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THE FREE ON-LINE MAGAZINE FOR LAND ROVER NEWS



**THE HOME FOR LAND ROVER NEWS
LANDYNEWS.ONLINE**

EDITORIAL

Hi and welcome to our fourth issue of

landynews.online

You'll find news and high resolution photographs throughout. Our main feature in this issue must be the hand built Classic Vehicles Trophy Defenders. Read all about them on page 11.

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Anything you can do to help us attract some sponsorship or advertising will help us keep the site and magazine going in the future.

Many thanks for your support to date.

"The Team"



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SMMT NEW CAR REGISTRATIONS

(data for January 2021)

New car registrations fall -39.5% as showroom closures stifle demand

- Just 90,249 new cars registered in January – the worst start to a year since 1970 despite click and collect preventing greater fall
- New emissions figures show 2020 delivered the cleanest vehicles in history as average CO₂ emissions fell by -11.8% on previous year, but more to do to deliver net zero
- Industry needs showrooms open at earliest opportunity once safe to do so, to protect jobs and accelerate zero emission vehicle transition

The UK new car market fell -39.5% in January with 59,030 fewer registrations compared to the same month last year, according to figures published today by the Society of Motor Manufacturers and Traders (SMMT). Just 90,249 cars were registered as showrooms across the country remained shut, leading to the worst start to the year since 1970.¹

Demand remained depressed for both private buyers (-38.5%) and large fleets (-39.7%). Declines were also recorded in both petrol and diesel cars registrations, which fell by -62.1% and -50.6% respectively. On a positive, however, battery electric vehicle (BEV) uptake grew by 2,206 units (54.4%) to take 6.9% of the market, as the number of available models almost doubled from 22 in January 2019 to 40 this year. Combined, BEVs and plug-in hybrid vehicles (PHEVs) accounted for 13.7% of registrations.

January

	2021	2020	% change	Mkt share -21	Mkt share -20
Private	37,946	61,685	-38.5%	42.0%	41.3%
Fleet	51,002	84,634	-39.7%	56.5%	56.7%
Business	1,301	2,960	-56.0%	1.4%	2.0%
TOTAL	90,249	149,279	-39.5%		

Year to date

	YTD 2021	YTD 2020	% change	Mkt share -21	Mkt share -20
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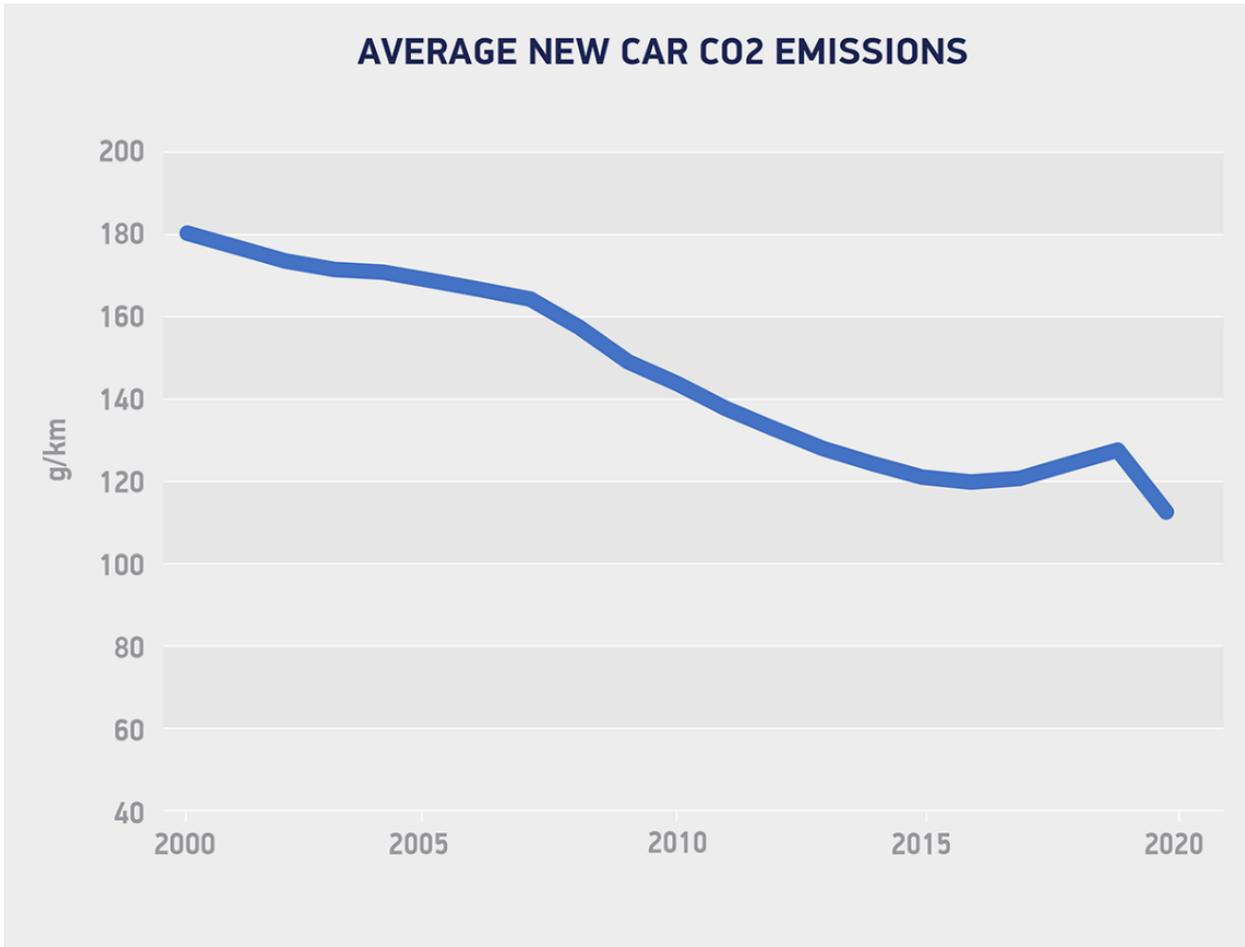
With lockdown restrictions in place until March – the most important month of the year for the sector, accounting for one in five new car registrations on average – the industry will face a challenging year as showroom closures depress consumer demand, which has a knock-on effect on manufacturing output. Opening dealerships as soon as it is safe to do so would help re-energise consumer confidence, supporting jobs and a green recovery. The effect of the current lockdown can be seen in SMMT's latest market outlook.

Having expected more than two million new cars to be registered in 2021, this forecast has now been downgraded to below 1.9 million given the more severe negative impact on first quarter performance and March in particular. The forecast does represent an increase of 15.7% compared to 2020's 'lost year' but it would still be a very subdued market in historical terms, given the 10-year average new car market to 2019 was 2.3 million.² More positively, however, BEVs and PHEVs are estimated to grow their combined market share from just over one in 10 new cars, to more than one in seven.

