

WHAT CAR?

Britain's biggest and best car buyer's guide Reprinted from What Car? 2019 & 2020



WHATCAR?

**CAR
OF THE
YEAR
2020**

Executive car
Winner

WHATCAR?

**CAR
OF THE
YEAR
2020**

Plug-in hybrid
Winner

DRIVING THE PHEV REVOLUTION

"The best hybrids, both conventional and
plug-in, now need no excuses"

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One hundred and seventy six miles per gallon. The official fuel economy of the new BMW 330e is certainly eye-

catching, but how achievable is that figure in the real world? Well, as with all plug-in hybrids, it depends on the type of driving you do.

If, for example, you spend most of your time slogging up and down motorways, the battery and electric motor will be nothing more than dead weight for long periods, and it's not the car for you. On the other hand, if your daily commute is no more than about 25 miles long and you can charge at both ends of it, you'll spend much of your time running on electric power and could save a fortune by choosing a 330e.

In short, it's the latest proof that one size doesn't fit all. There might come a day when one type of car wins out, but right now petrol, diesel, hybrid and electric models all have their place.

'A plug-in hybrid's economy depends on the type of driving you do'



With all the predictability of a washed-out bank holiday, the Government's decision to scrap its

plug-in hybrid car grant at the end of last year has led to a 34% drop in sales. And yet, in many ways, hybrid buyers have never had it so good.

Until recently, you see, most of these models forced you to put up with compromised refinement or practicality and fell massively short of their official economy figures in the real world. But no longer.

Whether you're looking at conventional 'self-charging' hybrids, which mix petrol and electric power for the best efficiency, or plug-in hybrids that can travel many miles before burning a drop of fuel, the best now need no excuses. Plus, the number on offer is about to explode.

So, in this issue, we have all you need to make an informed decision.

'The best hybrids, both conventional and plug-in, now need no excuses'

Steve Huntingford, editor
Steve.Huntingford@haymarket.com @swhuntingford



HYBRIDS WORTH WAITING FOR (OR BUYING TODAY)



Not so long ago, hybrids only made sense if you were a company car driver or someone living or working in London's Congestion Charge zone. However, the best are now brilliant all-rounders that offer diesel-beating fuel economy in real-world conditions. So, which should you consider now, and what are the most exciting models coming soon?

BMW X1

Revised exterior design and new plug-in hybrid version add to the allure of BMW's family SUV
On sale Now **Price from** £29,450. BMW X1 xDrive 25e Plug-In Hybrid from £38,200



FLYING COLOURS
The side skirts, wheel arches, lower bumpers and body cladding are painted in the body colour if you go for range-topping M Sport trim.

Doug Revolta
Doug.Revolta@haymarket.com

EVEN THE BEST trendsetters take a bit of time to perfect their formula. The BMW X1 was one of the first smaller SUVs to wear a premium badge, arriving well before this kind of car enjoyed a boom in popularity. Its jacked-up, chunky looks proved a hit, but it wasn't until the second-generation model arrived that BMW refined the offering and made it a genuinely good, big-selling car.

However, we've since seen new arrivals in the shape of the Volvo XC40 and the new Range Rover Evoque, both of which have set higher standards in the class. So, the time has come for some cosmetic tweaks to the X1, along with the introduction of an entirely new variant.

The exterior changes aren't substantial. BMW's trademark 'kidney grille' has been enlarged (a common recent theme, but they're still some way from the colossal scale

of the X7's nostrils) and the front bumper redesigned. There are also new-look LED tail-lights, while the exhaust tailpipes have swelled slightly.

Other new features include an LED projection of 'X1' from the door mirror to the ground when you unlock the car (on xLine and M Sport models), along with three new shades of metallic paint to choose from.

But the headline news is the introduction of BMW X1 plug-in hybrid to the range.

Badged xDrive25e, it uses a 1.5-litre three-cylinder petrol engine to drive the front wheels and an electric motor, fed by a 9.7kWh battery, to drive the rears. BMW says the xDrive25e will be able to cover more than 34 miles on electric power alone.

Combined outputs of 217bhp and 284lb ft of torque mean it can dispatch 0-62mph in 7.0sec (making it the fastest version of the X1) and reach a top speed of 119mph. Meanwhile, it officially emits as little as 40g/km of CO₂ >>



BUYER'S FILE	
BMW X1 xDrive 25e xLine PHEV	
Price	£39,200
Engine	3cyl, 1499cc, petrol
Power	217bhp @ 4600rpm
Torque	220Nm @ 1500rpm
Gearbox	6-speed automatic
0-62mph	6.9sec
Top speed	119mph
Economy	148.7-156.9mpg combined (WLTP)
CO ₂ , tax band	43-40g/km, 16% (WLTP)



(WLTP), thanks to a combined fuel economy figure of 156.9mpg. You'll have to do mostly short journeys and charge after each one to achieve that (otherwise it just becomes an overweight petrol), but you'll benefit from very low company car tax bills even if you don't.

We've had a look around the xDrive25e, and there's little to tell it apart visually. Stuffing a battery under the rear seats has resulted in a slight compromise on rear seat space, though, so tall adults will find their heads brushing the roof where they wouldn't in a petrol or diesel X1. Some underfloor boot space is taken up, too, but this isn't noticeable, because it's where the spare wheel sits in other models.

Anyway, deliveries of the xDrive25e won't start until later next year and pricing hasn't been announced yet, so let's focus on what you can have now.

Inside, the standard 6.5in display has been ditched in favour of an 8.8in touchscreen, and this can be upgraded to a new 10.3in item. BMW's iDrive continues to be the very finest infotainment system available, being packed with features and brilliantly simple to use, because you can use the dial

controller and shortcut buttons mounted between the front seats instead of prodding the screen.

The interior remains fantastically executed, with first-class build quality, and there are now more ambient lighting options. The driving position is what you'd hope for from a family SUV: high enough while still providing plenty of adjustability and good visibility.

On top of that, the X1 remains one of the most spacious and practical family SUVs, with lots of space for passengers and luggage.

And to drive? Well, we could get our hands only on the xDrive25i, which won't be coming to the UK, but with no mechanical changes from the pre-facelift model, the X1 remains great to drive. Its steering is weighty and precise and its handling is pleasingly agile. The ride is firm as a consequence, especially around town, but you could easily live with it, and it smooths out on the motorway.

Refinement is a weakness of the X1 at all speeds, however; there's a fair bit of road roar and the engine stop-start system could be a smoother operator.

In the UK, there will be front-wheel drive (sDrive) and four-wheel drive (xDrive) on offer, but our experiences suggest sDrive is all you need unless you live up a snow-capped mountain. And the choice of petrol and diesel engines is carried over, so the 148bhp sDrive18d will most likely remain the pick of the range, having more grunt than the sDrive18i and sDrive20i turbocharged petrols but lower running costs than the 187bhp xDrive20d.

Evidently, this facelift is more of a subtle reinvigoration for the X1 rather than a comprehensive reworking. The Evoque and XC40 continue to lead the way in the class as brilliant all-rounders, but the X1's practicality and excellent interior mean it's still well worth your consideration, while the new plug-in hybrid version should help it stand out further.

WHAT CAR? SAYS

Not much has changed, but that means the X1 remains a plush and practical family SUV

★★★★☆



ON SALE NOW

BMW X3 xDrive30e

Plug-in hybrid version of BMW's rival to the Audi Q5 has a 28-mile electric-only range and a classy interior

Price from £47,565

Darren Moss
Darren.Moss@haymarket.com

WE'VE BEEN VERY impressed with the latest BMW X3. It holds a five-star road test rating, putting it on an equal footing with its chief rival, the Audi Q5, and a whole star ahead of the Land Rover Discovery Sport. And now BMW is broadening its appeal to green-minded drivers, because it has launched a plug-in hybrid version.

Dubbed the xDrive30e, the model was revealed at the last Geneva motor show and is now on sale. It's powered by a combination of a 2.0-litre petrol engine and an electric motor, together producing 248bhp.

With a 0-62mph time of 6.1sec, this X3 is already reasonably rapid, but an extra 40bhp is temporarily available by utilising all of the electric motor's reserves – a boost

that should make overtakes a breeze. The gearbox is an eight-speed automatic, and you also get BMW's four-wheel drive system for extra traction on greasy roads, or if you want to venture into the wilderness.

Officially, the xDrive30e can cover up to 28 miles on electric power from a single charge. The battery is located under the rear seats in a bid to save storage space inside, but even so, this X3 has a smaller boot than conventionally powered X3s to the tune of 100 litres. Still, there should be enough space left to suit the average family.

Elsewhere, the xDrive30e is identical to regular X3 models. That means you get the same comfortable interior and class-leading iDrive infotainment system that we've praised in other models.

The xDrive30e costs slightly more than the equivalent regular X3, with prices starting from £47,565. It will go up against new

plug-in hybrid versions of the Audi Q5 (due for launch later this year) and Land Rover Discovery Sport.

Buyers wanting more electrified BMW SUVs won't have to wait for long, because the fully electric iX3 luxury SUV will join the plug-in hybrid X3 on sale next year.

Set to rival the Audi E-tron, Jaguar I-Pace and Mercedes-Benz EQC, the iX3 will be powered by two electric motors – one on each axle – and should be capable of covering at least 200 miles on a charge.

'The hybrid system produces 248bhp, with an extra 40bhp available temporarily'



X3 xDrive30e promises strong performance and potentially low running costs

WHAT CAR?

