



## Innovative New Ford Puma Fuses Mild-Hybrid Efficiency, Best-In-Class Luggage Space and Crossover Appeal

- New Ford Puma crossover enhances fuel efficiency, performance and fun to drive character using advanced Ford EcoBoost Hybrid 48-volt technology
- Flexible stowage solutions deliver best-in-class uncompromised load space. New Puma styling delivers the next chapter in Ford's human centric design philosophy
- New Local Hazard Information standard, Adaptive Cruise Control with Stop & Go available. Premium specification Puma Titanium X and ST-Line X Vignale variants also available

**COLOGNE, Germany, Jan. 13, 2020** – The new Ford Puma introduces Ford's advanced, fuel-saving mild-hybrid powertrain technology alongside class-leading practicality and head-turning design for compact crossover customers.

Powerful, responsive performance and optimised fuel efficiency is delivered using Ford's EcoBoost Hybrid 48-volt technology – seamlessly integrating electric torque assistance with a low-friction, three-cylinder 1.0#litreEcoBoost petrol engine to deliver up to 155 PS.

Puma is a new chapter in Ford's design identity with styling cues including distinctive wing-top mounted headlamps and athletic lines. SUV-inspired proportions deliver a raised ride-height for a confidence-enhancing driving experience, and support class-leading uncompromised luggage capacity of 456 litres.

Advanced driver assistance technologies delivering a simpler and less stressful driving experience include:

- Adaptive Cruise Control with Stop & Go, Speed Sign Recognition and Lane Centring, for effortlessly negotiating highway and stop-start traffic
- New [Local Hazard Information](#), which can inform the driver of hazardous situations in the road ahead before they become visible to the driver or vehicle sensors

Puma is also the first vehicle in its segment to offer hands-free tailgate technology and lumbar massage seats for comfort and convenience – both delivered as standard in premium TitaniumX specification. The Ford Performance-inspired Puma ST-Line is offered with signature sports body styling including 19-inch optional matt black machined alloy wheels, sports suspension and a flat-bottomed steering wheel. A new Puma ST-Line X Vignale variant further enhances comfort with standard Windsor leather seats and premium B&O Sound System.

“Our customers told us they want a compact vehicle with stand-out looks that also delivers solutions for everyday living. The result is our new Ford Puma – charismatic, practical and offering technologies from massage seats to mild-hybrid powertrains,” said Stuart Rowley, president, Ford of Europe.

### **Advanced powertrain technology**

Last year Ford announced that every one of the company's nameplates launched from the all-new Focus onwards will include an electrified option. Puma is one of 14 electrified vehicles to be introduced by Ford by the end of this year.

Puma customers will be among the first to benefit from Ford's mild-hybrid architecture – tailored to enhance fuel efficiency while complementing Ford's fun to drive experience with more powerful and responsive performance.

EcoBoost Hybrid technology enhances Puma's 1.0-litre EcoBoost petrol engine with an 11.5 kW belt-driven integrated starter/generator (BISG). Replacing the standard alternator, the BISG enables recovery and storage of energy usually lost during braking and coasting to charge a 48-volt lithium-ion air-cooled battery pack.

The BISG also acts as a motor, integrating with the engine and using the stored energy to provide torque assistance during normal driving and acceleration, as well as running the vehicle's electrical ancillaries.

Offered in 125 PS and 155 PS variants, the intelligent, self-regulating mild-hybrid system continuously monitors how the vehicle is being used to determine when and how intensively to charge the battery for optimal benefit, and when to utilise the stored battery charge using one of two strategies:

- Torque substitution, which deploys the electric motor functionality of the BISG to provide up to 50 Nm of torque – reducing the amount of work required from the petrol engine for a fuel efficiency improvement of up to 9 per cent, based on WLTP analysis. Torque substitution contributes to CO<sub>2</sub> emissions from 124 g/km and fuel efficiency from 5.4l/100km for the 125 PS variant WLTP (from 96 g/km and 4.2 l/100 km NEDC), and CO<sub>2</sub> emissions from 126g/km and fuel efficiency from 5.5 l/100 km for the 155 PS variant WLTP (from 99 g/km and 4.4 l/100 km NEDC)<sup>1</sup>
- Torque supplementation, which deploys the electric motor functionality of the BISG to increase the total torque available from the powertrain by up to 20 Nm above the level available from the petrol engine alone at full load – and deliver up to 50 per cent more torque at lower rpm – for optimised performance

The BISG has also enabled Ford engineers to lower the 1.0-litre EcoBoost engine's compression ratio and add a larger turbocharger for more power, by mitigating turbo-lag using torque supplementation that also rotates the engine faster for maintained turbocharger boost response.