Such growth in ultra low emission vehicles would continue the trend seen in 2020. Latest SMMT analysis shows that 2020 recorded the largest ever fall in average car CO₂ emissions, spurred on by increased uptake of BEV, PHEV and hybrid electric vehicles (HEVs) which accounted for almost one in six new car registrations. In fact, more than half of all BEVs registered in the past two decades were registered in 2020 alone. Combined with ongoing improvements to petrol and diesel engines, average vehicle CO₂ dropped to 112.8g/km – a reduction of -11.8% compared to 2019 and -37.7% compared to 2000.

While all classes of car have reduced emissions by at least a third since 2000, one of the biggest reductions was achieved in dual purpose cars (-48.8%), aided by increased availability of BEV and other low emission models. Around 30% of dual purpose vehicles are now zero emission-capable, demonstrating their vital role in helping to reduce overall CO₂ emissions.

There can be no let-up in the pace of environmental improvement, however, as the industry must achieve a UK-only CO₂ fleet average target of 95g/km this year or face severe penalties. This underscores the need to get showrooms open as soon as Britain emerges from lockdown, so they can generate the demand required to reach the country's green goals.



Mike Hawes, SMMT Chief Executive, said, “Following a £20.4 billion loss of revenue last year, the auto industry faces a difficult start to 2021. The necessary lockdown will challenge society, the economy and our industry’s ability to move quickly towards our ambitious environmental goals. Lifting the shutters will secure jobs, stimulate the essential demand that supports our manufacturing, and will enable us to forge ahead on the Road to Zero. Every day that showrooms can safely open will matter, especially with the critical month of March looming.”

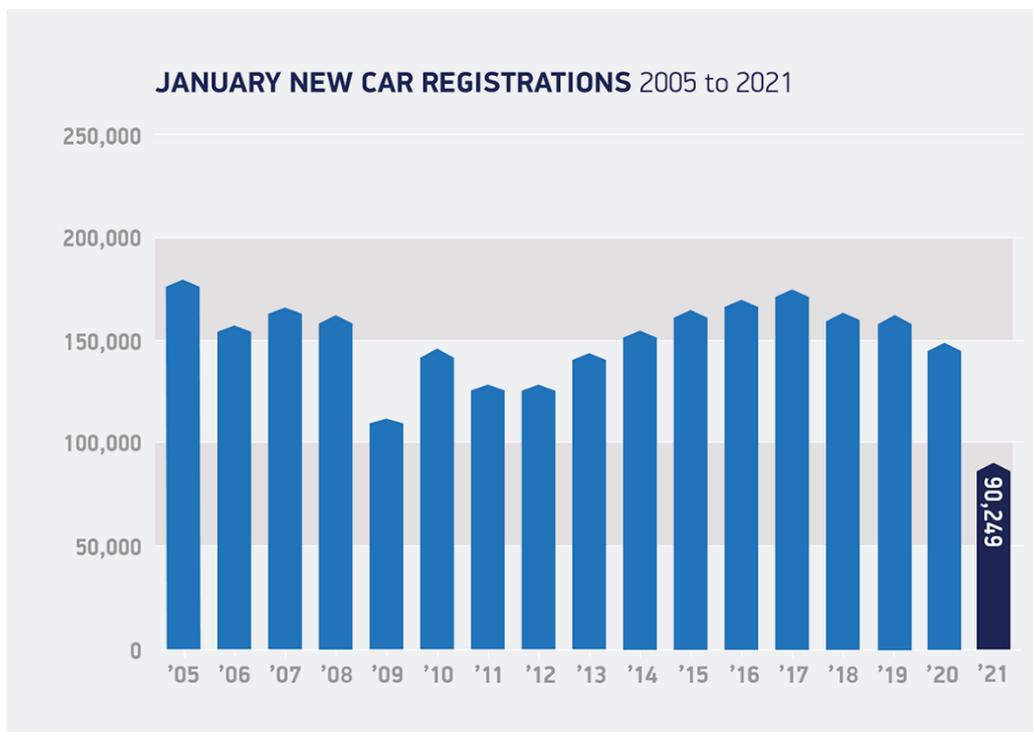
January

	2021	2020	% change	Mkt share -21	Mkt share -20
Diesel	11,083	29,278	-62.1%	12.3%	19.6%
Petrol	44,903	90,974	-50.6%	49.8%	60.9%
BEV	6,260	4,054	54.4%	6.9%	2.7%
PHEV	6,124	4,786	28.0%	6.8%	3.2%
HEV	6,826	8,971	-23.9%	7.6%	6.0%
MHEV diesel	6,221	4,918	26.5%	6.9%	3.3%
MHEV petrol	8,832	6,298	40.2%	9.8%	4.2%
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MHEV petrol	8,832	6,298	40.2%	9.8%	4.2%
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BEV - Battery Electric Vehicle; **PHEV** - Plug-in Hybrid Electric Vehicle; **HEV** - Hybrid Electric Vehicle, **MHEV** - Mild Hybrid Electric Vehicle



OLD LAND ROVER ADVERTS



LAND ROVER DISCOVERY Mpi

Above; The Mpi, used the 2lt petrol engine from the Rover 800.

Below; a V8i advert from 1994?