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Executive car
Winner

BEST BUY £30,000-£40,000

BMW 3 Series
330e M Sport

WHAT HAPPENS WHEN the tried and trusted facets of the BMW 3 Series are combined with cutting-edge plug-in hybrid technology? You get the 330e and a five-star review.

You see, the 330e is better than any other hybrid saloon, being very nearly as engaging as regular 3 Series variants, relaxingly refined and rather comfortable – especially on the motorway. Its closest rival, the Volvo S60 T8, may be more cossetting, but it's much pricier to buy and run and hardly any fun to drive.

The 330e also offers class-leading infotainment and good space front and rear. The only real downside of the hybridisation is that 100 litres of boot is given to the battery.

When fully charged, the 330e can officially cover up to 36 miles on electricity – a few more than the S60 T8 and Mercedes-Benz C300de. And it remains fairly frugal when forced to run on petrol power, recording 37.2mpg in our hands. The resulting low CO₂ emissions yield massive tax savings for company car drivers, too.

Although diesel, despite all the negativity, will still be the best choice for some, the 330e just pips the 320d to the post here, due to its potentially lower ownership costs.

KEY FACTS

List price £39,980 (£40,700 from 1 April 2020)
Target PCP £409
Performance
0-62mph 5.9sec
Top speed 142mph
Running costs
Official economy 176.6-201.8mpg combined (WLTP)
CO₂ 37-32g/km (WLTP)
Company car tax band 10%
Insurance group 33
Safety
Euro NCAP rating
★★★★★
97% 87% 87% 76%
(2019)

Winner
Executive car
BMW 3 Series
330e M Sport

Petrol, plug-in hybrid or electric? Our answer is the car we believe will suit most people most of the time: the BMW 330e.

This slickly integrates the latest technology with the long-held wants and needs of executive saloon drivers. That it's easy to live with, of the very highest standard everywhere inside, fantastic to drive and yet relatively cheap to run secures it the victory.

If the Tesla Model 3 has a long enough range for your needs, it'd make a terrific choice. Likewise, the Skoda Superb offers great value for money, delivering much of its rivals' capability. But the 330e possesses greater premium lustre than either, while providing penny-pinching zero-emissions driving without a hint of range anxiety.



Living the battery life

By paying extra to get yourself a plug-in hybrid executive saloon, rather than a petrol or diesel, you stand to receive incredible fuel economy and cheaper BIK tax. Surely there's a catch?

Photography: John Bradshaw



THE CONTENDERS

BMW 3 Series
330e M Sport (M Sport Plus Pack)
List price £42,190

NEW



Plug-in hybrid version of our Executive Car of the Year looks extremely compelling on paper.

Volvo S60
T8 Twin Engine AWD R-Design Plus
List price £49,805

NEW



More expensive to buy but promises blistering performance and a less compromised boot.

ELECTRIC CARS MAKE sense for more buyers than ever before, but they still aren't the right choice for everyone. What if you don't have a driveway for charging at home? Or if you need to make fairly frequent long trips and don't want to put your faith in the UK's unreliable motorway charging network?

Yes, you could just do what you've always done and buy another petrol or diesel car, but there's a potential third option: a plug-in hybrid. Like electric cars, and unlike so-called 'self-charging' hybrids, these can manage average-length commutes on

battery power alone. But if you need to make a longer journey or simply didn't have a chance to charge the battery, there's a good old petrol engine to help out.

And, as luck would have it, two new plug-in hybrid saloons have just gone on sale. The first is the BMW 330e, a variant of our 2019 Executive Car of the Year and one that can officially manage up to 36 miles of driving on battery power. Thanks to a combined 288bhp when its engine and rear-mounted electric motor team up, it should offer surprisingly punchy performance, too.

But it's unlikely to be nearly as rapid as the Volvo S60 T8. This understated Swede pumps out a mighty 386bhp and yet still promises 33 miles from a full charge. But which is the better all-round plug-in hybrid?

DRIVING
Performance, ride, handling, refinement

Let's deal with those electric-only ranges first because, just like official fuel economy figures for petrol and diesel cars, these are often hard to achieve in real-world

driving. And so it proved in our tests. The 330e managed 26.5 miles and the S60 24.8 miles – both some way behind the official distances, although still enough to handle many commutes.

To make sure the petrol engine stays switched off, you need to put these cars in their pure electric driving modes – although to keep fuel consumption as low as possible, both are intelligent enough to power themselves using mostly their electric motors anyway, as long as you're driving gently and there's a reasonable level of charge in the battery.

Once the battery is out of juice, the petrol engine is forced into getting its hands dirty. Don't expect spectacular fuel economy at this point, because both cars are quite a bit heavier than their conventional counterparts (blame the batteries and electric motors), but the 330e managed a respectable 37.2mpg in our tests, compared with the S60's 36.0mpg.

The S60's economy seems all the more remarkable when you consider the acceleration it can muster when its petrol engine and electric motor are working together. Floor its accelerator

pedal and, after a short delay while the automatic gearbox readies itself for what's about to ensue, it sprints off down the road like a true performance car. On a mildly damp road surface, it managed 0-60mph in just 5.3sec.

Not that the 330e is exactly sluggish; it still managed to hit 60mph from a standstill in 6.2sec, and its two power sources work together more adroitly than the S60's, with a smoother transition between battery and petrol power and to both working in tandem.

If you enjoy your driving, the 330e is the better choice, too. >>

COMPARISON

Granted, it isn't quite as agile as regular petrol or diesel versions of the 3 Series, but it still tucks its nose into corners eagerly and feels neatly balanced through bends and out the other side. The S60 grips the road almost as hard, but it responds more ponderously when you ask for a quick change of direction and there's more body lean when that happens. Its steering isn't as accurate or feelsome as its German rival's, either.

Then again, you'll appreciate the S60's generally softer, waftier ride. On gently undulating roads and motorways, it's considerably comfier than the firmer-edged 330e. That said, the S60 tends to shudder and crash more over broken asphalt and potholes, while the 330e always maintains its composure and deals with such obstacles quicker and more effectively. It's worth noting that the M Sport Plus Pack version we're testing here has adaptive suspension and 19in alloy wheels; regular M Sport cars get an even firmer suspension setup, albeit with slightly smaller (18in) rims.

The S60 is the slightly more peaceful cruiser, subjecting you to considerably less tyre roar than the 330e at a steady 70mph and only slightly more wind noise. Its petrol engine sounds coarser when you're accelerating hard, though.

BEHIND THE WHEEL
Driving position, visibility, build quality

These two have among the best driving positions in the executive saloon class, albeit for slightly different reasons. You sit lower in the 330e, so you immediately feel like you're behind the wheel of

RANGE		
	BMW 3 Series	Volvo S60
Official electric-only range (WLTP)	35 miles	33 miles
Combined range (petrol and electric)	509 miles	492 miles
What Car? test electric-only range	26.5 miles	24.8 miles
CHARGING		
Three-pin domestic cable	5hr 42min	5hr 42min
Type 2 cable (optional)	3hr 24min	3hr 24min
Maximum charging rate	3.7kW	3.7kW

BMW 3 SERIES



BEST DRIVING POSITION

BMW's iDrive system is the best in the class. You can use it as a touchscreen or by twisting and pressing a dial between the front seats (less distracting when you're driving). Measuring just over 10.0in, the display is bigger and brighter than the S60's, plus the operating system it displays is far more user-friendly. Android Auto isn't available; Apple CarPlay is, but you have to pay to use it after the first 12 months.



1 Interior is mostly of high quality; shame about the hard plastic around the gear selector

2 Aluminium dashboard trim comes as standard, but you can have wood or piano black for a fee

3 Apart from lumbar adjustment being a £265 extra, the driving position is excellent






The 3 Series can usually take seven suitcases to the S60's eight, but hybridisation has seriously compromised space. You'll still be able to slot in a set of golf clubs, though, and 40/20/40 split-folding rear seats are standard

Boot 375 litres
Suitcases 5






VOLVO S60



INFOTAINMENT



The S60's system is operated by touchscreen only, so it's quite distracting to use while driving. The fact that some of the icons are small doesn't help. Volvo's operating system isn't the most intuitive, either. You have to pay £300 for Apple CarPlay and Android Auto smartphone mirroring, or if you fork out £850, you get a bundle that includes the smartphone mirroring and a Harman Kardon sound system.




1 Whether you like the look of the S60's interior or not, it feels really well bolted together

2 The front seats are super-comfortable and supportive, plus electric adjustment is standard

3 You can choose between dark or light grey leather for the seats and centre console





The S60's boot is much taller than its German rival's, although it's a bit rich that you have to pay £300 for split-folding rear seats. More positively, it gets an electric bootlid as standard, whereas this costs extra on the 330e.

Boot 390 litres
Suitcases 8





BMW 3 Series vs Volvo S60

something with a sporty flavour, and a heavily bolstered seat that holds you in place securely through corners only adds to that impression. However, you have to adjust the seat the old-fashioned way (using bicep power) and must pay extra if you want adjustable lumbar support.

Electric front seats and adjustable lumbar support are standard on the S60, and those seats are even more comfortable than the 330e's on long drives – especially when the road is mostly straight. You sit higher up, which is good news for forward visibility. However, your over-the-shoulder view is actually slightly better in the 330e. Both cars come with front and rear parking sensors to help you out when manoeuvring in tight spots, and the 330e also has a rear-view camera.

Interior quality is a close-run thing, but the S60 just has the edge, with fewer hard plastics, particularly in the gear selector area. Indeed, it has one of the most upmarket interiors in the class, pipped only by the Audi A4 (which isn't available as a plug-in hybrid).

