delivery company Gnewt by Menzies Distribution (Gnewt) to create a “warehouse on wheels” that is currently being evaluated in London. The digital delivery service efficiently coordinates multiple modes of transport including pedestrian and – one day – bicycle couriers. During the trial, Gnewt’s “last-mile” delivery service will be driven by Ford’s intelligent cloud-based, multi-modal routing and logistics software MoDe:Link, that manages all aspects of parcel delivery from depot to doorstep. This could help couriers, fleet managers, logistics and food delivery companies

optimise processes and increase van utilisation, saving time and money while boosting capacity. The service could also improve customer experience by offering improved delivery windows and reducing costs, speeding time from order to delivery by enabling vans to make more frequent round trips back to the depot. In addition, it could contribute to healthier streets and reduced traffic in major cities, cutting congestion around valuable kerb space where vans typically load and unload. “We want to change the way we think about moving goods around our cities,” said Sam Clarke, founder and head of business development, Gnewt. “We are keen to understand how multi-modal deliveries can



benefit our business, our customers, and – by promoting active travel and the associated health and environmental benefits of walking and cycling – our employees too. We are delighted to be working with Ford and helping to trial its revolutionary new software solution.”



Ford Cements CV Leadership in Europe

Ford cemented its position as Europe’s No. 1 commercial vehicle brand in January, with sales up 7.0 per cent, marking the highest January sales since 1993 in its European 20 markets. Ranger also set a new January record with 4,000 units sold. Both results emphasise the importance of focusing on profitable growth segments such as CVs in Ford’s reset and redesign strategy to become sustainably profitable. In other good news for Ford, the brand’s SUV momentum continues, as EcoSport set a new January record, more than doubling sales – up 164 per cent – to 10,300 vehicles.



Rare Focus RS Sells for £84K

Two rare Ford Focus RS cars created to celebrate the 50th anniversary of the RS brand have sold at auction for £84,000 each. The limited edition RS50 Evo models are two of just three vehicles produced by Ford of Britain in conjunction with performance partner Mountune. They went under the hammer in the UK last month. Each features an upgraded sports exhaust, alloy intercooler, carbon fibre rear spoiler lip, vented bonnet, lowered sports suspension and lightweight brakes. Their 2.3-litre EcoBoost powertrains deliver 400hp and a 0-60 mph time of just over 4 seconds.



Fifth for M-Sport Ford in Sweden

M-Sport Ford World Rally Team’s EcoBoost-powered Ford Fiesta WRC showed winning pace at Rally Sweden – claiming five stage wins and challenging for victory. Teemu Suninen delivered an incredible performance through the opening stages, leading the field for the first time in his career until a brush with a snow bank dropped him down the order. Another encounter with a snow bank meant he finished outside the points. Elfyn Evans also had the speed to challenge for the top results in Sweden, but was left ruing an early spin.



Ford Credit Readies for Brexit

Ford Credit Europe’s (FCE) businesses in Belgium and the Netherlands are now operating as finance companies. The new finance companies will ensure continued support for Ford, its dealers and customers after Brexit, if the UK leaves the European Union (EU) as planned on March 29. Previously, the locations had operated as branches of the UK-based bank. “This is another milestone in our Brexit contingency planning following the launch of Ford Bank GmbH in Germany last summer,” FCE CEO Charles Bilyeu wrote in an email to employees. “I thank everyone in both locations, the Brexit team and Warley central office for the hard work and dedication that have made these successful launches possible.”



Ford Cleans Up at Fleet World Awards

Ford claimed a haul of top honours at the annual Fleet World Awards in the UK. Ford Focus was crowned Best New Fleet Car of the Year, and Best Lower Medium Fleet Car, while Ford Transit Custom was named Medium Van of the Year, and Ford was named Van Manufacturer of the Year. Fleet World said: “Light commercial vehicles are big business for manufacturers. With car sales dropping sharply, the van market remained strong in 2018. Having a van brand hit the number three spot in the overall vehicle market is an outstanding achievement. With one in every three van sales in the UK last year, it has to be Ford.”

>OVERHEARD<

“One of the most important innovations is that the Mondeo series now also includes a hybrid station wagon. Plus, the Mondeo Hybrid as a four-door sedan remains on offer.” **Mobility website Electrive.com**

“A Volvo Cars joint venture has won approval to begin hands-free testing of its software for self-driving cars on Swedish highways.” **Reuters (Sweden)**

“Traditional combustion engines still have a healthy future for a foreseeable time to come. Improved efficiencies and the cost of alternatives, alongside consumer confidence in alternatives, means that the combustion engine is very much alive and well.” **Frankfurter Allgemeine Zeitung**

“Ford wants to replace the angry blare from cars with a new system that beams alerts into surrounding vehicles. Rather than making a ‘polluting’ noise that can be heard by everyone, their ‘extended range horn’ will trigger an urgent beep.” **Sunday Express**

“Is your car spying on you? If not, it soon will be... A new generation of cars is on the way – and they will be tracking what you get up to.” **The Daily Telegraph**

“If you think traffic in cities is bad now, just wait until autonomous vehicles arrive, cruising around to avoid paying pricey parking fees.” **MIT Technology Review**

“I firmly believe that within five years the majority of car-makers will come to Google and say, ‘we need your help.’” **Brent Thill, equity analyst, Jefferies LLC**

“Almost 60,000 pure electric and plug-in hybrid cars were registered in the UK in 2018, representing a 19 per cent increase from the previous year.” **Utility Week**

“Just days after Dodge hinted that its next Challenger was set for electrification, Ford has patented a new electrified V8 powertrain that’s expected to be introduced to the Mustang by 2021.” **Pistonheads.com**

SUPERSTAR SUPER CAR

Meet the all-new Ford Focus ST – the latest piece in the Focus family jigsaw puzzle, and possibly the world's fastest recording studio. Confused? Read on

It takes some serious speed and precision to keep up with energetic MC and music producer Blakie. That's why Ford teamed up with the 21-year old "Can't see them" and "Bare Energy EP" star for a new film to demonstrate the responsiveness of the all-new Focus ST.