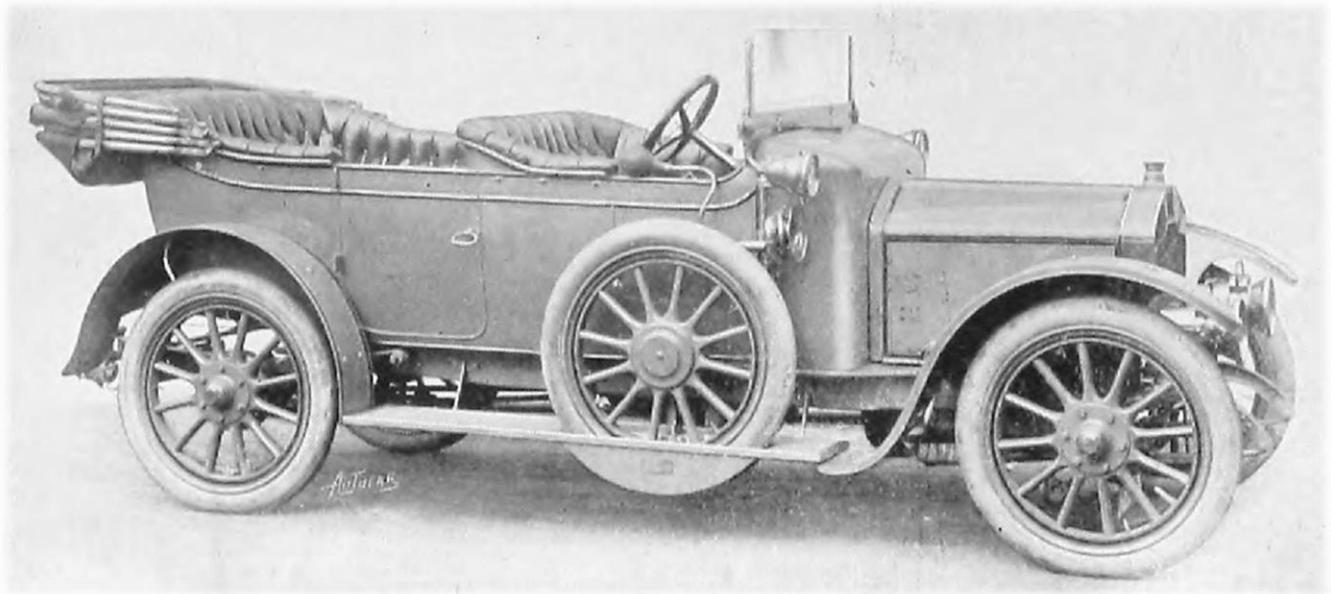


LAND ROVER DISCOVERY V8i AUTOMATIC

Burlen celebrates 110 years since the first OE fitment of an SU Carburettor

Burlen, the world's sole manufacturer of genuine Skinners Union (SU), Amal, and Zenith Carburettor brands, celebrates 110 years since the first SU carburettor was fitted as original equipment to a production vehicle.

The Rover Company Limited became the first motor manufacturer to fit an SU carburettor as original equipment to their Rover 12hp in 1911 (shown below). Rover manufactured the carburettor in-house, under licence, to SU specifications and patents, fitting it to approximately 3600 production cars. The carburettor design aroused enough interest to be featured in the 11th October 1911 issue of *The Autocar* magazine, where they explained how the carburettor drew air from the tappet chamber and was bolted directly to the cylinder block.



The second OE fitment for SU followed a year later, when Wolseley fitted an SU patented design of their constant depression carburettor to the 16/20hp model in 1912. This set the standard within the industry, and SU went on to feature as original equipment for many manufacturers including Bentley, Aston Martin, MG and Rolls-Royce. The demise of the carburettor-fed 1.1 and 1.4 litre Rover Metro in 1994 marked the end of SU Automotive Limited supplying original equipment carburettors to the car industry, some 86 years after the first SU carburettors were manufactured.

Despite the demise of SU OE carburettors, SU Automotive Limited continued to supply Rover group throughout the 1990's. Components included oil pumps for the Rover K series engines, induction manifolds assemblies for Rover and Land Rover vehicles and throttle-bodies and fuel rail assemblies for Rolls-Royce.

The relationship between SU and Burlen began in 1984, when Burlen persuaded SU to continue manufacturing products for aftermarket application. Burlen also took over packaging, marketing, and supply of SU carburettors in the same year marking the start of a serious business interest in the SU brand.

In 1991 Burlen became the sole global distributor for SU products, purchasing the dormant company name of *The S.U Carburetter Company* in 1996. That same year Burlen negotiated an agreement to manufacture the SU range of electric fuel pumps and HS range of SU carburettors – comprising HS2, HS4, HS6 and HS8. *Note; Carburetter is the spelling used by the Skinner family at the brands creation in the early 1900s, though carburettor is a more popular method of spelling the word.*

In 1999 Burlen took over the manufacturing and marketing of all SU carburettors, fuel pumps, spares, and throttle bodies. It also purchased all tooling, jigs, and remaining stock from the old Austin Rover Fuel Systems manufacturing plant in Birmingham.

The SU H8



In 2002, Burlen acquired the Intellectual Property Rights to the SU product range, becoming sole global manufacturer in the process.

Today, the current SU range uses the same principles of operation as the carburettor used on the Rover 12hp 110 years ago, a design that shaped the way SU would be known for generations to come. Despite the car industry moving to fuel injection in the 1990s, the SU carburettor remains in high demand today, across a variety of applications from road to race and elements of modern carburettors like the SU H8 can trace their mechanical roots all the way back to the start.

Mark Burnett, Burlen's Managing Director, added "As custodians of the SU brand, we are always respectful of the wonderful heritage the SU brand has. It's hard to comprehend the advanced engineering that was applied to the carburettor fitted to the Rover 12hp 110 years ago, and how difficult it would have been to mass-produce. We continue to manufacture SU carburettors with passion and care to this day, and we know how delighted the Skinner family would be to know there is still a worldwide demand for their products."

OLD NEWS FROM 2013

Land Rover-Sponsored Race2Recovery Sets Sail to Dakar

- Race2Recovery, the only disabled rally-raid team in the world has successfully scrutineered for 2014 Dakar Rally
- Two Land Rover Discovery's will support the team providing essential back-up support
- The team will compete two Defender-based Wildcats and one 'T4' race truck
- Video and Images available from the drive to Le Havre where scrutineering took place available at www.media.landrover.com

Whitley December 2013. Race2Recovery, the only disabled rally-raid team in the world, successfully loaded their compliment of race and support vehicles on the ASO (Amaury Sport Organisation) ship bound for South America for the start of the 2014 Dakar.

The team drove its two Defender-based Wildcat rally raid cars, one T4 competition truck, one T5 support truck and two Land Rover Discovery support cars to the Le Havre port in France and successfully passed scrutineering under the watchful eye of the ASO. Their vehicles joined over 650 other competitor vehicles in a ship that set sail from Le Havre bound for South America last weekend.

The scrutineering event gave fans and competitors alike an early indication of the sheer size and logistical challenge of running the Dakar. Hundreds of competitors from all over the world gathered to scrutineer bikes, trucks and cars in the various race classes.

That year's race started on January 5th 2014, starting from Rosario in Argentina and for the first time will enter Bolivia crossing the Andes and concluding 14 days later in Valparaiso in Chile. The Race2Recovery team set-off in the dead of night driving all its road-registered vehicles to Portsmouth overnighting on the cross-channel ferry to Caen, France. The following day, an hour's drive ensued to Le Havre which saw the giant race trucks and agile Wildcats mix with local traffic attracting much supportive attention on route.