Able to restart the engine in approximately 300 milliseconds – about the same as the blink of an eye – the BISG also enables the Puma EcoBoost Hybrid's Auto Start-Stop technology to operate in a wider range of scenarios for even greater fuel savings, including when coasting to a stop below 15 km/h (10 mph) and even when the vehicle is in gear with the clutch pedal depressed.

“Our 1.0-litre EcoBoost engine has already proven that fuel efficiency and performance can go hand-in-hand. Our EcoBoost Hybrid technology takes that to the next level,” said Roelant de Waard, vice president, Marketing, Sales & Service, Ford of Europe. “We believe customers are going to love the smooth and urgent power delivery of our EcoBoost Hybrid powertrains just as much as they'll enjoy less-frequent trips to the fuel pumps.”

In addition, customers can choose from advanced range of Ford EcoBoost petrol and Ford EcoBlue diesel engines that are supported by standard Auto Start-Stop for further reduced running costs, and a slick-shifting six-speed manual transmission.

A 125 PS 1.0-litre EcoBoost engine delivers from 131g/km CO<sub>2</sub> emissions and 5.7 l/100 km fuel efficiency WLTP (from 103 g/km and 4.5 l/100 km NEDC)<sup>1</sup> and later this year will be available with a new seven-speed automatic dual-clutch transmission that offers seamless gear changes for optimised refinement and fuel efficiency.<sup>2</sup>

Puma's 1.0-litre EcoBoost and EcoBoost Hybrid powertrains also feature Ford's industry-first cylinder deactivation system for a three-cylinder engine, which automatically switches off one of the engine's cylinders when full capacity is not needed, such as when coasting or cruising. The system can disengage or re-engage one cylinder in 14 milliseconds.

A 120 PS 1.5-litre EcoBlue diesel engine option will also be introduced later this year, delivering refined power and torque delivery alongside targeted CO<sub>2</sub> emissions from 117 g/km and targeted fuel efficiency from 4.5 l/100 km WLTP (from 99 g/km and 3.8 l/100 km NEDC).<sup>2</sup> Innovative technologies, include:

- An integrated intake manifold for optimised engine breathing
- Low-inertia turbocharging for faster, more controllable turbo response
- A high-pressure fuel injection system offering optimised responsiveness, refinement and precision

Fun to drive characteristics are further enhanced with Ford's selectable Drive Mode technology that enables drivers to adjust throttle response, ESC, traction control, plus gearshift timings for automatic models, to match responses and performance to the driving scenarios.

Drive Modes including Normal, Eco, Sport, Slippery and Trail enable customers to tailor their drive experience to road, weather and terrain conditions on demand, with each Drive Mode featuring a unique graphical display in the instrument cluster.

Puma further optimises Ford's B-car architecture that also delivers class-leading driving dynamics for the Ford Fiesta. A new, stiffer twist-beam rear suspension, larger shock absorbers, stiffer suspension bushes and optimised suspension top mounts reduce friction and enhance stiffness throughout the chassis to support best-in-class driving dynamics.

### **Distinctive personalities meet class-leading practicality**

The new Puma optimises the wheelbase and track of Ford's B-car architecture to deliver head-turning SUV proportions. A low, sloping roofline delivers an instantly recognisable silhouette, and bucks the trend for wedge-style crossover side profiles with an "anti-wedge" design that features a flatter belt-line to deliver balanced proportions.

Pronounced wheel arches amplify the sporty character and the expressive front-end features intricately designed "canoe-shaped" headlamps that sit high on the wings. LED fog lamps are positioned directly below, integrated into the front air curtain inlets that guide airflow across the front wheels to reduce turbulence for improved aerodynamics.

A unique "floating" A-pillar design creates an uninterrupted connection of belt line to cowl, which positions the visual mass of the cabin further rearward for a powerful and elegant silhouette.

Puma variants offer distinctive personalities that reflect individual customer preferences, including sporty Puma ST-Line, stylish Puma Titanium, high specification Puma Titanium X and the luxurious new Puma ST-Line X Vignale reflecting individual customers' preferences.

Based on the sporty Puma ST-Line, the Puma ST-Line X Vignale features a satin aluminium upper grille and surround, ebony lower grille, body-coloured lower rear bumper, and large rear spoiler. Standard specification includes LED headlights, Windsor leather seats, Manacor leather steering wheel, premium B&O Sound System and Ford KeyFree system.