Shot over three days on location at Lommel Proving Ground in Belgium, the film shows Londoner Blakie perform his track "Jump" from the passenger seat of the Focus as it flies around the facility at speed.

"Having a film made to a track I wrote in my bedroom was amazing - my mum drives a Ford so she'll be really happy," said Blakie. "I loved working with an amazing driver and experiencing the adrenaline of the Focus ST on a test track."

"We wanted to deliver an exciting driving film to appeal to the younger ST audience, and Blakie was the perfect fit," said Kim Benns, Ford Performance communications manager. "He developed a special version of his track especially for the shoot which uses established action movie techniques to emphasise just how potent and fun this Focus is."

Fun is something the new Focus ST delivers in spades. Revealed exclusively to employees on @FordOnline ahead of its official debut, it has been described by Leo Roeks, Ford Performance director, Europe, as "the most Jekyll and Hyde" Focus ST yet. It's certainly the quickest.

On sale this summer, it will be available in both five-door and wagon body styles with a choice of new petrol and diesel engines. For ultimate performance, the 280 PS 2.3-litre EcoBoost petrol engine variant is predicted to deliver sub six second 0-62mph sprints, while the new 190 PS 2.0-litre EcoBlue diesel option is also seriously rapid.



Customers can opt for a six-speed manual or quick-shifting new seven-speed automatic transmission, and, for the first time on Focus, Selectable Drive Modes technology that enables you to adjust the car to suit every driving scenario.

"Our all-new Focus ST is able to switch from refined tourer to focussed performance car at the push of a button," said Leo Roeks. "We've incorporated learnings from programmes including our Ford GT supercar and the acclaimed Focus RS to develop a mid-size performance car with a degree of flexibility that's unique in its segment."

Intuitive dynamics

New Focus ST is just at home on a B-road as it is blasting around Lommel's Track 7.

It's the first front-wheel drive Ford to be fitted with an electronic limited slip diff (eLSD) for 2.3-litre EcoBoost models, and it gets a unique suspension tuning that improve the vehicle's responses to driver inputs without sacrificing comfort.

For extra enjoyment on the twisty stuff, damping stiffness is increased up to 20 per cent at the front and 13 per cent at the rear, and ride height reduced by 10 mm. Ford's sophisticated CCD technology is available, and every 2 milliseconds monitors suspension, body, steering and braking inputs to adjust damping responses for outstanding ride quality and driving dynamics.

Focus ST 2.0-litre EcoBlue models feature Torque Vectoring Control technology, which improves road holding and reduces understeer by applying brake force to the inside front wheel when cornering.

The electric power-assisted steering (EPAS) is 15 per cent faster than the standard Focus, requiring just two turns lock-to-lock. And the brakes have also been beefed up - front disc dimensions have grown to 330 mm x 27 mm and feature dual-piston callipers. Rear discs now measure 302 mm x 11 mm.



Petrol version is predicted to deliver sub-six second 0-62mph sprints



Focus ST delivers outstanding ride quality and driving dynamics

Blakie, left, is an energetic MC and music producer from London



<https://youtu.be/EqGiTaUWrto>

Cars equipped with Ford's Performance Pack also get a Track Drive Mode that adjusts the eLSD, CCD, EPAS, throttle mapping, automatic transmission shift scheduling, electronic stability control, electronic sound enhancement (ESE) and climate settings.

"Selecting Track mode instantly makes braking response more direct and edgy; introduces higher steering efforts for more feedback; tunes the throttle to be more aggressive; instructs the eLSD to deliver maximum traction; and gives drivers more leeway within the ESC system," said David Put, Ford Performance vehicle dynamics. "Drivers can have full confidence in the Focus ST's ability to deliver on the track."

Upscale interior

New Focus ST looks fast from the outside and that impression is carried over as soon as you hop inside.

There's a sports steering wheel and Ebony coloured Recaro seats with a choice of high-quality cloth, leather, or partial leather. You get an ST-embossed aluminium gear

knob and scuff plates; alloy pedals; metallic hexagonal and satin silver decorative elements; and metal grey stitching for the seats, door inserts and centre console soft side pads.

The instrument cluster is inspired by the Ford GT supercar, with digital turbocharger boost pressure, oil pressure and oil temperature gauges displayed in a special Ford Performance screen. Launch Control for consistently fast standing starts on track is also delivered via the Performance Pack for 2.3-litre EcoBoost models.

Meanwhile, Ford's SYNC 3 connectivity system allows drivers to control audio, navigation and climate functions plus connected smartphones using simple voice commands supported by an 8-inch colour touchscreen. The system provides Apple CarPlay and Android Auto™ compatibility free of charge, and available FordPass Connect embedded modem technology turns the vehicle into a mobile WiFi hotspot with connectivity for up to 10 devices.