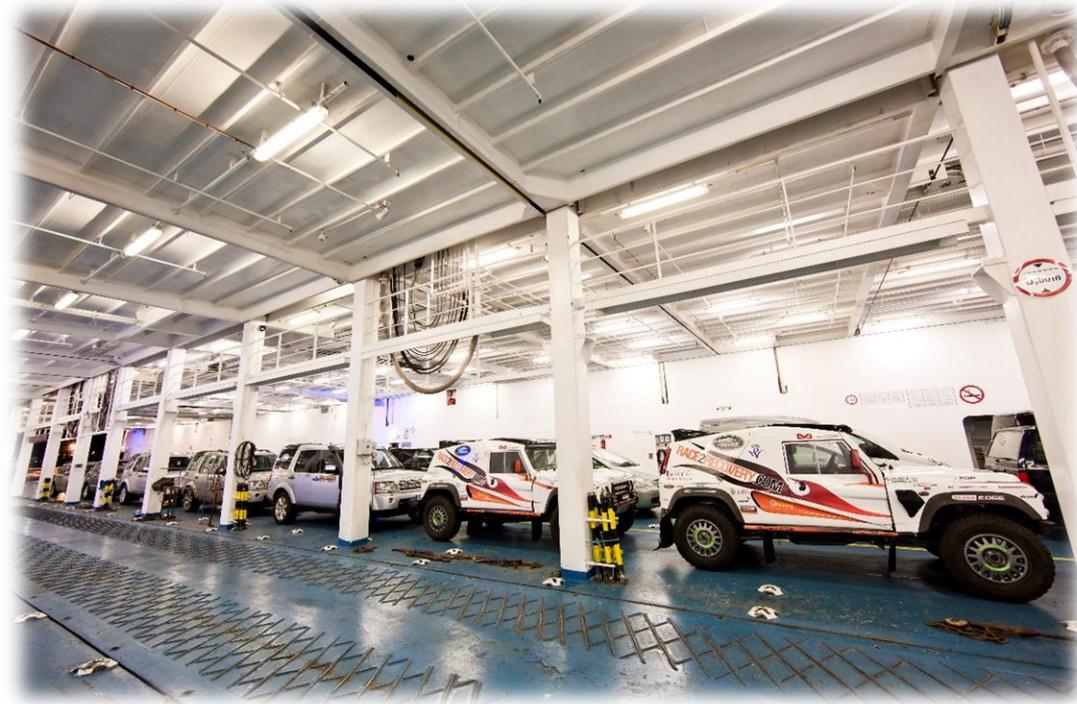
Pav Taylor, Team Manager, who was blown up by an IED in Afghanistan said: *"I'm delighted and relieved that the cars have successfully passed through scrutineering. We used the drive from Caen to Le Havre as a short shakedown exercise and made some minor adjustments on the way.*

"We learnt so much from our inaugural year and we are putting that knowledge into practice for 2014 so I am confident we're ready. Obviously our aim is to finish again and we're aiming to climb the standings."

The two Discoverys provided by Land Rover as part of its sponsorship package supported

Race2Recovery along the assistance route and will provide vital support to the team throughout the 14 day epic. Excellent on and off-road capability is absolutely essential to the team's success.

The vehicles carried front-mounted winches, roof racks and will run on standard all-terrain tyres. Land Rover's Terrain Response was used in difficult situations to aid the team to deal with the various demanding landscapes synonymous with the Dakar.



ADVENTURE-READY LAND ROVER DEFENDER WORKS V8 TROPHY CELEBRATES EXPEDITION LEGACY WITH UNIQUE EXPERIENCE



Land Rover Classic will build 25 re-engineered Defender Works V8 Trophy vehicles for an adventure event at Eastnor Castle in 2021

- Land Rover Classic is building 25 adventure-ready Defender Works V8 Trophy vehicles in 2021, paying tribute to the iconic 4x4's enduring expedition legacy
- Works V8 Trophy purchase includes entry to an exclusive Land Rover Trophy adventure competition at Eastnor Castle, the spiritual home of Land Rover testing and development
- Each Works V8 Trophy re-engineered by Land Rover Classic features a 405PS 5.0-litre petrol V8 powertrain, eight-speed ZF automatic transmission, uprated brakes and handling kit
- Choice of 90 and 110 Station Wagon body designs available, finished in unique Eastnor Yellow paintwork with Narvik Black details and body-colour heavy-duty steel wheels
- Additional all-terrain equipment includes front winch, multi-point expedition cage, roof rack, underbody protection, A-bar, raised air intake, spotlights and mud-terrain tyres
- Interior features full black Windsor leather trim, including Recaro sports seats with contrasting yellow stitch detailing, plus Land Rover Trophy clock face by Elliot Brown
- Racing driver, stunt driver and Land Rover ambassador Jessica Hawkins stars alongside Land Rover adventure legends including 1989 Camel Trophy winner Bob Ives in Defender Works V8 Trophy launch film
- Customer enquiries for Land Rover Classic should be made using: www.landrover.com/classic, +44 (0) 2476 566 600, sales@classic-jaquarlandrover.com

Land Rover Classic is continuing the formidable expedition legacy of the original Defender with a limited production run of adventure-ready Defender Works V8 Trophy vehicles for an exclusive competition at Eastnor Castle in 2021.

Based on the re-engineered 2012-2016 Defender Works V8 specification developed by Land Rover Classic, including 405PS / 515Nm 5.0-litre V8 petrol powertrain, eight-speed ZF automatic transmission and comprehensive uprated suspension, steering and braking packages, the Trophy vehicles feature a wide range of additional upgrades specifically tailored for off-road use.

Twenty-five examples of the Defender Works V8 Trophy, in a mixture of 90 and 110 Station Wagon body designs, will be exclusively finished in a unique Eastnor Yellow paint colour with matching 16-inch steel wheels. Contrasting Narvik Black paintwork features on the wheel arches, bonnet and rear door. The purpose-built vehicles also receive LED headlamps, a Heritage front grille, unique Land Rover Trophy badging and event participation graphics personalised to each customer.

The Defender Works V8 Trophy is designed to tackle the most demanding endurance challenges. Additional all-terrain kit includes a front winch, multi-point expedition cage, roof rack, underbody protection, A-bar, raised air intake, LED spotlights and mud-terrain tyres.

Inside, the instantly recognisable 4x4 benefits from full black Windsor leather upholstery with Recaro sports seats, contrast yellow stitching and a bespoke Land Rover Trophy clock face by Elliot Brown. Land Rover Classic's own Classic Infotainment System with integrated navigation and mobile device connectivity is also fitted.

Later this year*, Defender Works V8 Trophy customers will be invited to compete in an exclusive three-day adventure at Eastnor Castle in Herefordshire – the spiritual home of Land Rover all-terrain training, testing and development. This will be the first time customers drive their car.

Dan Pink, Director, Land Rover Classic, said: *“The Land Rover Defender has always been more than just a vehicle, its engineering capability and suitability for overland expedition and all-terrain competition means it’s renowned with getting away from it all. The new Land Rover Trophy will bring this to life for a new generation of adventurers.*

“Experiences are a key part of Land Rover Classic’s DNA and this whole concept comes directly from feedback we’ve received. Our customers want to create their own stories, battle scars and patina with their Works V8 Trophy vehicles from day one, fuelling campfire chats with like-minded enthusiasts.

“We’re looking forward to an exciting and memorable event, full of camaraderie, and continuing the Land Rover Trophy legend for years to come. Seeing the silhouette of these vehicles which you’ll instantly know as a Land Rover, traversing the hills at Eastnor, will be a defining moment of the adventure.”

On seeing their Defender Works V8 Trophy for the first time, customers and their co-drivers will make their first marks by adding their names and country flags to the vehicle. They will then embark on a range of challenges inspired by famous global adventures and competitions spanning more than seven decades of Land Rover production.

Expert one-to-one tuition will be provided as part of the adventure, giving customers a unique opportunity to develop extreme driving techniques and skills in their own vehicle, before putting their training to the test. Everyone will compete for a range of prizes, including a grand prize for the overall winner – to be announced later in 2021.