SPACE AND PRACTICALITY
Front space, rear space, seating flexibility, boot

If you're wondering how the engineers have managed to squeeze a big battery into these cars' already fairly compact dimensions, here's your answer: by stealing space from the boot. Yep, both cars have significantly less space for your luggage than their regular petrol and diesel counterparts.

It's more of an issue in the 330e, because although it had a slightly larger boot to begin with, a lot more space has been robbed. The space that's left is really shallow, managing to accept just five carry-on suitcases (compared with seven in the regular 3 Series). At least you can always fold down the 40/20/40-split rear seats if you need to carry more – just like you can in the S60 (for £300). The S60 can swallow eight cases.


The S60 is the roomier choice for rear passengers, too – particularly when it comes to knee room. A six-footer will still fit in the back of the 330e with relative ease, but he or she won't have the same space to spread out during a longer drive.

BUYING AND OWNING
Costs, equipment, reliability, safety and security

Right now, plug-in hybrids make the most sense for company car drivers, because their low >>


WHAT THEY WILL COST

All prices correct at time of testing



BMW 3 Series

The much cheaper option, no matter your circumstances



Volvo S60

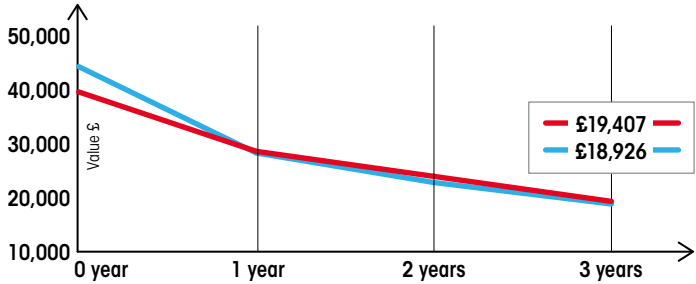
Only really makes financial sense if you're a company car driver

PRICES

List price	£42,190	£49,805
Company car tax	£225, £169, £169, £169	£265, £199, £199, £199
<small>(per month, until April 2020, 2021, 2022, 2023)</small>		
Contract hire (per month)	£407	£516

RESALE VALUE BY YEAR

■ BMW 3 Series ■ Volvo S60



Value £

0 year 1 year 2 years 3 years

THREE-YEAR COST

■ Depreciation ■ Insurance ■ Servicing ■ Road tax ■ Fuel (Test MPG) ■ Electricity (real-world range)

BMW 3 Series

£20,307

£1449

£1880

Total £28,653

Volvo S60

£25,483

£1852

£2187

Total £34,993

PCP FINANCE COSTS

Three-year term, £5000 customer deposit, 10,000 miles per year

Car	BMW 3 Series	Volvo S60
Monthly cost	£630	£741
Manufacturer deposit contribution	£5000	£2000
Optional final payment	£17,493	£18,866
Representative APR	4.9%	2.9%
Excess mileage charge	9.7p per mile	14.9p per mile
Other fees	na	na

official CO₂ emissions bring relatively cheap benefit-in-kind (BIK) tax bills. In fact, these two are the cheapest versions of their respective model line-ups when it comes to monthly salary sacrifices. The 330e's lower list price makes it even cheaper than the S60, though; from next April, when tax incentives will improve for cars with low CO₂ emissions, a 40% taxpayer will have to sacrifice just £169 per month. The S60 would cost an extra £30 per month.

The 330e is also much cheaper to own privately, partly because it's so much cheaper to buy but also because it's predicted to depreciate at a much slower rate. It's the same story for those looking at a PCP finance deal, with the 330e again working out much cheaper.

Both cars come with luxuries such as heated front seats and climate control, but while the 330e's seats are leather, the S60's are part-leather, part-fabric. Other than metallic paint and a Type 2 charging cable (£50), which allows you to use a proper charging point to charge the battery quicker, there's no option we'd strongly recommend adding to the S60.

As well as the bigger wheels and adaptive suspension we talked about earlier, the M Sport Plus Pack for the 330e adds tinted rear windows, red and blue stitching on the seatbelts and some gloss black exterior trim. We'd still recommend adding adjustable lumbar support (£265) and a Type 2 charging cable (from £165),

but metallic paint is thrown in. However, it's worth noting that if you can resist adding any options and eschew the M Sport Plus Pack altogether, the price of the car dips below £40,000, meaning you'll pay £135 annually in road tax from years two to six, rather than £455.

As for safety, both cars come with automatic emergency braking (AEB) as standard, along with lane departure warning, while the S60 adds lane-keeping assistance (part of the £1250 Driving Assistant Professional Pack on the 330e). Blindspot monitoring and adaptive cruise control cost extra on both.

When it comes to how well these cars are likely to protect you and your passengers in an accident, both scored impressive marks by class standards. The S60 proved fractionally better at protecting children in Euro NCAP's tests, with the 3 Series edging it for adult occupant protection.

These models were too new to appear in our 2019 Reliability Survey, although Volvo as a whole came a respectable 11th out of 31 brands. BMW finished a rather less impressive 21st, although the 330e does come with a three-year, unlimited-mileage warranty, with cover for the battery extended to six years (capped at 60,000 miles between years three and six). The S60's three-year warranty has a 60,000-mile limit, but there's eight years or 100,000 miles, whichever comes first, of separate cover for the battery.

The four-wheel-drive S60 T8 is a fair bit faster than the rear-wheel-drive BMW 330e

EQUIPMENT												
✓ Standard ✗ Not available	Alloy wheel size	Adaptive cruise control	Electric tailgate	DAB radio/Bluetooth/sat-nav	Wireless charging	Infotainment screen size	Apple CarPlay/Android Auto	Leather seats	Sunroof	Parking sensors front/rear	Rear-view camera	Keyless entry
BMW 3 Series	19in	£1250*	£990+	✓/✓/✓	£350	10.3in	✓/✗	✓	£1700^	✓/✓	✓	£990+
Volvo S60	18in	£1625**	✓	✓/✓/✓	✗	9.0in	£300	✓++	£1200	✓/✓	✓	✓

*Part of Driving Assistant Professional Pack +Part of Comfort Pack ^Part of Premium Pack **Part of Intellisafe Pro Pack ++Part-leather, part-fabric

STATS, SPECS AND RATINGS

BMW 3 Series

330e M Sport (M Sport Plus Pack)

Width 2070mm

2068mm

2851mm

4709mm

690mm

Volvo S60

T8 Twin Engine AWD R-Design Plus

Width 2040mm

1437mm

2872mm

4761mm

660mm

ECONOMY & EMISSIONS

OFFICIAL MPG (WLTP)	Combined	176.6mpg	OFFICIAL MPG (WLTP)	Combined	156.6mpg
Test MPG	37.2mpg*		Test MPG	36.0mpg*	
Test electric range	26.5 miles		Test electric range	24.8 miles	
Fuel cost per 12,000 miles	£1131**		Fuel cost per 12,000 miles	£1216**	
Tank	59 litres		Tank	60 litres	
CO ₂ emissions (NEDC)	38g/km		CO ₂ emissions (NEDC)	42g/km	

*With empty battery

**Based on Test MPG and real-world electric range, assuming average journey distance of 40 miles and an electricity cost of 14p per kWh

SAFETY

Euro NCAP rating (2019)

All protection 97% 87% 87% 76%

Euro NCAP rating (2018)

All protection 96% 84% 74% 76%

POWERTRAIN

Engine	4cyl, 1998cc, petrol + electric motor	Engine	4cyl, 1969cc, petrol + electric motor
Peak power	288bhp (combined)	Peak power	386bhp (combined)
Peak torque	310lb ft (combined)	Peak torque	472lb ft (combined)
Gearbox	8-spd dual-clutch automatic	Gearbox	8-spd dual-clutch automatic

PERFORMANCE

Weather conditions Damp

0-60mph 6.2sec

Top speed 142mph

Acceleration 30-70mph in kickdown 5.2sec

30-50mph in kickdown 2.2sec

50-70mph in kickdown 3.0sec

Braking 30-0mph 11.0m 70-0mph 59.1m

Noise at 30mph 62.2dB

Noise at 70mph 66.8dB

Turning circle 11.4m

0-60mph 5.3sec

Top speed 155mph

Acceleration 30-70mph in kickdown 4.6sec

30-50mph in kickdown 1.9sec

50-70mph in kickdown 2.7sec

Braking 30-0mph 10.6m 70-0mph 58.2m

Noise at 30mph 61.2dB

Noise at 70mph 66.8dB

Turning circle 11.3m

CARS PICTURED

BMW 3 Series 330e M Sport with Sunset Orange metallic paint, black Vernasca leather upholstery with blue stitching (£500), M Sport Plus Pack (£2200), Technology Pack (£1900), Premium Pack (£1700), Visibility Pack (£1500), Comfort Pack (£990), Parking Assistant Plus Pack (£650) and Type 2 charging cable (£165)

Volvo S60 T8 Twin Engine AWD R-Design Plus with Osmium Grey metallic paint (£675), Charcoal nappa leather and textile upholstery, Xenium Pack (£2200), Intellisafe Pro Pack (£1625), Harmon Kardon Pack (£850), 19in five-spoke alloy wheels (£550), Convenience Pack (£350), Winter Pack (£200) and Type 2 charging cable (£50)

BMW 3 Series vs Volvo S60


WHAT CAR? SAYS

If they're charged up regularly, plug-in hybrids can help reduce our dependance on fossil fuels and, in the process, cut the amount of CO₂ and other pollutants that are pumped into the atmosphere. But let's face it: one of the main reasons for buying one is the potential for big savings on running costs.