Sports steering wheel and Recaro seats come as standard on Focus ST

"Our target was to deliver an all-new Focus ST that is as effortless to drive day-to-day as the rest of the Focus line-up," Roeks said. "The model's comprehensive range of technologies means customers gain exhilarating ST performance without sacrifice."



See how Ford is taking care of man's best friend

Why Focus is Perfect for Pooches

A new survey commissioned by Ford shows that 32 per cent of dog-owning drivers admit to not securing their pets safely in the car. Fortunately, Ford engineer Rene Berns has come up with a solution

Work on Ford's all-new Focus wagon was a labour of love for Merkenich-based Rene, who looked to his three-year old Australian Shepherd dog, Emil, for inspiration when designing a car that enabled dogs to travel more safely.

During testing, Rene enlisted Emil's help to ensure the biggest possible crate could be accommodated in the Focus wagon boot space. As a result, the vehicle can comfortably carry even an Irish Wolfhound, the world's tallest breed of dog.

Think of its safety

"If you have a pet, please think of its safety in the same way you would about any other member of the family," said dog training

expert, Graeme Hall, aka "The Dogfather". "I always carry my dog Lily in the boot in her crate. She can comfortably move around and everyone's safe. I believe that's the best solution."

5,000 dog-owning drivers in France, Germany, Italy, Spain and the UK took part in the Ford commissioned survey. Of those who said they did not always secure their pets, 32 per cent said it was because the animals did not like it, 31 per cent claimed there was no need when undertaking short journeys, and 14 per cent said they did not have room for a dog crate.

More than 1 in 4 of those who carried their dog unsecured admitted that their pet had poked its head out of the window (26 per

cent). Some said pets had previously jumped out of the window resulting, on occasion, in the pet being killed or injured. Owners also admitted being involved in accidents after being distracted by their pets, that dogs had turned on indicators, obscured the view ahead and bitten occupants.

Poked its head out

Insurance claims can be invalidated if pets are not safely restrained in the vehicle and it has been estimated that if a car crashes at a speed of 40 km/h (25 mph), an unrestrained dog can develop projection forces that are 40 times its weight.

Together with his team, Rene helped to maximise boot space in the Focus wagon by compressing the foam layer of the roof liner, altering the length of the hinge screws and reshaping the boot opening.

"I know how much it means to me to be able to take Emil with me wherever I am going, and I'm proud that he has helped make that easier for other dog owners and their pets to travel safely and in comfort," he said.

The all-new Focus wagon is on sale across Europe in a comprehensive line-up that includes the stylish Focus Trend and Titanium, sporty Focus ST-Line, upscale Focus Vignale, and the first sports-utility vehicle-inspired Focus Active crossover.

* According to Statista, there were an estimated 85 million dogs in Europe in 2017

* Germany had the highest dog population (9.2million), followed by the United Kingdom (8.65 million), and Poland (7.75 million). France (7.4 million), Italy (6.9 million), and Spain (6.27 million) rounded out the top six

* The most Googled dog breed in Europe in 2018 was the Cane Corso (Italian Mastiff), followed by the Rottweiler, and the Pug

Doggy Data

The Autonomous Van, That Isn't



Watch people react to Ford's 'driverless' Transit Connect

Hand gestures, head nods and thumbs-up are just some of the tools drivers use to communicate behind the wheel. So how will driverless cars "talk" to other road users in the future?



That's a puzzle Ford engineers have been attempting to solve to help autonomous vehicles seamlessly integrate with drivers, cyclists and pedestrians.

One approach Ford has experimented with uses lights to indicate what the vehicle is doing and what it will do next. And to ensure testing was as realistic and natural as possible, the company created a special "Human Car Seat" that it installed inside a Transit Connect van to make it look just like an autonomous vehicle.

With the driver hidden in the seat, observers could more effectively gauge responses to a roof-mounted light bar that flashed white, purple and turquoise to indicate when the van was driving, about to pull forwards and giving way.

People need to trust AVs

"Fundamentally, people need to trust autonomous vehicles and developing one universal visual means of communication is a key to that. Turning someone into a 'Human Car Seat' was one of those ideas when there was a bit of a pause and then a realisation that this was absolutely the best and most effective way of finding out what we needed to know," said Thorsten Warwel, manager, Core Lighting, Ford of Europe.

The latest testing, which complements research already carried out in the U.S., was conducted together with Chemnitz University of Technology, in Germany. It showed that 60 per cent of the 173 people surveyed after encountering the Transit Connect thought it was an autonomous vehicle. Together with the observed reactions of a further 1,600 people, turquoise – more noticeable than white and less easily confused with red than purple – emerged as the colour that was preferred. There was also a high level of acceptance and trust in the signals, providing a basis from which researchers can further develop and hone the visual language.

"Making eye contact is important – but our study showed that first and foremost road users look to see what a vehicle is doing. The next step is to look at how we might ensure the light signals can be made clearer and more intuitive to everyone," said Dr. Matthias Beggiato, Department of Psychology, at the university, with which Ford worked on the "InMotion" project, funded with the help of €1 million from the German Ministry of Transport and Digital Infrastructure as part of the Research Programme on Automation and Connectivity in Road Transport.

"Human Car Seat" drivers, who underwent training to ensure they drove safely at all times, kept their eyes on the road through a false head rest and operated a special lever to indicate. An assistant, hidden in the back, also monitored the road ahead and ensured that the driver had a ready supply of water.