Familiar faces from Land Rover’s adventure heritage feature in the Defender Works V8 Trophy launch film, including racing driver, stunt driver and Land Rover ambassador Jessica Hawkins, alongside Camel Trophy participants such as 1989 event winner Bob Ives. A number of these experts will also be on-hand at the Land Rover Trophy to share their knowledge and experiences.

The Land Rover Trophy event will be supported by the new Defender and carefully selected brand partners Elliot Brown, Fat Face and Musto, who have created complementary products specifically for Defender Works V8 Trophy customers.

Both 90 and 110 wheelbase Defender Works V8 Trophy derivatives are now available to order direct from Land Rover Classic, with prices starting from £195,000 for a 90 in the UK.





Further Information

TECHNICAL DATA	LAND ROVER DEFENDER WORKS V8 TROPHY
ENGINE & TRANSMISSION	
Engine capacity (cc)	4,999
Cylinders	V8 naturally-aspirated petrol (EU5)
Power (PS)	405 @ 6,000rpm
Torque (Nm)	515 @ 5,000rpm
Transmission	8-speed automatic with Pistol Shifter, All-Wheel Drive, two-speed transfer box, heavy-duty front and rear differentials, torque-biasing centre differential
CHASSIS	
Front and rear suspension	Front: live beam axle, coil springs, telescopic dampers. Panhard rod and radius arms. Anti-roll bar Rear: live beam axle, coil springs, telescopic dampers. 'A' frame and trailing links. Anti-roll bar.
Front brakes	Servo-assisted, 335mm discs, four-piston calipers
Rear brakes	Servo-assisted, 300mm discs, four-piston calipers
Wheels and tyres	16in heavy-duty steel wheels, 235/85 R16 mud-terrain tyres
Steering	Recirculating ball, power-assisted

MARKET AVAILABILITY

Defender Works V8 Trophy is available in the United Kingdom, Europe, MENA, Africa and Oceania on an individual import basis, subject to rules on importation of vehicle conversions.

V8 DEFENDER HISTORY

- V8 powertrains in the Land Rover Defender and its production predecessors started with the Series III Stage 1 V8 of 1979. The carburetted 3.5-litre Rover V8 produced 90bhp.
- The Land Rover One Ten from 1983, and Ninety from 1984, used the same 3.5-litre Rover V8 engine as the Series III Stage 1 V8, but in 113bhp form, uprated to 135bhp from 1987.
- For North American Specification (NAS) Defender 90s and 110s only, from 1992, a 182bhp fuel-injected 3.9-litre version of the Rover V8 was fitted, along with a four-speed automatic transmission.
- In 1998, the fuel-injected 190bhp 4.0-litre V8 from the second-generation Range Rover was fitted to a limited run of 50th Anniversary Defender 90s, with a four-speed automatic transmission.
- 5.0-litre naturally-aspirated 2018 Defender Works V8 became the first official V8-powered Land Rover Defender to be introduced since 1998.



THE POWER OF CHOICE: POTENT NEW DEFENDER V8 AND EXCLUSIVE SPECIAL EDITIONS JOIN THE RANGE



Building on decades of Land Rover V8 heritage, the powerful Defender V8 joins the range of Plug-in Hybrids, and efficient Ingenium petrol and diesel powertrains.

- **Defender V8 90 and 110:** New 525HP supercharged engine powers fastest and most powerful production Defender ever made; 0-60mph in 4.9 seconds, 149mph top speed (Defender 90)
- **Power meets durability:** Bespoke chassis settings and transmission tuning combine to make Defender V8 the most capable and dynamic example of Land Rover's award-winning 4x4
- **Potent new flagship:** New Limited Edition Defender V8 Carpathian Edition combines the power and capability of Defender V8 with a unique combination of design elements
- **New special edition model:** New Defender XS Edition replaces the successful First Edition and features unique exterior design enhancements and comprehensive specification
- **Height of personalisation:** New Bright Pack and Extended Bright Pack options provide even greater scope for customer personalisation across the Defender line-up
- **Larger screen:** New optional 11.4-inch touchscreen* – over 60% larger than existing 10-inch display – now available for intuitive Pivi Pro infotainment, plus wireless device charging with new signal boosting technology* for enhanced convenience
- **Extended family:** Defender range offers incredible breadth of choice with 90, 110 and Hard Top derivatives, petrol and diesel engines, and a Plug-in Hybrid capable of 27 miles** of EV driving
- **Choose your model:** Defender 90 Hard Top priced from £36,886 OTR (plus VAT), 90 bodystyle from £44,825 and 110 from £46,215 OTR in the UK. Find out more at www.landrover.co.uk/Defender

Only last month, Land Rover launched the powerful Defender V8 as part of a range of enhancements to its unstoppable and award-winning 4x4 family. The new 525HP Defender V8 and flagship Defender V8 Carpathian Edition provide a unique combination of performance and capability, with bespoke chassis settings delivering new levels of driver engagement and agility both on and off-road.

The powerful new models build on decades of Land Rover V8 heritage – spanning the original Stage I V8 of the Seventies, North American Specification models of the Nineties and powerful Defender Works V8 – as the characterful engine joins the latest range of efficient Ingenium petrol, diesel and advanced Plug-in Hybrid Land Rover powertrains.

The V8 petrol engine isn't the only introduction. There's also a new XS Edition, fresh exterior design packs that provide greater personalisation potential and an optional larger 11.4-inch Pivi Pro infotainment touchscreen.

Defender V8 builds on the rugged 4x4's class-leading capability, delivering new levels of performance and driver engagement by combining a powerful 525HP 5.0-litre V8 supercharged petrol engine with expertly developed suspension and transmission tuning to create the fastest and most dynamically rewarding Defender yet.

The exclusive new Carpathian Edition is based on the Defender V8 and represents the ultimate expression of Defender design, performance and capability, while a new XS Edition replaces the hugely successful First Edition and combines bespoke design and specification enhancements inside and out.

Defender's personalisation potential has also been expanded with the introduction of new exterior packs. The Bright Pack, Extended Bright Pack and Extended Black Pack feature bespoke exterior trim to enhance Defender's unmistakable silhouette.

Heightened connectivity is also part of the updates. Defender's state-of-the-art Pivi Pro touchscreen infotainment is now available with a range of desirable new features, including the option of a larger 11.4-inch touchscreen display*. Wireless device charging with integrated signal booster is now included in the Comfort and Convenience Pack for improved convenience and call quality.

David Hemming, Chief Product Engineer, Jaguar Land Rover, said: *"The introduction of our V8 powertrain adds a new dimension of driving engagement and off-road capability to Defender. Fast and fun to drive, it represents the pinnacle of the Defender family and is as rewarding on the road as it is capable off it. We've also broadened the appeal of the entire Defender line-up with new derivatives, option packs and enhanced connectivity, so there really is a Defender for everyone."*





New Defender V8

New Defender V8 is the ultimate expression of Land Rover's toughest 4x4 and recalls the rich heritage of eight-cylinder Land Rovers dating back to the 1970s. The potent new V8 supercharged engine is available in both 90 and 110 body designs and delivers elevated performance and driver engagement without compromising Defender's unstoppable capability.