The Puma Titanium X exterior delivers exclusive 18-inch, 10-spoke Pearl Grey alloy wheels, and a unique high gloss black finish and chrome highlights on the honeycomb grille and fog lamp bezels. The same treatment features for the side-skirts, while the rear diffuser element and skid plate feature metallic grey highlights. Body-coloured, heated wing mirrors include integrated indicators and puddle lights that illuminate the ground adjacent to the door when opened.

Inside, the Puma Titanium X is the first Ford to feature removable and washable seat covers that will help customers keep their premium interior feeling like new. The integrated zipper makes it easy for owners to remove covers using just one hand. The interior is further enhanced with a leather-effect steering wheel, wood-effect appliques surrounding the cluster bezel and instrument panel, and contemporary fabric inserts for the door interiors.

"We wanted Puma Titanium X to feel as welcoming and comfortable as being at home, so we used colours, finishes and an overall interior execution that would reflect that environment," said Sonja Vandenberk, chief designer, Colour and Materials, Ford of Europe.

The Ford Performance-inspired Puma ST-Line is offered with 18-inch standard or 19-inch optional matt black machined alloy wheels, and a sports suspension with specially tuned springs and shock absorbers. At the front, the ST-Line grille features matt black elements and a high-gloss surround, high-gloss foglamp surrounds, and an optional larger, functional roof-spoiler.

Signature ST-Line lower wing elements direct air to the air-curtain inlets. Inside, the PumaST#Line features a flat-bottomed steering wheel and signature red stitching – also available on the optional partial leather seats. Alloy pedals, an aluminium gear shifter and signature black headliner further heighten the sporty character.

A palette of 10 vibrant exterior colours for the Puma range includes Blazer Blue, Frozen White, Race Red, Solar Silver, Agate Black, Lucid Red, Grey Matter, Desert Island Blue, Magnetic and Metropolis White.

### **Innovative practicality**

Puma's styling belies unprecedented compact crossover practicality, supported by rear stowage solutions that offer practical solutions to everyday storage problems. Puma delivers best-in-class uncompromised load space and rear luggage space of 456 litres. Aflexible load compartment can comfortably accommodate a box 112 cm long, 97cm wide and 43 cm high with the second row of seats folded flat.

Developed to meet and exceed customer requirements for practical luggage space, the Ford MegaBox provides a deep, versatile storage space with a capacity of 80 litres. Measuring 764mm wide, 753 mm long and 306 mm deep, the storage solution can house unstable items up to approximately 115 cm tall – such as houseplants – in an upright position. Alternatively, with the lid down, the space can be used to conceal dirty sports equipment or muddy Wellington boots. The Ford MegaBox's synthetic lining and drain plug in the bottom makes it easy to clean with water.

For even greater versatility, the Puma's boot floor can be easily adjusted using just one hand to suit load requirements, and to hold one of three positions in the cargo area:

- In the lowest position, the maximum storage volume available while concealing the Ford MegaBox is delivered
- In the high position, the area underneath increases to create a cargo floor that is level with the fold-flat second-row seats
- Removed, the floor can be securely stored vertically against the back of the second-row seats for full 456-litre capacity

The adjustable boot floor features a honeycomb structure inspired by the hexagon-shaped cells used in the construction of high-strength components for jet planes and supercars, for durability and strength.

Loading the Puma is made even easier with Ford's segment-first hands-free tailgate technology. The system allows access to the boot space even with arms full of groceries, kids or sports equipment, using a simple kicking motion under the rear bumper.

The Puma tailgate also features an innovative incorporated parcel shelf solution – solving the challenge of what to do with the parcel shelf when loading, unloading and carrying large items. The tailgate-mounted luggage cover moves in unison with the tailgate and removes the need for side supports, ensuring unhindered access to the rear load area. The flexible luggage cover easily moulds itself around bulky items.

“Throughout the development process, our goal was to deliver an unprecedented degree of practicality in a compact and efficient package,” said Norbert Steffens, Puma chief programme engineer. “Puma's unique Ford MegaBox and parcel shelf are examples of the innovative thinking that helped us deliver flexibility without compromising on style.”