Eye contact is important

In separate tests conducted by Ford together with the automotive lighting and electronics specialist HELLA, researchers tested further locations for the lights, such as on the grille and headlamps, though no clear preference emerged.

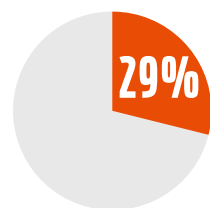
With the goal of developing a purpose-built self-driving vehicle for deployment first in North America in 2021, Ford is working towards ensuring that people trust autonomous vehicles. Essential to this is the creation of an industry standard for communicating driving intent. The company is collaborating with several industry organisations, including the International Organisation for Standardisation and the Society of Automotive Engineers, and is calling on other automotive and technology companies to help create that standard.



Improving the Breed

Ford Ranger is Europe's most popular pick-up by far, with almost 1,000 sold every week last year. Now the company is set to strengthen its dominance in this profitable sector with a new Ranger due in showrooms soon. Hans Schep explains what's new

Ranger's segment share in 2018



European pick-up sales are on the rise

+75% since 2014

102k -> 178K

It is one of Ford of Europe's biggest success stories.

Muscular, versatile, refined and great fun to drive, Ranger has never been never more in demand. So what is the big attraction, and does the Ranger bubble show any sign of bursting?

With sales up 15 per cent in 2018 alone, Ford is predicting demand will only increase in 2019 and beyond. And the driver for this increase is? "Lifestyle users," explains Hans Schep, General Manager, Commercial Vehicles, Ford of Europe. "We've seen unprecedented demand for Ranger from customers who appreciate the rugged looks, enormous load carrying capacity, raised driving position and all-round go-anywhere capability that Ranger offers in spades – both for business and for pleasure."

Go-anywhere capability

In just a few months' time, a new improved Ranger goes on sale in Europe, delivering more power, greater fuel-efficiency, enhanced refinement and advanced driver assistance technologies.

Perhaps the most significant improvement can be found under the hood. At the top of the range is Ford's powerful new 2.0-litre EcoBlue bi-turbo diesel engine with selective catalytic reduction (SCR) for optimised emissions.

This sophisticated new power unit produces 213 PS and 500 Nm of torque – up by 13 PS and 30 Nm

compared with the current 3.2-litre TDCi diesel engine. It's greener too, delivering up to a 9 per cent fuel-efficiency improvement when combined with an advanced new 10-speed automatic transmission.

Customers can also specify the single turbo version of the 2.0-litre EcoBlue engine with a choice of 170 PS and 130 PS ratings to provide the optimum powertrain for their new Ranger.

Available in Regular Cab, Super Cab, and Double Cab body styles, the new Ranger features four-wheel drive as standard, and offers business and leisure users new tools to boost convenience and productivity, including Ford's SYNC 3 connectivity and FordPass Connect on-board modern technology.

Ranger is the first vehicle in its class to offer Pre-Collision Assist with Pedestrian Detection and Intelligent Speed Limiter as standard. Active Park Assist is now also available, in addition to the existing range of advanced driving technologies designed to make driving less stressful and to help avoid or mitigate the effects of collisions.



Envy of the industry

Double Cab, high-power new Ranger variants now feature Active Noise Control technology for improved refinement. Flagship Ranger Wildtrak models and luxurious Ranger Limited both also offer new premium features, including an easy-lift tailgate.

Delivering class-leading ability to wade through water up to 800 mm deep, and with 230 mm of ground clearance, new Ranger's off-road strengths are matched by towing capability of up to 3,500 kg and payload capacity of up to 1,252 kg.

"Pick-up customers love Ranger and this new version builds on the all the strengths of the current product, adding features unheard of in this segment and a brand new state-of-the-art diesel engine," adds Schep.

"Factor in the Ford Performance-developed new Ranger Raptor which also goes on sale in mid-2019, and we'll have a pick-up portfolio that will be the envy of the industry, and highly profitable too."



Which Electric Vehicle is right for you?

Do you know your BEV from your MHEV, or which type of electrified vehicle would best suit your needs? @Ford explains how each system works and the advantages they offer

If proof were needed that electric vehicles are the future, consider this. In the UK, in the past 12 months, demand for electric, plug-in hybrid and hybrid cars surged 26.3 per cent and it is predicted to increase by a similar margin in 2019. In Germany, sales of battery electric vehicles jumped 44 per cent in 2018.

To meet this growing demand for EVs, Ford plans to release a global portfolio of 40 electrified vehicles by 2022, including mild

hybrids (MHEVs), full hybrids (HEVs), plug-in hybrids (PHEVs) and full battery electric vehicles (BEVs) – including a fully-electric performance utility vehicle in 2020.

Available to buy in 2019 is the new Mondeo HEV, while the new Transit Custom PHEV is scheduled to enter production later in the year. As with all electrified vehicles, some are more suited for short urban trips, while others are better for longer journeys.

What's the difference?



MILD HYBRID (MHEV) vehicles have two sources of power that work together – a conventional engine and a battery-driven electric motor. The electric motor does not power the car independently.

- + CO₂ savings up to 10%
- Can't be driven solely by the electric battery and motor



HYBRID (HEV) vehicles have two sources of power. They can automatically switch between conventional mode, pure electric mode (for short distances) or use both to power the vehicle as needed.