That's why the 330e makes a lot more sense here. It's dramatically cheaper for private cash buyers, those using PCP finance and even company car drivers. And although its advantages on electric-only range and overall fuel economy are relatively small, they still count in its favour.

Yes, the S60 may be faster, but aside from its blistering acceleration, it isn't a particularly rewarding car to drive. And it's not as though the 330e is at all sluggish. Indeed, the S60's most relevant advantage is its bigger boot, but that still isn't enough to steal it the win.

1




BMW 330e ★★★★★

For More agile and heaps more fun to drive; excellent infotainment system; much cheaper on all fronts; better visibility

Against You won't fit much in the boot; road noise; firmer ride won't be to all tastes

Recommended options Type 2 charging cable (£165), lumbar adjustment (£265)

2



Volvo S60 ★★★★★

For Rapid acceleration; more rear leg room; bigger boot; calmer motorway ride; great driving position; quality interior

Against Very expensive; not much fun to drive; heavier depreciation

Recommended options Metallic paint (£675), Apple CarPlay and Android Auto (£300), Type 2 charging cable (£50)

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WHATCAR?

CAR
OF THE
YEAR
2020

Plug-in hybrid
Winner

BEST BUY £35,000-£50,000

BMW 3 Series
330e M Sport

LOOK FAMILIAR? YES, that's right: our newly crowned Executive Car of the Year, the BMW 330e, is in contention for this category too.

Part of the reason for its inclusion here is that it's a hybrid you can have some fun in. The Volvo S60 T8 is certainly faster, but neither that nor the diesel-engined Mercedes-Benz C300de can match the 330e's agility and sense of connection to the road. It's also worth pointing out that both are significantly more expensive to buy, while the 330e dips below the £40,000 mark, so you avoid the road tax surcharge for 'premium' cars.

According to official figures, you should be able to manage up to 36 miles on each charge, plus it sits in the 10% tax bracket for company car drivers. The switch from electric to petrol power and back again is barely noticeable, and it's even fairly frugal when the battery is flat.

It's worth pointing out that the 330e's boot is rather small because of the big battery, but we have no complaints regarding anything else inside. Every material feels suitably expensive, the infotainment system is a cinch to use and there's a decent amount of space in the back. The 330e really is a great car.

KEY FACTS

List price £39,980 (£40,700 from 1 April 2020)
Target PCP £409
Performance
0-62mph 5.9sec
Top speed 142mph
Running costs
Official economy 176.6-201.8mpg combined (WLTP)
CO₂ 37-32g/km (WLTP)
Company car tax band 10%
Insurance group 33
Safety
Euro NCAP rating
★★★★★
97% 87% 87% 76%
(2019)

Winner
Plug-in hybrid
BMW 3 Series
330e M Sport

Yes, this is a second class won overall by the terrific 330e. Not only is it really rapid, but it can also be hugely frugal and even handles rather well, in spite of the basket of battery cells in its boot.

The XC90 T8 may be far more practical, but there's no hiding from the huge price jump it requires. Besides, the 330e can go farther on a full charge and is far more frugal when running on petrol alone.

But what of the new Superb iV? Well, it's certainly comfier and even cheaper to buy, but it just isn't as good to drive and its interior isn't as swanky.

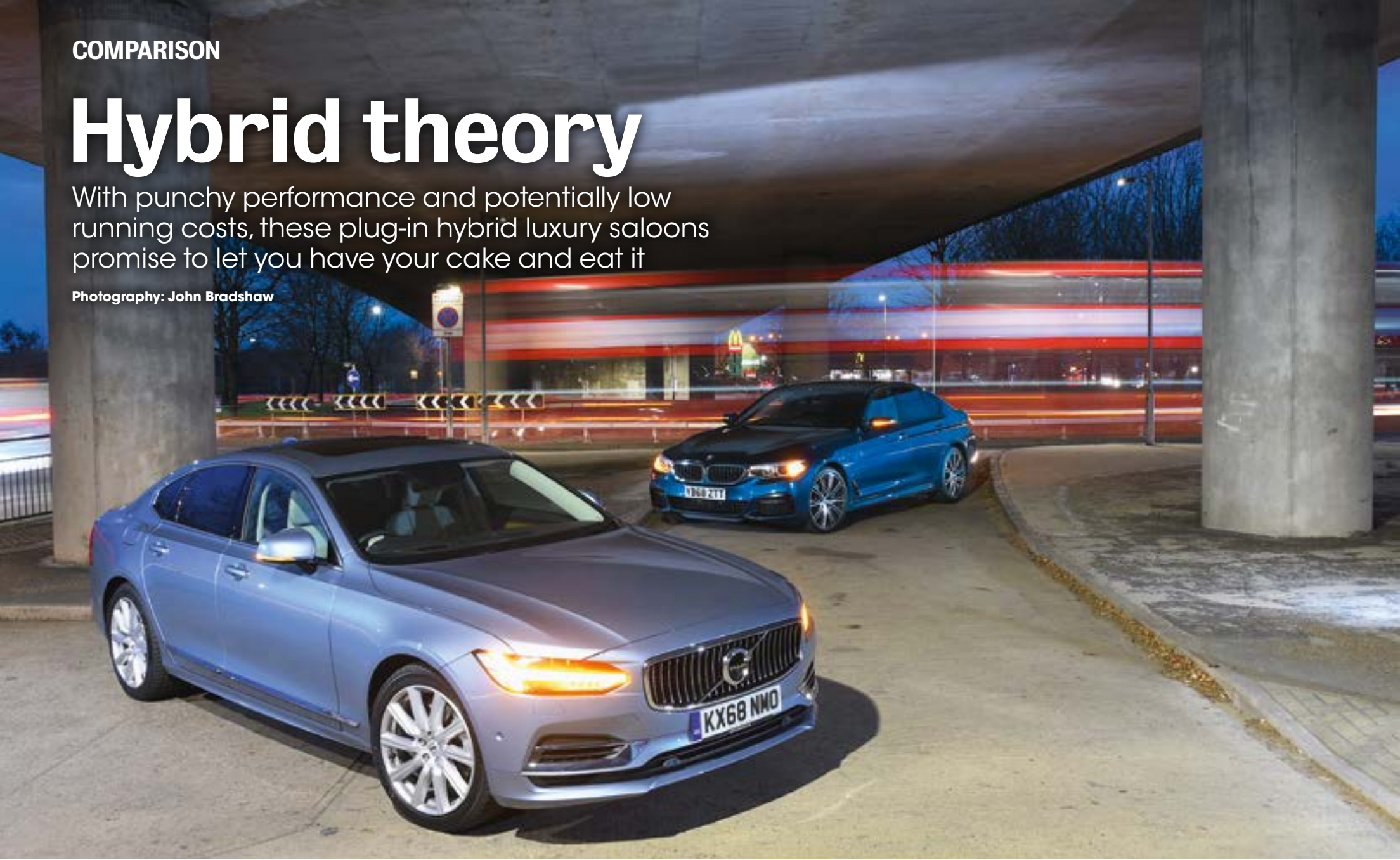
Given that the 330e makes traditional petrol and diesel versions of the 3 Series obsolete for most company car drivers, it simply has to win overall.



Hybrid theory


With punchy performance and potentially low running costs, these plug-in hybrid luxury saloons promise to let you have your cake and eat it

Photography: John Bradshaw




THE CONTENDERS

BMW 5 Series
530e M Sport
List price £50,000



On paper, this is the most efficient version of our favourite luxury car.

Volvo S90
T8 Inscription Pro
List price £58,555



This top-spec S90 comes with plenty of toys and much more power than the 530e.

CUTTING CO₂ EMISSIONS to save the planet may be of utmost importance, but it can be a trifle dull, can't it? Take cars, for instance: if you're after good efficiency, most of the options are either sluggish hatchbacks or unfashionable diesels.

So, what do you do if you're after a speedy saloon with petrol power? No, the answer isn't to get a horse to tow it half the time; it's to look at a plug-in hybrid. Unlike

regular 'self-charging' hybrids, you can charge a plug-in hybrid's battery from the mains, to give an official range on electric power alone of between 20 and 30 miles.

In the blue corner is the BMW 530e, the plug-in hybrid version of our reigning Luxury Car of the Year. In the not-quite-so-blue corner is the Volvo S90 T8, a car that may look quite sensible but, as you'll find out, has a devastating sucker punch.

DRIVING
Performance, ride, handling, refinement

Both cars pack a 2.0-litre petrol engine that's boosted by an electric motor, but their power outputs aren't even close. While the turbocharged 530e has a total system output (engine and electric motor combined) of 249bhp, the S90 packs a whopping 385bhp, thanks its petrol engine being turbocharged *and* supercharged.

Being four-wheel drive rather than rear-wheel drive like the 530e, the S90 catapults you off the line, managing 0-60mph in a startling 4.8sec. The 530e is no slouch, though, taking a respectable 6.1sec to reach 60mph from rest. It's a similar story on the move, with the S90 proving far quicker when you accelerate through the gears.

However, the 530e is better to drive in a number of key ways. Although these cars aren't as agile as their conventionally powered counterparts, due to the extra

weight of those batteries, the 530e is far better at hiding its extra flab. It feels keener to turn in to corners, its body leans less and it copes with mid-corner bumps in a much more composed fashion, giving you a greater sense of confidence.

With the S90 being softer and wallowing more in corners, you'd think it would have a more comfortable ride, right? Well, it does initially seem that way on roads that are free of challenging obstacles. However, all it takes is a pothole or expansion joint to send a sharp shock up through your seat and unsettle the car.