### **Confidence-inspiring technologies**

Puma utilises 12 ultrasonic sensors, three radars and two cameras positioned around the car to deliver a suite of Ford Co-Pilot360 technologies that enhance protection, driving and parking, and are designed to make the driving experience more comfortable, less demanding and safer.<sup>3</sup>

Adaptive Cruise Control with Stop & Go, Speed Sign Recognition and Lane Centring will help the vehicle maintain a comfortable driving distance from vehicles ahead. The system also helps reduce stress during long road trips by keeping the vehicle centred in its lane and can adjust the vehicle speed to within legal limits by monitoring the roadside and overhead gantries for speed signs. This is in addition to using information from the on-board navigation system. Stop & Go and Lane Centring functionalities are available only in combination with the seven-speed automatic gearbox.

Stop & Go enables the Adaptive Cruise Control system to bring the vehicle to a complete halt in stop-start traffic using up to 50 per cent of total braking force, and automatically pull away if the stopping duration is less than 3 seconds. For stopping durations greater than 3 seconds, the driver can push a steering wheel button or gently apply the accelerator pull away.

New Local Hazard Information functionality – enabled by the FordPass Connect on-board modem – can inform drivers of a hazardous situation on the road ahead, even if the incident is not visible due to a bend in the road or other vehicles.

Local Hazard Information notifications are delivered independent of sat-nav – sourced from local authorities, emergency services, and driving data from other vehicles connected to “the cloud”.

Notifications of hazards including road works; broken down vehicles; animals, pedestrians and objects in the carriageway; and even hazardous driving conditions are delivered to the vehicle over-the-air, giving drivers advanced warning of developing situations beyond their field of vision.

For the first time on a B-segment Ford, a rear wide-view camera captures a 180-degree view that can be displayed on a touchscreen inside the car – so passing pedestrians, cyclists and other vehicles can be more easily seen when reversing out of parking spaces or driveways.

Also helping Puma drivers reverse with greater confidence, Ford’s Blind Spot Information System (BLIS) with Cross Traffic Alert can provide a warning when reversing of vehicles that may soon be crossing behind them. The system can apply the brakes to avoid or mitigate the effects of collisions if drivers do not respond to warnings.

Ford’s Enhanced Active Park Assist helps drivers find suitable spaces and park hands free nose-to-tail and side-by-side with other cars. Auto high beam technology can automatically dip the Puma’s headlights to prevent dazzling oncoming drivers.

Further enhancing Ford’s Lane-Keeping System, Road Edge Detection functionality can recognise where a paved road transitions to an impassable surface, such as a soft verge, gravel hard shoulder or grass. The system can apply a torque to the steering wheel to prevent the vehicle from drifting off the carriageway.

Puma technologies also help drivers negotiate busy urban environments. Pre-Collision Assist with Active Braking can detect people who are in or near the road ahead, or who may cross the vehicle’s path. The system is designed to reduce the severity of some frontal collisions involving vehicles and pedestrians, or help drivers avoid some impacts altogether. Puma features an enhanced version of the technology with a wider camera angle that helps better track pedestrian and cyclist movements.

Should an accident occur, Post-Collision Braking technology helps to reduce the impact of a potential secondary collision by automatically applying moderate brake pressure when an initial collision event is detected; slowing the vehicle can potentially lessen injury to occupants and further damage to the vehicle.

Additional technologies designed to help Puma drivers avoid accidents include:

- Evasive Steering Assist, designed to operate at city and motorway speeds, which uses radar and a camera to detect slower-moving and stationary vehicles ahead and provides steering support to enable drivers to manoeuvre around a vehicle if a collision is imminent
- Wrong Way Alert, which uses a windscreen-mounted camera and information from the car's navigation system to provide drivers with audible and visual warnings when driving through two "No Entry" signs on a motorway ramp

"Puma is offered with an unprecedented array of technology for its segment," Steffens said. "Features from wireless charging to Stop & Go are designed to fit seamlessly into owners' lives and make driving Puma an effortless and intuitive experience."

Puma has been awarded the highest-possible 5-star safety rating by Euro NCAP independent crash test authority, earning full points in both the side barrier test and more severe side pole tests. Technologies including Pre-Collision Assist with Active Braking, Intelligent Speed Limiter and Lane-Keeping System were also commended.

### **Innovative and inviting**

Puma offers upscale comfort and convenience technologies including segment-first lumbar massage front seats that revitalise tired muscles and contribute to more relaxing journeys. The three-bladder massage system features three intensity settings and adjustable rolling directions.