With unique suspension and transmission tuning, including bespoke spring and damper rates and a new Electronic Active Rear Differential, it delivers more agile and engaging handling with heightened body control – all accompanied by a characteristic V8 soundtrack.

Power comes from Land Rover's 5.0-litre V8 supercharged petrol engine, which produces 525HP, 625Nm of torque and drives through an eight-speed automatic transmission. The Defender V8 90 accelerates from 0-60mph in just 4.9 seconds (0-100km/h in 5.2 seconds) with a top speed of 149mph (240km/h) and delivers fuel consumption of up to 19.5mpg (14.5l/100km) with CO₂ emissions from 327g/km**.

Exceptional off-road capability is a Defender hallmark and the V8 adds a new layer of driver appeal, with the introduction of a new Dynamic mode within the Terrain Response system – only available on V8-powered Defenders. It helps drivers to exploit the more dynamic character and handling balance of the 525HP model on tarmac and loose surfaces. Engineered to be the fastest and most engaging production Defender ever, it delivers unrivalled agility and driver appeal.

Iain Gray, Senior Manager, Powertrain Advanced Engineering, Jaguar Land Rover, said:

“The 5.0-litre V8 supercharged engine further enhances the unique character of the Defender. It sounds fantastic and delivers incredible performance – providing new levels of driver appeal. Our engineering focus has been to optimise powertrain calibration for Defender to deliver both responsive on-road performance and fine control off-road – all without compromising Defender's unstoppable all-terrain capability and wading ability.”

Larger-diameter and solid anti-roll bars help reduce body roll in extreme cornering, while the unique Electronic Active Rear Differential introduces a Yaw Controller that allows fine control of the Defender V8's cornering attitude as it reaches and exceeds the limit of grip.

Careful calibration of the new Dynamic mode in Terrain Response 2, gives Defender V8 a more agile, playful and responsive character. In this setting, a sharper throttle response and bespoke tuning for the Continuously Variable Damping combine with the stiffer suspension bushes for immediate steering responses. Working in harmony with the Torque Vectoring by Braking technology, Traction Control Systems and new Yaw Controller, the Defender V8 is faster, more engaging and more controllable than ever.

Instantly recognisable, the Defender V8 features a number of unique exterior enhancements; bespoke exterior badging, quad exhausts with distinctive tailpipes and unique 22-inch alloy wheels with a Satin Dark Grey finish combine to set the most powerful model in the line-up apart. The Defender V8 is further identified by its Xenon Blue brake calipers on the front.

Careful acoustic tuning of Defender V8's induction and exhaust systems provides a purposeful and authentic sound. Calibrated to suit every driving situation, this evocative soundtrack can be enhanced by selecting Dynamic mode in the Terrain Response system.



“Supercharged” on the engine cover says it all

Customers have a choice of three colours – Carpathian Grey, Yulong White and Santorini Black – with the grey and white options offering a contrast roof in Narvik Black. Shadow Atlas exterior detailing completes New Defender V8's distinctive exterior finish.

Inside, Defender V8 features seats trimmed in unique Ebony Windsor Leather with Dinamica® suedecloth and Robustec accents, while the Defender's exposed Cross Car Beam has a special Satin Black finish. The four-spoke steering wheel is enhanced by an Alcantara rim and tactile satin chrome gearshift paddles, which are unique to V8 models. Leather covers the airbag housing and gear lever, while illuminated treadplates are completed with a V8 script.

Defender V8 Carpathian Edition

The exclusive new Defender V8 Carpathian Edition is the ultimate expression of performance, durability and design, and represents the very pinnacle of the Defender range. Finished exclusively in Carpathian Grey, it is distinguished by a Narvik Black contrast roof, bonnet and, for the first time on New Defender, taildoor. Additional visual highlights include Satin Black towing eyes and distinctive Xenon Blue front brake calipers.

The unique exterior is finished with Land Rover's Satin Protective Film. The PU-based wrap is applied to external bodywork giving the 4x4 a contemporary semi-matte finish that also protects against everything from car park scratches to off-road bramble rash.

Inside, the Defender V8 Carpathian Edition features the same upgrades as the V8, with seats finished in Ebony Windsor leather with Dinamica suedecloth and Robustec accents, an Alcantara-wrapped steering wheel and illuminated treadplates.

Defender XS Edition

The new XS Edition replaces the hugely successful First Edition. Positioned above the SE models, it features a unique exterior and interior treatment and is available in both 90 and 110 body designs.

Externally, the XS Edition is identified by its bespoke body-coloured lower cladding and lower wheel arches, and distinctive 20-inch, contrast Satin Grey with diamond turned wheel. A choice of four exterior colour options is available: Silicon Silver, Hakuba Silver, Gondwana Stone and Santorini Black.

Inside, the XS Edition's 12-way, heated and electric memory seats are finished in an optional Khaki Grained Leather, while the Cross Car Beam has a Light Grey powder coat brushed finish.



Comprehensive standard specification includes Electronic Air Suspension, Adaptive Dynamics and Configurable Terrain Response. In addition, the XS Edition benefits from Matrix LED headlights with signature DRL, ClearSight interior Rear View camera technology and the state-of-the-art Pivi Pro infotainment system with 11-speaker Meridian sound system.

The XS Edition is available with a choice of powerful and efficient powertrains, including the P400 MHEV petrol, P400e Plug-in Hybrid Electric Vehicle (PHEV) and D250 Mild Hybrid Electric Vehicle (MHEV) diesel.



Pivi Pro upgrade

New for 2022 model year, Defender is available with wireless device charging, which features a signal booster for optimised network reception and Wi-Fi signal. Connectivity is also enhanced by the latest evolution of Pivi Pro infotainment, available with an optional larger 11.4-inch touchscreen* for the first time. The new interface is 60 per cent larger than the standard screen, making it even easier to follow navigation route guidance. The fast and intuitive Pivi Pro system provides immediate responses. A simple menu structure allows the most commonly used functions to be accessed directly from the home screen to reduce driver distraction. The system can be easily customised to suit the preferences of individual customers. Additional app 'panels' can be added, moved and removed, while swiping left or right of the screen quickly reveals the most relevant information at a glance, ensuring the driver's concentration stays on the road.

The advanced navigation uses self-learning algorithms and dynamic guidance to optimise routing, while Smart Voice Guidance knows to cancel audio instructions in familiar surroundings. Navigation mapping is always up to date thanks to Defender's Software-Over-The-Air (SOTA) technology†.

Intelligent learning allows the navigation system to identify routes customers use regularly, even without inputting a destination, and use this information to inform drivers of the fastest route to their likely destination based on current traffic conditions. If a faster route becomes available, Pivi Pro will propose this as an alternative.