The 530e is certainly firmer, especially on optional 20in wheels, yet it has a consistency to its ride that makes it the more comfortable car for more of the time, and it's even better when fitted with optional adaptive dampers (£985), which we recommend. The 530e is also noticeably quieter at 70mph, generating much less road noise. Put your foot down and its engine

is more refined than the slightly coarse S90's, too.

While both cars officially return well over 100mpg under the new and supposedly more realistic WLTP fuel economy tests, the way plug-in hybrids work means these figures are slightly misleading. Your actual economy will depend on factors such as how much charge you have in the battery and the length of your journey.

With the batteries fully charged and EV mode selected (preventing the engine from firing up except under hard acceleration), we covered 18.1 miles in the 530e and 20.7 miles in the S90 on electricity alone. But with the batteries depleted and the engines >>

BMW 5 SERIES



1 This lid hides a couple of cupholders and, optionally, a wireless charging dock

2 The 530e's pedals are more offset to the right than the S90's, but they don't cause discomfort

3 As in the S90, even the 530e's door pockets are made of soft plastic, giving a luxury feel

VOLVO S90



1 Look underneath the centre armrest and you'll find a disappointingly shallow storage space

2 Physical air-con controls would be more useful than these ones for the stereo

3 Interior looks great, but switches such as these don't feel quite as solid as the 530e's

BEST TO DRIVE



The 530e is relatively agile and well balanced; it's quieter, too



S90 wallows in bends and the ride gets upset by sharp bumps

EQUIPMENT												
✓ Standard ✗ Not available	Alloy wheel size	Adaptive cruise control	Two-zone climate control	DAB/ Bluetooth/ sat-nav	Infotainment screen size	Apple CarPlay/ Android Auto	Massage seats	Adjustable lumbar support	Parking sensors front/rear	Rear-view camera	Keyless start/entry	Metallic paint
BMW 5 Series	19in	£965	✓	✓/✓/✓	10.25in	✓/✗	£795**	£275	✓/✓	£375	✓/£695	£685
Volvo S90	19in	✓	✓	✓/✓/✓	9.0in	£300***	✓	✓	✓/✓	£400	✓/✓	£700
* Three-year subscription ** Only with comfort front seats (£1265) *** Plus two extra USB ports												

INFOTAINMENT

BMW's iDrive infotainment system is easy and safe to use, even on the move, thanks to its rotary dial controller and high-mounted 10.3in screen. It also responds to touch; this can be preferable when you're stationary. Helping matters further are scalpel-sharp graphics, menus that are simple to navigate, standard sat-nav and online services. Disappointingly, Apple CarPlay phone mirroring is only an option (£235) and Android Auto isn't available.



BEST SYSTEM

INFOTAINMENT

Volvo likes doing things a little differently, choosing to mount its 9.0in touchscreen in a portrait orientation. It relies on swipes as well as prods to navigate its sometimes confusing menus; this can prove tricky to do on the move. Some screens also have lots of tiny icons that do everything from adjusting the hybrid system to folding the rear head restraints. While you get sat-nav, Apple CarPlay and Android Auto are optional (£300).



BMW 5 SERIES

1105-1970mm

280-375mm

855-1390mm

950mm

1440mm

755mm

985mm

1495mm

1120mm

Best front space

Boot 410 litres

Suitcases 5

Passengers are unlikely to complain about space, but they'll need to pack light, because the boot is much smaller than you'll find in other 5 Series models. Folding rear seatbacks are a £335 option, with release levers in the boot

Volvo S90

1120-2030mm

485mm

1025mm

940mm

1425mm

785mm

935mm

1460mm

1095mm

Best boot space

Best rear space

Boot 500 litres

Suitcases 8

Clever packaging of the hybrid system means far more boot space in the S90, while rear seat passengers get more leg room than in the 530e. Electric folding rear head restraints are a nice touch should you have no one in the back

WHAT THEY WILL COST

All prices correct at time of testing

BMW 5 Series

Cheaper to run for private and company car users

Volvo S90

Competitive on PCP finance but could cost far more in fuel

PRICES

List price

Company car tax

(until April 2019, 2020)

Contract hire (per month)

£50,000

£216, £266

£380

£58,555

£254, £312

£529

RESALE VALUE BY YEAR

Value (£1000s)

0 year

1 year

2 years

3 years

BMW 5 Series

Volvo S90

£25,764

£23,000

THREE-YEAR COST

Depreciation

Insurance

Servicing

Road tax

Fuel (Test MPG)

Electricity (real-world range)

BMW 5 Series

£22,737

£2841

£880

£1076*

£3246*

Total

£32,571

Volvo S90

£29,617

£3234

£880

£1217*

£3670*

Total

£40,454

* Assuming journey distances of 40 miles and an electricity cost of 13p/kWh

PCP FINANCE COSTS

Three-year term, £10,000 customer deposit, 10,000 miles per year

Car

Monthly cost

Manufacturer deposit contribution

Optional final payment

Representative APR

Excess mileage charge

Other fees

BMW 5 Series

£565

£5953

£18,054

5.0%

11.6p per mile

na

Volvo S90

£564

£2000

£25,764

0%

14.9p per mile

na

running, the 530e averaged a respectable 33.1mpg, whereas the S90 managed just 25.8mpg.

BEHIND THE WHEEL
Driving position, visibility, build quality

There's no doubt about the fact that you're getting into a luxury car when you slide behind the wheel of either of these. Both come with plush leather seats as standard, although the S90's are superior, thanks to full electric adjustment with memory, a massage function and softer nappa hide. The 530e makes do with part-electric seats and, unlike in the S90, you have to pay extra for adjustable lumbar support and a memory function.

Forward visibility is slightly better in the S90, because its windscreen pillars are slimmer, but its shallower rear window makes looking out the back slightly trickier than in the 530e. At least both get front and rear parking sensors, with rear and 360deg bird's eye-view cameras on the options list.

As for interior quality, both have plenty of dense, squidgy plastic throughout, along with leather and leather-effect garnish on the top of the dash and doors, plus expensive-looking trims. However, the 530e feels that little bit better screwed together. Digital instrument panels are standard on both, but the 530e's have sharper graphics, so they're easier to see.

SPACE AND PRACTICALITY
Front space, rear space, seating flexibility, boot

Tall drivers will find that the 530e's seat goes back a little farther and there's significantly more head room. The S90's optional sunroof (part of a £1600 pack) is to blame for at least part of that, but even those over six feet tall won't find their head touching the roof.

Those in the back will find the S90 has a bit more leg room but a fraction less head room, although

again, a couple of tall adults will still fit in without complaint. A larger central tunnel for middle seat passengers to negotiate counts against the S90, though. Should you need to carry long items, the S90 gets folding rear seatbacks as standard, but you'll need to pay £335 for them in the 530e. Thus equipped, the 530e scores for having convenient release levers in the boot, while the S90 has electric releases near the rear headrests.

With the rear seats up, the S90's boot is far bigger, swallowing eight carry-on suitcases with a bit of room to spare, whereas the 530e can manage only five, due to the hybrid gubbins underneath. The regular 5 Series saloon's boot is much more capacious.

BUYING AND OWNING
Costs, equipment, reliability, safety and security

You can buy an S90 T8 only in high-spec R-Design Pro or Inscription Pro trim; our test car was the latter and has a list price that trumps the 530e's by more than £8000, widening even further after discounts. You'd have to hit the 530e's options list hard to match the S90's standard equipment, though.

Factor in heavier depreciation, pricier insurance and that inferior fuel economy and the S90 works out more expensive to run for a private buyer over three years by a whopping £9000. However, PCP finance costs are almost identical, thanks to a 0% APR deal on the S90 at the time of writing. If you're a company car driver in the 40% tax bracket, the S90 will cost you just under £40 more each month, while monthly leasing rates are around £150 more expensive.

Both cars come with a three-pin domestic cable, while a faster Type 2 cable costs £50 for the S90 and £165 for the 530e. Using the latter in a 7kW home wallbox, the S90's battery can be fully recharged in two hours and the 530e's in three hours.

STATS, SPECS AND RATINGS

BMW 5 Series

530e M Sport

Width 1868mm

1479mm

2975mm

4936mm

667mm

Volvo S90

T8 Inscription Pro

Width 2025mm

1443mm

2941mm

4963mm

685mm

ECONOMY & EMISSIONS

OFFICIAL MPG (WLTP)

Combined

122.8mpg

Test MPG

33.1mpg*

Fuel cost per 12,000 miles

£1441**

Tank

46 litres

CO2 emissions (NEDC)

49g/km

Real-world electric range

18.1 miles

OFFICIAL MPG (WLTP)

Combined

128.4mpg

Test MPG

25.8mpg*

Fuel cost per 12,000 miles

£1629**

Tank

60 litres

CO2 emissions (NEDC)

49g/km

Real-world electric range

20.7 miles

Test MPG result gives you an indication of a car's real-world fuel economy when driving gently. Tests are carried out in controlled conditions at a private test track. * Battery fully depleted ** Based on Test MPG and real-world electric range, assuming journey distances of 40 miles and an electricity cost of 13p/kWh

SAFETY

Euro NCAP crash rating

All protection

91%

85%

81%

59%

Euro NCAP crash rating

All protection

96%

84%

74%

76%

POWERTRAIN

Engine

4cyl, 1998cc, turbo, petrol, plus electric motor

Peak power

248bhp @ 5000rpm (combined)

Peak torque

214lb ft @ 1350-4250rpm (engine)

Gearbox

8-spd automatic

Engine

4cyl, 1969cc, turbo/supercharged, petrol, plus electric motor

Peak power

385bhp @ 6000rpm (combined)

Peak torque

295lb ft @ 2200-4800rpm (engine)

Gearbox

8-spd automatic

PERFORMANCE

0-60mph

6.2sec

Top speed

146mph

0-60mph

4.8sec

Top speed

155mph

Acceleration

30-70mph through the gears 5.7sec

30-50mph in kickdown 2.4sec

50-70mph in kickdown 3.3sec

Braking

30-0mph 8.5m

70-0mph 45.0m

Noise

At 30mph 59.7dB

At 70mph 65.5dB

CARS PICTURED

BMW 530e M Sport with Mediterranean Blue paint (£685), M Sport Plus Package (£2190), Comfort Package (£1995), head-up display (£995), powered bootlid (£430), folding rear seats (£335), lumbar support (£275)

Volvo S90 T8 Inscription Pro with Mussel Blue paint (£700), Bowers & Wilkins stereo (£3000), Xenium Pack (£1600), blindspot information system (£500), heated rear seats (£300), smartphone integration (£300)

WHATCAR? SAYS

With its stylish interior and roomy rear seats, the S90 has lots of showroom appeal. It's seriously fast, too, but it lacks the handling skills to back up all that performance.