- + CO₂ savings up to 40%
- Limited electric only range



PLUG-IN HYBRID (PHEV) vehicles, when fully charged, can operate on electric power for journeys of approximately 50 km. Once the battery runs out of charge, the vehicle will behave like a hybrid with the conventional engine running when necessary. Transit Custom PHEV uses a small petrol engine to top up the battery. The engine cannot drive the wheels.

- + CO₂ savings up to 80%
- Must be plugged in to fully charge



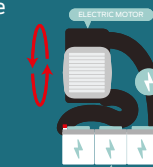
BATTERY ELECTRIC (BEV) vehicles, when fully charged, offer a range of up to approximately 500 km on newer models.

- + CO₂ savings of 100%
- Reliant on plug-in charging

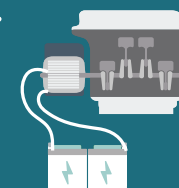


Charging the Battery

All four electric vehicle types have one thing in common in that they use regenerative braking to charge the battery. It captures energy generated under braking and turns it into electricity to boost the battery.



MHEVs and HEVs also use a conventional engine to power a generator which charges the battery. PHEVs, with their larger batteries, must be plugged in to fully charge, but also use regenerative braking and the engine to boost the battery. BEVs must be plugged in to charge the battery.



PHEVs and BEVs can be charged either through a conventional 230 volt socket, a special wall box, or paid-for public charging stations. Ford, together with other automakers, is jointly developing a network of 400 high-power charging stations across Europe which will be compatible with both current and future electric vehicles.





Aaron Rajda

“We’re Always Looking to Improve”

How is IT supporting the development of driverless cars, and what exactly is Big Data? Aaron Rajda, IT director, Ford of Europe, discusses these topics and much more in this exclusive @Ford interview

Aaron, welcome. Define your role within Ford of Europe?

My role within Ford of Europe is to work with the IT team here and to make sure that the work we’re doing within IT supports the Ford of Europe business objectives while maintaining a global IT perspective. This includes ensuring we have the talent, capabilities, and systems we need to deliver those objectives.

What is the biggest challenge you face right now?

A big focus we have right now is how do we make sure we’re getting the value out of all the IT investments that we’re making, and ensuring that for every dollar we’re spending on IT we can measure the value of that and show how we’re contributing to the business. To do this, we are measuring our work in a very different way for 2019 than we ever have before. It’s an adjustment both for IT as well as our business partners we are working with across the business unit.

How big is IT team in Europe, and where is everyone based?

The IT team in Europe is roughly about a thousand employees who are based primarily between the UK and Germany. We do also have some teams in other markets supporting the local operations there. We also work closely with our IT team members in the US and in India that also support the work we’re doing in Europe as well. We leverage our global IT scale, but we do have a great team of European IT team members here.

What commercial advantages does your team bring to the business?

We have great technical skills, but when you look even further our IT team members have a lot of great knowledge about the business itself. They understand the markets, they understand the business challenges, they understand how systems connect to one another and that really gives us a great competitive advantage. So there’s not just technical knowledge but really a great knowledge of the business as well, and I think that sets us apart.

Is Ford a leader in IT deployment?

When you look at Ford IT and our ability to deploy systems at the scale we need to, I do think we’re a leader. Can we do things better? Absolutely. We continue to learn from every deployment we do and improve upon that, so that the next launch or the next deployment is even better. The best deployment is one that no one knows about, because it happened and there were no adverse impacts. We’re always looking to improve, but we deploy a lot of capability and we support a huge, diverse enterprise on a daily basis and running and protecting the business is a key priority.

How is IT supporting the Smart Mobility side of the business?

When you look at the Smart Mobility side of the business, they’re doing some great work exploring new business models and new capabilities. A lot of the systems they need data from are systems that we are managing. So whether it is customer data, or other vehicle system data, or records, we work closely with the Smart Mobility team to help support them, be it through data or through interfacing systems. Our IT teams do a lot working with each other as well to share skills and share learning across the teams. We collaborate quite a bit.



Let’s talk GDPR (General Data Protection Regulation). How has this impacted your work?

From an IT perspective GDPR has had an impact, but in many ways we’ve always maintained an intense focus on security controls and protecting data whether it’s our employees, customers or other partners. So GDPR is something we take very seriously and we build into our processes the controls we need to both protect data and to ensure we comply with all the regulations that we need to as well.

Is IT directly involved in developing future autonomous vehicles (AVs)?

We’re directly involved in terms of the needs of the teams and the needs of the technologies that go into autonomous vehicle development. A good example is the amount of data that vehicles collect through the autonomous vehicle research we’re doing right now. This needs to be stored and managed, and IT is a key partner working with those teams to make sure we’ve got the capabilities and the systems to manage the data that’s coming in.

IT frequently is associated with the term Big Data, so what is Big Data?

Big Data is a term that has been used for a long time and almost overused at this point. It really represents the fact that as we build more and more systems, whether it’s a mobile application or more web applications, we’re generating data, right? For example, the devices in our home that are connected to the internet generate data and the challenge with Big Data is how do you use that, how do you turn it into information and then use this

information to drive decisions. Is Big Data going to get bigger? Yes it is. The tools for managing data are getting better, and our GDIA team (Global Data, Insights and Analytics) is doing great work turning that data into information that we can use to make better decisions.

How closely do you work with external partners to maximise IT capabilities?