The height adjustable driver's seat, along with the front passenger seat, feature a sculpted slim-back design that maximises knee clearance for second row passengers. The second row bench seat contour has also been designed for easier entry and exit. In addition, a full-length openable panorama roof comprising two almost-full width panes of toughened, tinted glass creates an even more spacious and airy feel for occupants in the front and rear.

Helping drivers stay on top of busy work and social lives, innovative features include a wireless charging pad for effortlessly recharging smartphones on the move. Removing the need to occupy one of the Puma's two USB inputs with a charging cable, the pad sits just beneath the instrument panel and will detect compatible devices to automatically initiate charging.

Devices can remain connected via Bluetooth to Ford's SYNC 3 communications and entertainment system while using wireless charging, allowing Puma drivers to control audio, navigation and connected smartphones using simple voice commands. The system delivers Apple CarPlay and Android Auto™ compatibility at no extra cost and is supported by an 8-inch central touchscreen that can be operated using pinch and swipe gestures.

FordPass Connect on-board modem technology turns Puma into a mobile WiFi hotspot with connectivity for up to 10 devices. The system allows a range of convenient features via the FordPass mobile app, including Vehicle Locator; Vehicle Status that checks fuel levels, alarm status, oil life and more; remote Door Lock Unlock; and Remote Start for models equipped with the seven-speed automatic transmission.<sup>4</sup>

An available B&O Sound System has been dynamically tuned to ensure a premium audio experience regardless of the driving conditions. The 10-speaker system includes a 150 mm by 200 mm externally coupled subwoofer integrated into the boot without compromising luggage space and delivering a smooth bass tone. The tweeter positions have been optimised to produce a wider sound stage at seating level, delivering an enveloping listening experience for all occupants. The system is powered by a 575-watt Digital Signal Processing Amplifier that controls equalisation and audio mixing including selectable Surround Sound.

In addition, a 12.3-inch fully-configurable digital instrument cluster allows drivers to personalise and prioritise display of information including driver assistance technology and sat-nav notifications. The cluster uses free-form technology that allows curved upper edges for seamless interior design. The free-form panel features circuitry embedded across the display, enabling designers to mould it into shapes beyond the traditional rectangular design.

In addition, the 24-bit “true colour” digital instrument cluster generates detailed, high definition, more intuitive images and icons displayed in the full colour spectrum, making them brighter, less tiring on the eyes and easier to read.

The new Puma joins Ford’s expanding line-up of SUV and SUV-inspired crossover models in Europe, including the Fiesta Active, Focus Active, EcoSport, all-new Kuga, Edge, and the all-new Explorer Plug-In Hybrid.

Ford has employed an additional 1,700 staff and invested approximately €200 million at its state-of-the-art manufacturing facility in Craiova, Romania, to support production of Puma, taking the company’s total investment in Craiova to almost €1.5 billion since 2008.

“We believe Puma is going to really resonate with drivers in Europe,” Rowley said. “We've gone to every length to give customers the flexibility they want, and the best-looking car they've ever owned.”

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<sup>1</sup>The declared fuel/energy consumptions, CO<sub>2</sub>emissions and electric range are measured according to the technical requirements and specifications of the European Regulations (EC) 715/2007 as last amended. Fuel consumption and CO<sub>2</sub>emissions are specified for a vehicle variant and not for a single car. The applied standard test procedure enables comparison between different vehicle types and different manufacturers. In addition to the fuel efficiency of a car, driving behaviour as well as other non-technical factors play a role in determining a car's fuel/energy consumption, CO<sub>2</sub> emissions and electric range. CO<sub>2</sub>is the main greenhouse gas responsible for global warming.

Since 1 September 2017, certain new vehicles are being type-approved using the World Harmonised Light Vehicle Test Procedure (WLTP) according to (EU) 2017/1151 as last amended, which is a new, more realistic test procedure for measuring fuel consumption and CO<sub>2</sub> emissions. Since 1 September 2018 the WLTP has begun replacing the New European Drive Cycle (NEDC), which is the outgoing test procedure. During NEDC Phase-out, WLTP fuel consumption and CO<sub>2</sub> emissions are being correlated back to NEDC. There will be some variance to the previous fuel economy and emissions as some elements of the tests have altered i.e., the same car might have different fuel consumption and CO<sub>2</sub> emissions.

<sup>2</sup>Officially homologated fuel efficiency and CO<sub>2</sub> emission figures will be published closer to on-sale date

<sup>3</sup>Driver-assist features are supplemental to and do not replace the driver’s attention, judgement and need to control the vehicle

<sup>4</sup>In regions where permitted by law

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