Given that it's also significantly more expensive on everything but PCP finance, the S90 has to lose out to the 530e. The latter is sharper to drive, quieter inside and more comfortable most of the time.

There's a large 'but', though. Yes, you'll save a lot in company car tax, but unless you charge your car regularly to make the most of their electric range, a 2.0-litre diesel 5 Series will drink far less fuel. With that in mind, the 520d is still our pick of the range.

BMW 530e
For Sharper handling; cheaper to buy and run; excellent infotainment system
Against Seriously compromised boot; firm edge to the ride on 20in wheels

Volvo S90
For More rear seat space; bigger boot; longer electric range; exceedingly rapid
Against Sometimes crashy ride; wallowy handling; thirsty petrol engine

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BMW X5 xDrive45e

New plug-in hybrid luxury SUV trumps virtually all of its rivals with a 54-mile electric-only range **On sale** Now **Price from** £64,745

Doug Revolta
Doug.Revolta@haymarket.com

ALTHOUGH YOU MIGHT have already read about a thirsty new BMW SUV (the X6) elsewhere in this issue, the German brand is, in fact, endeavouring to include more cars in its line-up that don't drink like a bunch of students on fresher's week. Indeed, it has pledged to launch 10 new or revised electrified vehicles by the end of 2020 – one of which is this plug-in hybrid X5 xDrive45e, which succeeds the previous-generation xDrive40e.

Until this year, plug-in hybrid SUVs were in relatively short supply. Now, though, Audi and Volvo both have at least two apiece in their line-ups, with the latter brand's seven-seat XC90 T8 being our reigning Plug-in Hybrid of the Year, while Mercedes-Benz is rolling out plug-in versions of the GLC and GLE and Land Rover has the Range Rover Sport P400e.

Given that the regular versions of the X5 are already impressively smooth, classy and luxurious, adding electric power to offer even more relaxing low-speed progress and lower fuel bills sounds like a winning combination. The xDrive45e is powered by a smooth six-cylinder petrol engine and an electric motor



You can keep it all-electric or let the car juggle the power

that gets its energy from a 24kWh battery under the rear seats. The fuel tank has been relocated beneath the boot floor to make room for the battery, so boot space is down by 150 litres compared with other X5 models, and you can't have a spare wheel.

The X5 isn't quite as roomy inside as the equivalent Audi Q7, and unlike the XC90 you can't have the hybrid with seven seats, but space is hardly stingy, and BMW's infotainment system beats all rivals for ease of use, especially on the move.

But here's the eye-popping news: the X5 is officially capable of covering 54.1 miles on electric power alone – nearly twice as far as most of its rivals can manage. It also means the X5 will be a cheap company car as of April, when tax bands take into account electric ranges.

The good news continues when you drive the car. It's smooth, quiet and very quick if you wish to prioritise performance over fuel economy. Although it doesn't control body movements quite as well as other X5s, it's still good to drive, with accurate steering and

tidier handling than the XC90. And the air suspension, while being slightly firmer than usual, still provides a very comfortable ride, especially on the motorway. It's more supple than the XC90 around town, too.

The driver has a choice of Sport, Hybrid and Electric driving modes to sort out how the car uses its petrol and electric power, but it's best to just leave it in Hybrid. Do this and the X5 shuffles between its different power sources very smoothly. When the petrol engine cuts in, it does so without much fuss – exactly what you'd want from your hybrid. And unlike many

of the breed, which can have grabby and inconsistent brakes, the xDrive45e's are barely any different in feel from the standard X5's.

The only cable you get as standard enables slow charging at a rate of up to 3.7kW, boosting the battery from 0-80% in around five hours. To charge any faster, you have to pay extra for another cable.

Given that it'll be slightly cheaper to buy than the equivalent Q7 and XC90, it's clear that the plug-in hybrid X5 has a lot going for it, especially as a company car. In fact, the only black mark against it is the lack of seven seats.

WHAT CAR? SAYS

A potential game-changer with an outstanding electric range; it's great to drive, too



BMW 7 Series

Luxury limo gets a new look, engine and infotainment upgrades and more advanced tech **On sale** Now **Price from** £73,600

Alan Taylor-Jones
Alan.Taylor-Jones@haymarket.com

IF YOU'RE IN the fortunate position of looking to buy a massive luxury liner of a car, the BMW 7 Series has always offered something a little different from rivals such as the Audi A8 and Mercedes-Benz S-Class. Although it can cosset its occupants, it's also a firm favourite for those who want to drive rather than be driven.

A raft of upgrades for 2019 aim to bring the fight to its more recently released or refreshed rivals. If you look past the giant grille – a whole 40% bigger than before – you'll find a revised infotainment system with the latest software and improved voice control, as well as a new, fully digital instrument cluster and improved semi-autonomous driving functionality.

The car promises to be quieter, too, thanks to thicker acoustic glass on the side and rear windows and improved sound deadening around the rear seat area. If comfort for rear seat passengers is the priority, there's also a long-wheelbase variant that stretches the gap between the front and rear wheels by 14cm.

In addition to the 3.0-litre six-cylinder



Interior is plush but a little too much like the 5 Series'

diesel, expected to be the most popular choice, engine options include a heavily reworked 4.4-litre petrol V8 in the 750i and new plug-in hybrids (745e and 745Le). The former will be available in standard length with four-wheel drive, while the latter offer a choice of lengths and rear or four-wheel drive.

Adaptive air suspension is standard on all models, allowing you to pick between maximum waft, a firmer sports setting and a mode that adapts to your driving style. Rippled roads are smoothed off well, although the softest (Comfort Plus) mode can make the 7 Series feel a little wallowy. Expansion joints and potholes cause more of a thud than you'd get in an A8, at least on the optional 20in wheels fitted to our test cars.

Otherwise, the 7 Series is impressively hushed. Road and wind noise are well isolated, while the 745e can drive in whisper-quiet electric mode for up to 36 miles (officially) while emitting as little as 48g/km of CO₂.

The hybrid now features a silken six-cylinder

petrol engine instead of the previous model's slightly gruff four-cylinder unit, so it's refined even when the battery charge is depleted. The 750i's V8 is more noticeable, but we suspect intended buyers will appreciate its burly background rumble. Power has increased by 79bhp to 523bhp – enough to hurl this vast limo down the road with enough force to embarrass many out-and-out sports cars.

You can hustle the 7 Series along a winding road, but even with optional four-wheel steering helping to tuck its nose into corners, it can't hide its bulk. Add in steering that blots

out any information about grip and you'll soon go back to a more relaxed cruise.

A five-seat interior is standard, but you can also specify a four-seat setup with reclining rear pews. In the long-wheelbase car, rear seat space is just as plentiful as you'll find in its rivals, so you can stretch out in total comfort. There's loads of supple leather and classy wood trim, but it lacks the wow factor of the S-Class's

interior and the configurable digital dials are harder to read than those in the A8 and S-Class.

All in all, while the 7 Series is improved, we'd still take the A8 for its superior comfort, finish and refinement.

WHAT CAR? SAYS

Plug-in hybrid impresses, but it can't quite match its best rivals for comfort and interior quality





Looking high and low

Want a luxury SUV but can't stomach the company car tax bills? One of these low-emissions plug-in hybrids from BMW and Volvo might be the answer

Photography: Will Williams

THE CONTENDERS

BMW X5
xDrive45e M Sport
List price £66,665

Volvo XC90
T8 R-Design
List price £66,645

NEW



Hybrid X5 has an excellent electric-only range and a smooth six-cylinder engine.



Our long-time favourite plug-in SUV has a spacious and flexible interior with seven seats.

FROM APRIL, COMPANY car tax will become cheaper. Don't worry, we're not trying to fool you; we're just pointing out that changes in benefit-in-kind (BIK) taxation mean that if you pick your car carefully, your bank balance will look a whole lot healthier.

That's because while the majority of regular petrol and diesel models will be hit with a rise in tax rates, the costs for electric cars and many plug-in hybrids will drop significantly. But low CO₂ emissions aren't the be-all and end-all any more. That's because hybrids that produce just

1-50g/km are now also judged on the number of miles they can cover on battery power alone.

That being the case, the new BMW X5 xDrive45e finds itself in a very sweet position right about now. With a CO₂ output of 39g/km and an official electric-only range of up to 54 miles, it enjoys a BIK rate of just 6% after 6 April. To put it another way, it means your monthly tax bill will be less than if you'd gone for a sub-£25,000 1.0-litre Ford Puma small SUV.