Ford IT does do a lot of work with external partners that help us support our business today, whether it’s IBM, or Cisco, or other technology companies and we spend a lot of time with those companies. We visit them, we hear from them in terms of what are the trends they’re looking at, what are the patterns they’re seeing, whether it’s in the industry or from a technology perspective and we build those learnings into our plans going forward. From a business plan perspective we have about a five-year planning horizon but our research team is looking further beyond that to technology that is a bit more nascent, and thinking how can we apply it to the challenges we have within Ford today. Some of the things we’re actively looking at right now include artificial intelligence and machine learning, and how can we use those technologies in real applications today.

How is IT contributing to Sprint to 6?

IT is very much a part of Sprint to 6. All of the Sprint to 6 franchise rooms have an IT element and we’re making sure that IT supports all the activities taking place within these rooms. From a Reset and Redesign planning perspective, IT is making a major contribution, too. We work actively with the European Operating Committee to support those objectives.

“We have great technical skills, but when you look even further our IT team members have a lot of great knowledge about the business itself”

“Some of the things we’re actively looking at now include artificial intelligence and machine learning, and how can we use those technologies in real applications today”

On a personal note

First Car?

My first car was a car that my parents handed down to me and it was a Chevrolet Caprice Classic. So unfortunately it wasn’t a Ford and it wasn’t very fuel-efficient, but it was a big four-door car, and it was free.

First Job?

My first job out of college was working as a network engineer. I knew I wanted to go into IT so I worked for a smaller company that did network engineering, building out local area networks and wide area networks, too.

Favourite holiday destination?

We have a lake home in the U.S., so we spend a lot of time there on vacation. It’s on Lake Erie, one of the great lakes. My wife’s family are from that area, so we have a lot of relatives there and a lot of great friends.

Can’t live without?

I can’t live without my Kindle. I could live without my phone, because the

phone becomes almost a distraction, but I use my Kindle every single day. It’s become a habit.

Hobbies?

My number one hobby is working outside. I really enjoy being outside whether it’s working in the garden, or taking care of the yard. Because we have two young children, a lot of the hobbies I had before them are on hold for now, but we enjoy being outside together. Now that we’re in Europe and living in Germany our hobbies will be traveling and exploring Germany and exploring Europe.

Three people you would like to have dinner with?

From a technology perspective I would choose Satya Nadella at Microsoft, Larry Ellison at Oracle and then Tim Cook at Apple. What’s interesting about those leaders is how they’ve changed the direction of their company over time. That ability to change is something that I’d love to discuss with them over dinner sometime.



CELEBRATING 50 YEARS OF CAPRI

Half a century ago, Ford launched a new coupe across Europe and a motoring icon was born. The Capri was billed as the “the car you always promised yourself”, captivating a style-conscious generation with its sleek, elegant lines and spirit of freedom

Bottom left
Capri was unveiled at the 1969 Brussels Motor Show by King Baudouin of Belgium

Bottom right
Formula One star Jackie Stewart poses with a Capri back in '73



1969



1973

It catered for all tastes with its optional custom packs and mixture of engines – 1.3 through to 3.0-litre V6 – offering an astonishing 26 variations and breaking new ground in the industry.

Revealed with great fanfare to the world’s media at the 1969 Brussels Motor Show, the European Capri would go on to sell almost two million units before production finally finished in 1987.

The Capri was known as the Colt during its development stage, but Ford was unable to use the name as it was trademarked by Mitsubishi. Renaming it after a beautiful Italian island that had acted as a playground for the Hollywood stars of the 1960s, seemed to encapsulate the glamour and ambition of the Capri project.

In 1969, Harry Calton was Chief Press Officer, Cars, at Ford of Britain, and was involved closely with Capri’s launch in Europe. “At that time the Mustang was hot news in both the USA and Europe, and news regarding Ford launching a European version was received with open arms by the media and public,” he said.

“The Ford of Britain launch began with a Christmas dinner for the press at the London Hilton, which also included invitations to their partners. The event went extremely well and the design of the Capri was received most positively.”

Harry agrees that the wide variety of choice within the Capri range helped spur on its huge success.

Received with open arms

“The fact that there were Capris to cater for all tastes was a very strong selling point, with a choice of engines

from 1.3 to 3.0 litres, matched by a wide variety of both trim and colour options, made it very much ‘the car you always promised yourself’,” he added.

But beyond glittering gala events, Ford was keen to demonstrate the Capri’s driving capabilities.

“Early in January 1969, we ran a full road appraisal for both the British and the Scandinavian press in Cyprus,” said Harry.

“Each group was able to enjoy two full days’ driving, which included an opportunity to experience the roads in the Troodos Mountains and enjoy a cup of coffee close to the summit of Mount Olympus.

“The fact that these mountain roads were snow covered was an added bonus for the journalists.”

He added: “As the Capri 3000 was still 12 months away at the time of introduction, Ford Competitions inserted 16-valve rally prepared BDA engines into six of the test cars, so the press could experience a more powerful Capri, even though there was never any intention to sell such a car. The reaction to the test drives was excellent.”

Further media coverage was achieved when an experimental four-wheel-drive 3-litre Capri, driven by legendary rally driver Roger Clark, romped to victory at a televised Rallycross race at Croft in northern England.

The 1970s also saw the Capri triumph at Spa, Belgium, in a number of 24-hour endurance races and clinch the European Touring Car Championship in two successive seasons.

Harry says the Capri, which went on sale across Europe in 1969, with prices starting at £890 for a 1.3 model in the UK, struck a chord with the aspirations of motorists in 1970s Europe.