Con't on page 22



LAND ROVER PHOTO'S, TOO GOOD NOT TO USE

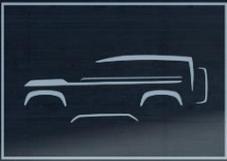




Greater personalisation with new Exterior Packs

Customers can now choose from three new exterior design packs. The Bright Pack, Extended Bright Pack and Extended Black Pack further extend the personalisation potential of New Defender. Available on all Defender models, the Bright Pack features a Noble Chrome finish for the front and rear skid plates, plus a Noble Chrome Grille bar and badging. The Extended Bright Pack adds Ceres Silver to the lower body cladding and wheel arches.





DEFENDER
POWERTRAIN
LINE-UP

New Defender is available with a wide range of powertrains including Plug-in Hybrid Electric Vehicle (PHEV) and Mild Hybrid Electric Vehicle (MHEV) technologies, the powerful high-performance V8 and a range of advanced and efficient Ingenium petrol and diesel engines, all fitted with intelligent Stop/Start technology to minimise emissions.



90
D200 200PS / 500Nm
0-100km/h: 9.8s, 0-60mph: 9.1s
D250 249PS / 570Nm
0-100km/h: 8s, 0-60mph: 7.6s
D300 300PS / 650Nm
0-100km/h: 6.7s, 0-60mph: 6.3s

110
D200 200PS / 500Nm
0-100km/h: 10.2s, 0-60mph: 9.5s
D250 249PS / 570Nm
0-100km/h: 8.3s, 0-60mph: 7.9s
D300 300PS / 650Nm
0-100km/h: 7s, 0-60mph: 6.6s

DIESEL
3.0-litre, six-cylinder MHEV
Diesel engines feature MHEV technology for superior responses and enhanced efficiency and contribute to enhanced fuel economy of 32.2mpg (8.8l/100km)* for Defender 110 through an efficient Stop/Start system.



90
P300 300PS / 400Nm
0-100km/h: 7.1s, 0-60mph: 6.7s

110
P300 300PS / 400Nm
0-100km/h: 7.4s, 0-60mph: 7s

PETROL
2.0-litre, four-cylinder Turbocharged
The 300PS unit uses an advanced twin-scroll turbo for smooth performance and delivers fuel consumption for 110 of 24.2mpg (11.7l/100km).



90
P400 400PS / 550Nm
0-100km/h: 6s, 0-60mph: 5.7s

110
P400 400PS / 550Nm
0-100km/h: 6.1s, 0-60mph: 5.8s

PETROL
3.0-litre, six-cylinder MHEV
Electric supercharged series with twin-scroll turbo boost performance. 48V mild hybrid system maximises efficiency.



90
V8 525PS / 625Nm
0-100km/h: 5.2s, 0-60mph: 4.9s

110
V8 525PS / 625Nm
0-100km/h: 5.4s, 0-60mph: 5.1s

PETROL
5.0-litre, eight-cylinder Supercharged
The potent new V8 supercharged engine has a top speed of 149mph (240km/h) and delivers fuel consumption for 110 of 19.2mpg (14.7l/100km).



110
P400e 404PS / 640Nm
0-100km/h: 5.6s, 0-60mph: 5.4s

PLUG-IN HYBRID ELECTRIC VEHICLE
2.0-litre, four-cylinder PHEV
The 105kW electric motor and 19.2kWh battery deliver an all-electric range of up to 43km (27 miles) and provide CO₂ emissions of 74g / fuel economy of 85.3mpg (3.3l/100km)*.



*WLTP TEL Combined

Defender X, Defender X-Dynamic and Defender V8 customers can select the new Extended Black Pack. It provides a Gloss Black finish for the front and rear skid plates, grille bar, bonnet chequer finisher, mirror caps, badging, lower body cladding and wheel arches for a stealthy and purposeful appearance.



Prices for the New Defender V8 start at £98,505 for the 90 and £101,150 OTR for the 110 in the UK. For more information and to configure New Defender visit: www.landrover.co.uk/Defender

LAND ROVER
LEGENDS

12-13 JUNE 2021
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AIR INDEX VEHICLE EMISSIONS RATING SYSTEM OFFERS FIRST REALISTIC, FULLY-FLEDGED ALTERNATIVE TO OFFICIAL DATA

- Broad coverage of vehicles offers complete system of ratings for the first time
- Alternative to misleading official nitrogen oxide (NO_x) and carbon dioxide (CO₂) figures
- For use by cities, fleets, consumers and manufacturers
- Based on thousands of independent, real-world tests
- With coverage of over 90% of model variants in key categories
- Available now free of charge at airindex.com

The expanded AIR Index ratings programme creates a near-comprehensive system that can be used by cities, vehicle buyers and car makers for policy solutions to, once and for all, target the dirty cars on the road without penalising clean vehicles.

The **AIR Index** at airindex.com identifies the cleanest cars across the whole market. Until now, and especially since Dieselgate, there have been many studies and reports about real-world emissions. However, these have typically tested a small selection of vehicles, which made them useful only for broad policy development.

If you were a city looking to implement an effective and fair clean air zone (CAZ), or a car retailer looking for trusted insight to inform customers about the real-world emissions of your vehicles, you had no choice except to use the official labelling system. This official system was made up of the New European Driving Cycle (NEDC) tests up until around 2018, followed by the World Harmonised Light-duty Transient Cycle (WLTC) after that.

A van on test for independent AIR Index rating



The former test regime has been discredited as it underestimates real-world NO_x, a problem pollutant for urban air quality, by a factor of 4-5, and real-world CO₂, the global warming gas, by around 40%, based on research by the **AIR Alliance**. The WLTC remains a laboratory test with a cycle unrepresentative of the range of real-world driving, despite having smaller discrepancies.

With the launch of this expanded **AIR Index** programme, cities, retailers and fleet managers now have an alternative. Thanks to the coverage of over 90% of model variants in the key segments, the **AIR Index** can help make clean air zones and other incentive schemes to work more effectively. It allows the razor-sharp targeting of older, dirtier vehicles, while exempting those that are cleaner. For clarity, models launched since the introduction of the new Real Driving Emissions (RDE) on-road test have all tested clean – and these are not the source of urban air quality problems.

The expanded AIR Index will allow the NO_x-related air quality problem to be solved in the quickest and easiest way for cities, with the minimum impact necessary on car owners and fleets.

The AIR Alliance rates vehicles for NO_x and CO₂ separately, on scales from A to E. The Greater London Authority will be using the **AIR Index** to power its Cleaner Vehicle Checker, which can be found at: <https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/cleaning-londons-vehicles/cleaner-vehicle-checker>. This works in conjunction with the Ultra Low Emissions Zone to inform and incentivise car drivers and buyers.

This expanded service from the AIR Alliance is based upon a recognised, European legal standardisation methodology in the form of CWA17379, published in January 2019, which was the product of CEN Workshop 90. At the heart of the ratings are vehicles that have been tested in full compliance with this methodology. These results are complemented by predicted ratings for most of the rest of the market using a ground-breaking artificial intelligence model that is trained on a large volume of real-world data. These data are from thousands of vehicles that have been tested in carefully controlled conditions on the public highway in the UK and mainland Europe.