But what does all this mean for the What Car? award-winning Volvo XC90 T8? With a CO₂ output

of 66g/km and an official electric-only range of up to 29 miles, it sits in a much higher BIK tax bracket (18%), but that doesn't mean we should count it out. After all, it's the only plug-in hybrid SUV with seven seats, and it has plenty of other talents to shout about, too.

DRIVING

Performance, ride, handling, refinement

Despite their green credentials, these big, heavy cars are seriously quick. The XC90 pairs a 299bhp supercharged and turbocharged

2.0-litre four-cylinder petrol engine (driving the front wheels) with an 86bhp electric motor that drives the rears. The X5 does things a bit differently, positioning its 111bhp electric motor between a 282bhp 3.0-litre turbocharged straight six petrol engine and an eight-speed automatic gearbox and apportioning drive continuously to all four wheels.

With the X5's more even spread of power, it accelerates off the line far more authoritatively, sprinting from a standstill to 60mph in just 5.1sec. The XC90 is far from sluggish, taking 5.7sec

to cover the 0-60mph dash, but it always feels less punchy, largely because its smaller petrol engine needs to be revved hard before it produces its best.

Both cars can get to the motorway speed limit on battery power alone if necessary. As for their electric-only ranges, the X5 returned an impressive 32.5 miles on our set test route, which replicates a range of real-world driving environments, whereas the XC90 managed just 18.7 miles.

The X5's engine is smoother and quieter when it fires into life and sounds more tuneful when you

rev it hard. And although its tyres make more of a slapping noise over bumps around town, the X5 is a more relaxing cruiser, suffering less from wind and tyre noise on the motorway. Its suspension is quieter at all speeds, too.

But a hushed interior is no good if your luxury SUV has a back-breaking ride. Despite the fact that our X5 test car was wearing large, optional 21in wheels (part of the £1900 M Sport Plus package), it has an ace up its sleeve in the shape of standard adaptive air suspension. Although particularly vicious potholes and ridges still >>

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COMPARISON

thump through to your backside, the X5 positively floats over most imperfections, proving especially supple when cruising on the motorway. We suspect it'd be even better on the 20in wheels that are standard with M Sport trim.

R-Design XC90s come with 20in wheels and regular suspension that's noticeably stiffer. The upside is that the XC90 controls its body movements pretty well, without too much pitching and heaving along uneven roads. The downside is that the car fidgets more than the X5 over surface imperfections at all speeds and deals with sharp bumps far more abruptly. You wouldn't quite call it uncomfortable, but it certainly isn't as cossetting as the X5. Adaptive air suspension is a £2150 option on the XC90, but it doesn't improve matters enough to warrant spending the extra money. We'd certainly avoid the optional 21in or 22in wheels, because these make the ride even worse.

The combination of the XC90's stiffer suspension and lower weight means it feels more agile in corners than the X5. It not only leans over less but also changes direction in a snappier fashion. Even if you flick the X5 into its Sport mode, which firms up the suspension and lowers the body closer to the ground, it still sways around more.

Mind you, the X5 has more naturally weighted steering that gets heavier as cornering forces and speed increase – just as it should. It's also very precise. The XC90's steering feels like the front wheels are half-buried in mud when you first turn the wheel, then there isn't enough weight build-up to give you confidence during cornering.

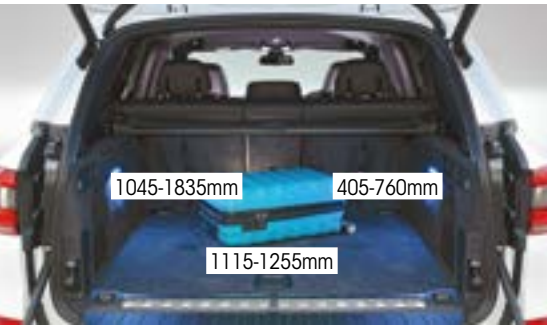
HOW THEY FARE AS TOW CARS			
	BMW X5	Volvo XC90	
Optional tow bar cost	£995	£1075	
Maximum towing weight (unbraked)	750kg	750kg	
Maximum towing weight (braked)	2700kg	2400kg	
Maximum tow ball weight	140kg	110kg	
Maximum roof load	100kg	100kg	



- 1 Temperature controls are easier to use than a touchscreen, but we'd prefer knobs to buttons
- 2 Digital instrument panel can show a greater variety of information than the XC90's
- 3 Switchable ambient lighting is standard, with six different colours to choose from

INFOTAINMENT

We've long said that BMW's infotainment system is the best in the business, and the X5 doesn't change our mind one bit. It's controlled by a rotary dial between the seats or via the 12.3in touchscreen and comes with sat-nav, DAB and wireless Apple CarPlay smartphone mirroring, but not Android Auto. The menus are easy to navigate, the graphics are crisp and it responds promptly to inputs.



X5 has useful 40/20/40 split-folding rear seats, but there's no option to slide or recline them. Nearly flat rear floor is good for three in the back, while there's room under the boot floor for your charging cables

Boot 500-1720 litres
Suitcases 9



'A more supple ride and lower noise levels make the X5 a better cruiser'



- 1 R-Design models get a leatherette-wrapped dash and door tops with contrasting stitching
- 2 Climate controls are on the touchscreen. Physical buttons and knobs would be easier to use
- 3 There are plush plastics and trims, but interior doesn't feel quite as luxurious as X5's

INFOTAINMENT

At 9.0in, the XC90's touchscreen is much smaller than the X5's and nowhere near as responsive to commands. In addition, some of the icons are quite small, making them tricky to hit on the move, while the menus can be confusing. Apple CarPlay and Android Auto are packaged as a £300 option, but they're displayed only on the bottom half of the screen, so they aren't all that easy to see at a glance.



XC90 allows you to stretch out the most in the back, helped by the three sliding and reclining individual rear seats. It has a larger boot in five-seat mode, while its party trick is that it also has two decent third-row seats

Boot 262-640-1816 litres
Suitcases 10



'The XC90's engine is coarser and has to be worked hard for it to give its best'

BMW X5 vs Volvo XC90

BEHIND THE WHEEL

Driving position, visibility, build quality

Both contenders have lofty seating positions with fine visibility all round, courtesy of big windows. With a great range of electric adjustment in their driver's seats and lots of height and reach adjustment for their steering wheels, finding an ideal driving position is a doddle in both.

Our X5 test car came with 'Comfort' front seats that are part of a £2350 Comfort Package. This also brings heated rear seats, rear sunblinds, keyless entry and even heated and cooled cupholders, which are very effective. Both driver's seats are exceedingly comfortable even after hours in the saddle, although we prefer the X5's slightly squidgier seat base.

Handily, both cars have a memory function for the driver's seats and door mirrors, so sharing the car with a partner who's a different height from you needn't cause any grumbling. Front and rear parking sensors are standard on both, as are reversing cameras.

Both SUVs look flash inside, thanks to faux-leather-wrapped dashboards and door panels, real leather seats, digital instrument panels and dense plastics. However, the X5's materials are that bit richer, its switches and knobs work slightly more pleasingly and its digital displays are noticeably crisper.

The X5's digital dials are also more sophisticated than the XC90's rather limited display, which can only show a map or music information in the gap between the 'dials'. That said, the X5's instruments feel a little like a case of style over substance; they aren't as legible as we'd like.


SPACE AND PRACTICALITY

Front space, rear space, seating flexibility, boot

This is where the XC90 really comes into its own. For a start, as we've said, it's the only plug-in hybrid that's available with seven seats, whereas in the X5 there's no option to add a third row like you can with other versions. The XC90 also comes with a much more flexible middle-row seat layout, giving it a clear advantage when it comes to practicality.


The XC90's three individual middle-row seats – split fairly evenly in a 35/30/35 arrangement – not only slide fore and aft, allowing you to prioritise boot space or rear leg room, but also recline. As for the X5, its rear seats are fixed, but the 40/20/40 rear seatback split is still convenient. >>

WHAT THEY WILL COST



BMW X5

Far cheaper for BIK tax; less expensive to run privately, too



Volvo XC90

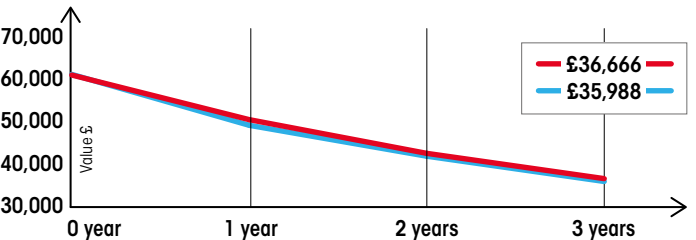
Petrol engine uses less fuel; cheaper to buy on PCP finance

PRICES

List price	£66,665	£66,645
Company car tax	£178, £178, £178	£399, £399, £399
<small>(per month, until April 2021, 2022, 2023)</small>		
Contract hire (per month)	£662	£583

RESALE VALUE BY YEAR

■ BMW X5 ■ Volvo XC90



THREE-YEAR COST

■ Depreciation ■ Insurance ■ Servicing ■ Road tax ■ Fuel (Test MPG) ■ Electricity (real-world range)

BMW X5

£24,584

£1808

£1350

Total

£35,210

Volvo XC90

£3534

£910

£3024

Total

£37,525

0 5000 10,000 15,000 20,000 25,000 30,000 35,000 40,000 45,000

PCP FINANCE COSTS

Three-year term, £6700 customer deposit, 10,000 miles per year

Car	BMW X5	Volvo XC90
Monthly cost	£873	£784
Manufacturer deposit contribution	£3345	£2250
Optional final payment	£32,843	£36,441
Representative APR	4.9%	4.9%
Excess mileage charge	15.2p per mile	14.9p per mile
Other fees	na	na

When it comes to interior space, both of our contenders are well endowed; even taller folk will be able to stretch out in comfort in the front. Behind them, the XC90 has more leg room when its middle-row seats are slid all the way back, while the X5 offers more head room. But whichever car you pick, a six-footer will be able to fit behind another and still remain perfectly comfortable. Middle-seat passengers will prefer the X5, due to its almost flat rear floor; there's a hump to straddle in the XC90.