1971



1972

Capri was a formidable touring car competitor in the early 70s

“As to why Capri was such a success for such a long time was much, I believe, because it kept pace with and anticipated public taste,” he explained. “An early complaint was the lack of luggage space, and this was addressed with the introduction of Capri MK 2, with its hatchback configuration and fold flat rear floor.”

In the years following its launch, the Capri continued to go through numerous reincarnations. For the serious drivers there was the Cologne-built RS 2600 and the 200kmph RS 3100 made in Halewood near Liverpool.

In 1974, Ford launched the Mk 2 with smoother design lines and simplified option packs to appeal to a wider market. From 1978, the Mk III introduced several special editions including the Calypso and Laser.

And three years later, Dunton’s newly formed Special Vehicle Engineering department unveiled its first project: the 160bhp Capri 2.8 Injection. The limited-edition Capri 280, also known as the Brooklands Capri, signalled the end of the Capri era, with the final models delivered to showrooms in 1987.

A brilliant motor car

A number of events will be held this year to celebrate the Capri’s 50th anniversary, including a one-off race at the 2019 Silverstone Classic in July.



1969

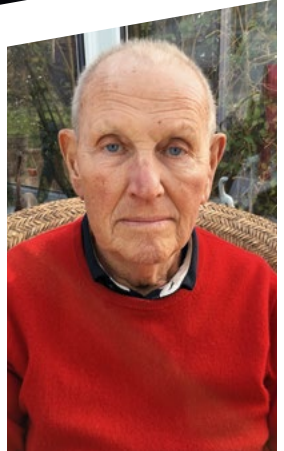
A Rare Ferguson 4x4 Capri in action

The top-performing Capri at the meeting’s Historic Touring Car Challenge will be presented with a special trophy by motorsport legend Gordon Spice. Spice, who notched up 24 British Saloon Car Championship race victories in a Capri between 1976 and 1980, said: “The Capri was very important to me. It was by far the easiest car I ever raced. There was absolutely nothing complicated about it. The rear-drive chassis was simple to tune, so it handled really, really well. Just a brilliant motor car.”



1986

The last Capri - a 2.8i - rolls off the line



Harry Calton was closely involved in Capri's launch in Europe



HOW AN ST-LINE BECOMES AN R2



New R2 is the most potent version to date. It made its World Rally Championship debut in Sweden last month

TECH SPEC:

ENGINE – R2 spec 1.0-litre Ford EcoBoost produces 200PS at 6,500 RPM.

TRANSMISSION – Sadev five-speed sequential gearbox, limited slip diff, plus AP Racing clutch.

SUSPENSION – Reiger adjustable dampers with Eibach springs all round. Optional hard or soft anti-roll bar.

WHEELS – Five stud OZ Racing wheels (6x15" gravel/6.5x16" tarmac).

BRAKES – Ventilated AP Racing front discs (285mm gravel/310mm tarmac) with Alcon rear solid discs (280mm).

SAFETY – T45 Steel roll cage, FIA homologated 65-litre fuel tank, Lifeline Zero 275 fire extinguisher system – a first for a rally car.

The all-new Ford Fiesta R2 is the vehicle of choice for this year's FIA Junior World Rally Championship. This is what it takes to transform a standard Fiesta ST-Line into a seriously rapid rally machine

This is the brand-new Ford Fiesta R2, the latest evolution of a vehicle that first burst onto the world rally scene 10 years ago when the original R2 was created as part of Ford and M-Sport's "Rallying Ladder of Opportunity".

Created from scratch at M-Sport Poland's state-of-the-art facilities in Krakow, it is the most potent R2 to date, carrying over a more powerful version of the multi award winning 3 cylinder engine, higher performance brakes, superior suspension and enhanced safety features.

The most potent R2

It's based on a standard 1.0-litre EcoBoost ST-Line and it takes two of M-Sport's technicians a day and a half to strip down, and a further 10 days for one technician to lighten the body shell and build and fit the roll cage and mounting points.

A further four days are required to strip and build the EcoBoost engine to FIA R2 specification, while another four days are needed to modify windows, dashboard, install new wiring looms, sub-frames, and suspension. Painting the body shell takes three days, and then finally it takes two people six days to put it all back together ready for competition on some of the toughest stages in the World Rally Championship.

A massive step forward

Maciej Woda, Board Member M-Sport Poland, said: "The all-new Ford Fiesta R2 is a massive step forward and something everyone at M-Sport Poland is extremely proud of. But the main philosophy of the Fiesta R2 remains – giving the stars of the future the perfect platform with which to hone their skills and show what they can do in the early stages of their careers."

Some famous names that started their successful rally careers in the Fiesta R2 are Elfyn Evans, Craig Breen, Pontus Tidemand and Nil Solans.



Making People's Lives Better

Working with partner universities, the Ford Fund is making a difference to the lives of the people of Cologne through a programme of not-for-profit organisations run by students

Through the Service Learning programme, students from the University of Cologne and the University of Applied Sciences of Cologne develop valuable skills while improving the lot of communities in the local area.

Volunteers work as small groups on a specific project in a wide variety of areas, from education and ecology to tackling social issues such as diversity, homelessness, drug addiction and the plight of newly arrived refugees.

The Ford Fund has supported the programme for the past four years, investing a total of more than \$50,000, supporting more than 470 students and 76 separate not-for-profit organisations.

development while preparing them for the world of work.