The impact of over-emitting diesel-powered passenger cars and vans remains the prime focus for policy makers to improve urban air quality. This is particularly relevant for Euro 5 and pre-RDE Euro 6 diesel vehicles which cover a period from around 2010 until the introduction of RDE around 2018, although not all cause problems by exceeding NO_x limits. These models are problematic because there are large numbers of them on the road and they are relatively young, so will remain in the road for many years. Of this generation of models, the expanded **AIR Index** covers around 90% of all model variants.

Nick Molden, co-founder of the **AIR Alliance**, said:

*“Creating a fully-fledged alternative to official ratings has been the objective of the **AIR Alliance** from the beginning, and we are pleased now to be able to launch the expanded **AIR Index** to offer an important practical tool to cities, buyers and the industry. Reducing nitrogen oxide emissions is not the only type of pollution that is of concern, but it is perhaps the most pressing in the light of the systematic design problems of vehicles that were revealed by Dieselpgate.”*

As a not-for-profit organisation, the **AIR Alliance** is independent of the car industry and governments. Its objective is to bring about reductions in air pollution and gases that contribute to climate change through the power of real-world data.

AIR carries out an ongoing programme of vehicle testing, and results are added to the **AIR Index** periodically.

Inspiration for the **AIR Index** was NCAP, the independent vehicle-safety rating system developed in the US in the 1970s that became the industry standard in the EU and around the world. The programme held car makers accountable for their safety performance, resulting in a voluntary adoption of technologies that led to safer vehicles.

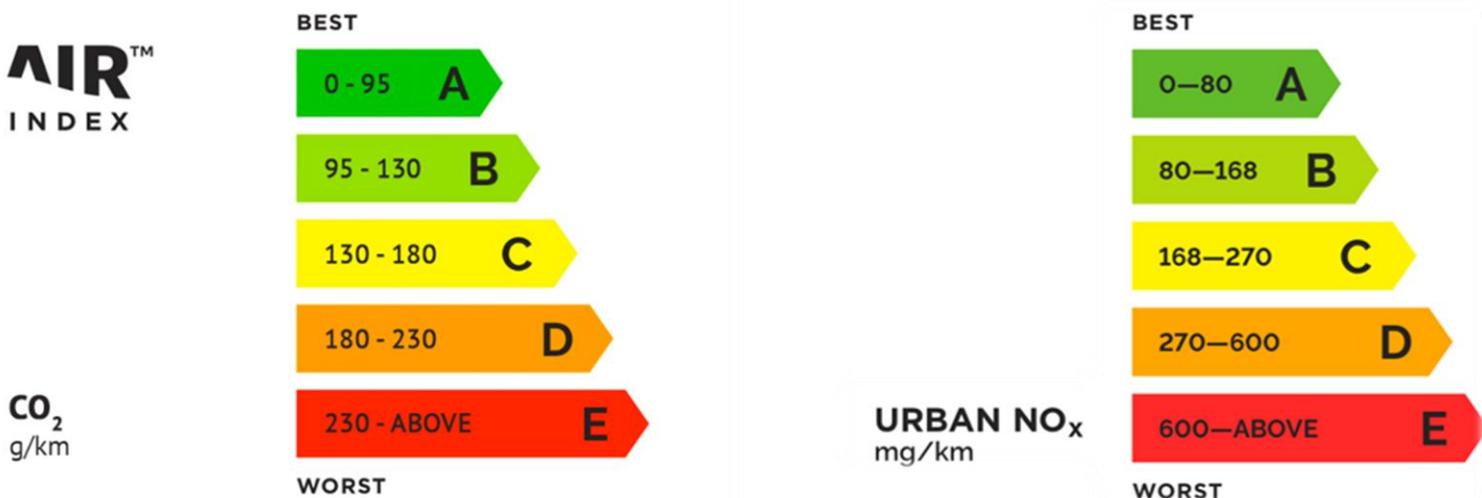
AIR tests at least two different cars or vans of each model, sold and on the road, sourced independently from the vehicle makers in a scientifically robust programme of on-road trips which lead to an emissions rating in the **AIR Index**.



AIR Index rating in car showroom

The rating of each vehicle uses the latest methodology CWA 17379 developed at European level to fairly compare the emissions performance of different vehicles using portable emissions monitoring systems (PEMS) to ensure that the technology provides trusted data on emissions that is transparent and available to everyone.

The **AIR Index** ratings for urban CO₂ and NO_x are rated as follows:



FINAL THOUGHT FROM THE TEAM.....

Potholes a growing concern for drivers, overtaking texting and drink driving in problem ratings



Potholes are perceived by motorists to be a much more significant concern on the road than they were three years ago, overtaking texting and drink driving as a worsening problem according to the findings of a new report from the UK's largest road safety charity.

IAM RoadSmart's annual Safety Culture Report, which tracks drivers' changing attitudes to key road safety issues over time, discovered that three in four motorists (75 per cent) now perceive potholes to be a bigger issue for road users than they were three years ago. This was followed by driver distraction (68 per cent) – such as texting or talking on a mobile phone - and traffic congestion (65 per cent).

Further findings from the report, now in its sixth year and which involves surveying more than 2,000 motorists, also discovered that around nine in ten (89 per cent) drivers have been affected by potholes over the last year.

Meanwhile, just over one in three (31 per cent) drivers had changed their route to avoid a pothole with, more worryingly, more than half (54 per cent) having had to steer away or brake hard to avoid impact and damage.

Neil Greig, IAM RoadSmart Director of Policy & Research, said: "The pothole situation on UK roads has now become much more than just irritating, it's a significant threat to personal safety.

"We simply can't have vehicles swerving into oncoming traffic or slamming on their brakes without warning to avoid them. Deteriorating roads also put pedestrians and cyclists at greater risk.

"It is clearly a sign of the times when motorists perceive potholes to be a bigger growing concern to them than drink driving and texting. And while the statistics show that the devastating impacts of using a motor vehicle under the influence of alcohol or using a mobile phone when driving still remain, it does highlight that it is time for government to take potholes seriously and fix the UK's road network."

Regionally, eight in ten (81 per cent) motorists in the South East considered potholes to be a bigger road safety issue than three years ago, compared with around six in ten in London (61 per cent) and the North East (64 per cent).



It is currently estimated that there are some 42,675 miles of UK roads classed as being in POOR structural condition, costing an estimated £11.14 billion to bring them up to a level which they could be maintained cost effectively going forward, according to Asphalt Industry Alliance*.

However, IAM RoadSmart's research found of those motorists who had experienced a pothole only around one in ten (12 per cent) had enough damage to their car caused by the pothole to require a repair and only around one in six (16 per cent) had reported a pothole to the authorities. Less than one in ten (7 per cent) made a claim for the damage.

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