The fact that students join the programme as volunteers also promotes a feeling of responsibility and engagement in the community while at the same time fostering social and professional skills.

Each term, Service Learning co-ordinator Pia Kollender-Jonen, kickstarts the process by organising a launch event where all those taking part – including instructors and student volunteers – meet for the first time and the Service Learning structure is outlined and individual projects explained. And during each programme there are free courses and ongoing supervision, so students can make

Pia said: "I have led the Service Learning programme at the universities for the past four years and thoroughly enjoy helping these motivated young people develop valuable real-world skills associated with project development, business planning and communication.

Community Benefit

The non-profit organisations are extremely appreciative, and jointly we are making a difference in our local community."

The latest end of term presentation heard about a number of projects that have transformed lives in Cologne and the surrounding area. These included the production of a film to promote deaf5, a children's theatre for the deaf and hard of hearing, and a project focused on raising awareness of climate protection via an app which informs pupils about mobility, nutrition, energy and consumption, encouraging them to take action in the interests of the planet.

Wolfgang Hennig, Sustainability and Corporate Citizenship Manager, told @Ford: "At Ford we want to help strengthen communities and make people's lives better and the Service Learning programme has exactly the same objective – 1,200 Ford employees contributed to our volunteering actions in 2018.

"We are delighted to be supporting these students and non-profit organisations and I want to thank everyone involved for their enthusiasm, dedication and teamwork."



"At Ford we want to help strengthen communities and make people's lives better – 1,200 Ford employees contributed to our volunteering actions in 2018" – Wolfgang Hennig, Sustainability and Corporate Citizenship Manager

Personal Development

By working on the projects, students gain valuable methodical, technical and social skills in everything from project development and business planning to marketing, website design, video production and communications. They also get to see first-hand, how to work in a practical way to support an organisation, aiding their personal

the most of the learning experience.

Every Service Learning semester ends with a final presentation of the projects' results – a kind of marketplace – where the different student project groups meet, present and discuss their results, including the social impact and community benefit gained, as well as reflecting on their own personal experience.

HAVE YOUR SAY

@Ford is YOUR magazine, so if you've got a story idea, comment, question or complaint, please contact us at meetfoe@ford.com or via internal post: **D-NX/2A**. These are just some of the contributions received this month.

"RS is a legend and a very good contributor of brand appeal. That's the way to increase brand appeal."
Emrah Tokyuerek

"Love it (Lane Centring Bed). Great way to bring a technology to life in a fun and engaging way. Great work team."
Jay Ward

"Lane Centring Bed is a great way to advertise our car technologies, it's got everyone talking. Clap clap."
Martin Fisher

"Lane Centring Bed is a fascinating approach to promote Ford Technologies to customers, who are not interested in car commercials. Just like the Noise-Cancelling Kennel, which is very popular on Youtube, these kind of videos trigger positive personal feelings/opinions, which are liked and shared on social media."
Hanno Doeden

"Haha, is Lane Centring Bed an actual product I can buy or a funny attention grabber? I would love to see a bed with active noise cancellation as well."
Juliane Gerke

"Kudos to the European TOPs Team their involvement in the 'time to change' campaign."
Clive Bailey

"I would love to volunteer and start a 'Let's talk about mental health' Group in Merkenich."
Linus De Paoli

"I, like most, realise the viability of the Capri returning is nil, but it does not stop me from smiling to myself due to the enjoyment driving my Capri gave me. Yes I am one of those old boys now looking back at my youth. It has made me believe that youth is wasted on the young."
John Malone

"To be able to speak both 'openly' and/or 'candidly' without repercussions will show we at Ford are truly on our way to a great cultural change! Keep working at it everyone!"
Chris Karas

"All-new Focus ST looks to be a winner. If it's as good dynamically as the Fiesta ST, we can dominate the hot hatch market in Europe."
Brian Edwards

"Well done Ford for producing a wagon variant of the new Focus ST. I can't wait to order mine with the 280 PS EcoBoost."
Liz Bell

"A front-wheel drive Focus with 280 PS, and a 0-100km sprint of less than six seconds? How, where and when can I order one?"
Andy Smith

SALES STAT



Sales of Focus grew 6.6 per cent in January, marking the vehicle's best January sales since 2012. Focus also achieved its best January market share since 2014.



<https://youtu.be/yfSYjbODGUc>

"Ford invents 'smart bed' that rolls selfish sleepers back to their own side" [dailymail.co.uk](https://www.dailymail.co.uk)

"Ford's smart bed that puts your partner back in his lane" [lavanguardia.com](https://www.lavanguardia.com)

"Ford bed keeps everyone in their place" [vroom.be](https://www.vroom.be)

"This smart bed doesn't allow 'overtaking'" [observador.pt](https://www.observador.pt)

Ford's "Lane-Keeping Bed" hit the headlines when it was revealed to media last month. The one-off prototype applies car tech know-how to ensuring that even the most selfish bed mate stays firmly "in their lane" through the night. Inspired by Lane-Keep Aid, it uses pressure sensors to identify when someone has strayed from their side of the bed and gently returns them to where they should be with the help of an integrated conveyor belt. "Lane-Keeping Aid in our cars can make driving easier and more comfortable. We thought that showing how similar thinking could be applied to a bed, would be a great way to highlight to drivers a technology that they might not previously have been aware of," said Anthony Ireson, director, Marketing Communications, Ford of Europe.