While the X5 rules itself out as a seven-seater, there's plenty of room for kids in the XC90's third row; even normal-sized adults will be fine on shorter journeys. Our only grumble is that access to the third row is a little tight.

The XC90's boot is barely compromised in hybrid form, either, with the T8 losing only 40 litres of space compared with regular versions – roughly equivalent to a carry-on suitcase. The hybrid X5 is hit harder, losing 150 litres of space compared with other versions, with a higher boot floor and less underfloor storage space. The result is that while the X5 can swallow a still-decent nine carry-on cases, the XC90 can hold an even more impressive 10.

For convenience, the X5's rear seatbacks can be folded down via levers inside the boot. The XC90 only has release levers on the tops of the seatbacks, requiring you to go around to the side doors to operate them, unless you're exceptionally tall.

BUYING AND OWNING

Costs, equipment, reliability, safety and security

If you're a company car driver, both of these cars promise to drastically reduce ownership costs compared with their conventional petrol and diesel equivalents, thanks to their favourable BIK rates. But the X5's much lower tax band means it doesn't just beat the XC90 on BIK; it annihilates it. You'll pay less than half what you'd have to sacrifice each month with the XC90, saving you nearly £8000 over three years.

If you're contemplating a PCP finance deal, the XC90 is £89 per month cheaper on the same 36-month term with a limit of 10,000 miles per year and a £6700 deposit, while leasing it will cost you £79 per month less.

Things are tighter if you're planning on buying one privately with cash; in fact, there's barely anything in it for up-front costs. The X5 is predicted to hold onto its value better and is cheaper to

'You'll save nearly £8000 in company car tax over three years if you opt for the X5'

service, though, and its excellent electric-only range means you'll save around £1300 in combined petrol and electricity costs over three years, assuming both cars' batteries are topped up regularly and most of your journeys are around 40 miles long. When the batteries are fully depleted, the X5's petrol engine is a bit thirstier (25mpg on our Test MPG circuit, versus the XC90's 27.5mpg), but even so, the X5 will cost private buyers about £2300 less to run over three years when all the costs you're likely to face are factored in.

However, it's worth bearing in mind that most private buyers, who don't benefit from choosing a plug-in hybrid anywhere as much as business drivers, will be better off with a regular diesel version of either car, simply because they're cheaper to buy in the first place.


Both SUVs are well equipped, although the XC90 edges ahead thanks to climate control that allows occupants of both front seats and the outer rears to set their own temperature (the X5 has just two zones), plus keyless entry rather than just keyless start and a tailgate that opens if you wave your foot under the rear bumper instead of one that requires a button prod.

The XC90 also proves safer than the X5, doing a better job of protecting both adults and children in an impact. As for reliability, the XC90 finished just above mid-table in the luxury SUV class, while this generation of X5 was too new to appear. Volvo ranked 11th in the manufacturers' table (out of 31), well ahead of BMW in 21st spot.


Sadly, neither car comes with a Type 2 cable that allows faster charging – just one you plug into a three-pin plug socket. That means you'll be waiting five hours for the XC90 to charge fully from flat and 10.6 hours for the X5, due to its larger battery. At their maximum 3.7kW charging rate via a dedicated home wallbox, the XC90 still takes three hours and the X5 nearly seven, so we'd definitely take the optional Type 2 cable that you'd need to use one. Volvo charges only £50 for this and BMW £165.

STATS, SPECS AND RATINGS

BMW X5
xDrive45e M Sport
Width 2225mm



Volvo
XC90 T8 R-Design
Width 2140mm



ECONOMY & EMISSIONS

Official MPG (combined)	188.3-235.4 mpg	Official MPG (combined)	113.0mpg
Test MPG (battery depleted)	25.0mpg	Test MPG (battery depleted)	27.5mpg
Official electric range	54 miles	Official electric range	29 miles
Real-world electric range	32.5 miles	Real-world electric range	18.7 miles
Battery capacity	24kWh	Battery capacity	11.6kWh
Charging time (3.7kWh)	6.8 hours	Charging time (3.7kWh)	3 hours
Tank	69 litres	Tank	70 litres
CO ₂ emissions (WLTP)	39g/km	CO ₂ emissions (WLTP)	66g/km

SAFETY

Euro NCAP rating (2018)

■ All protection

89% 86% 75% 75%

Euro NCAP rating (2015)

■ All protection

97% 87% 72% 94%

POWERTRAIN

Engine	6cyl, 2998cc, petrol, plus electric motor	Engine	4cyl, 1969cc, petrol, plus electric motor
Peak power	389bhp (total system output)	Peak power	385bhp (total system output)
Peak torque	443lb ft (total system output)	Peak torque	295lb ft (petrol), 177lb ft (electric)
Gearbox	8-spd automatic	Gearbox	8-spd automatic

PERFORMANCE

Weather conditions Damp

0-60mph 5.1sec

Top speed 146mph

0-60mph 5.7sec

Top speed 140mph

Acceleration

30-70mph in kickdown 4.7sec

30-50mph in kickdown 2.0sec

50-70mph in kickdown 2.7sec

Braking

30-0mph 10.7m

70-0mph 58.4m

Noise at 30mph 61.0dB

Noise at 70mph 65.9dB

Turning circle 12.6m

Acceleration

30-70mph in kickdown 4.9sec

30-50mph in kickdown 1.9sec

50-70mph in kickdown 3.0sec

Braking

30-0mph 10.0m

70-0mph 55.7m

Noise at 30mph 60.3dB

Noise at 70mph 68.0dB

Turning circle 12.2m

CARS PICTURED

BMW X5 xDrive45e M Sport with Mineral White paint, Comfort Pack (£2495), Technology Pack (£2095), M Sport Plus Pack (£1900), Visibility Pack (£650)


Volvo XC90 T8 R-Design with Saville Grey paint (£700), Xenium Pack (£1600), Harman Kardon stereo (£850), Winter Pack (£525), Family Pack (£275)

WHATCAR? SAYS

Although the XC90's seven-seat capability will make it the only option for some, that isn't enough to see off the new plug-in hybrid X5. Yes, the XC90 is a little bit more agile and slightly better equipped and potentially safer in a crash, but we just can't ignore the small matter of money.

For company car drivers in particular, the X5 won't just be cheap to run for a luxury SUV; it'll be cheap to run full stop. It's still very good to drive and its more comfortable ride will matter more than agility to many. We wish it had more flexible rear seats, but there's plenty of space for both luggage and people, regardless. Factor in the X5's much better electric-only range and its smooth, powerful engine and it's the clear winner.

1




Buy this car at whatcar.com/new-car-deals

BMW X5 45e ★★★★★

For Cheaper as a company car; more cossetting ride; stronger performance; better infotainment; long electric range
Against Thirstier when battery is flat; less agile; rear seats don't side or recline

2



Buy this car at whatcar.com/new-car-deals

Volvo XC90 ★★★★★○

For Seven seats as standard; bigger boot; more flexible rear seats; better for safety
Against Firmer ride; coarser engine; noisier at high speeds; fiddly infotainment

Recommended options

Type 2 cable (£165)

Recommended options

Type 2 cable (£50), metallic paint (£700)

XC90 is more agile and leans less in corners, while X5 has a more comfortable ride

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BMW Plug-In hybrids and all-electric models, on sale now and coming soon



BMW 225xe Active Tourer

Price from £36,475



BMW 330e & BMW 330e xDrive Saloon

Price from £38,585 **What Car?** says ★★☆☆



BMW 530e & BMW 530e xDrive Saloon

Price from £46,820 **What Car?** says ★★☆☆



BMW 745e and BMW 745Le xDrive

Price from £78,465 **What Car?** says ★★☆☆



BMW X1 xDrive25e

Price from £38,200 **What Car?** says ★★☆☆



BMW X3 xDrive25e

Price from £47,565 **What Car?** says ★★☆☆



BMW X5 xDrive45e

Price from £64,745 **What Car?** says ★★☆☆



BMW i8 and BMW i8 Roadster

Price from £115,105 **What Car?** says ★★☆☆



BMW X2 xDrive25e

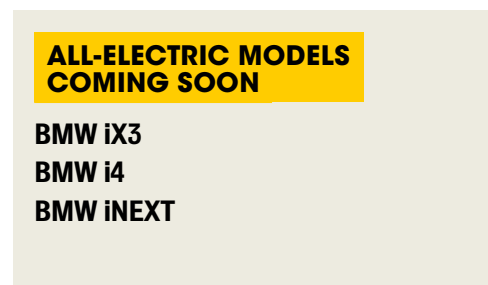


BMW 330e & BMW 330e xDrive Touring



BMW i3

Price from £36,025



**ALL-ELECTRIC MODELS
COMING SOON**

**BMW iX3
BMW i4
BMW iNEXT**

For more information on the BMW Plug-In Hybrid and all-electric ranges contact your local BMW Centre, or search: bmw.co.uk/plug-in-hybrid.

All prices excluding comparison models tested have been amended to on the road prices, from 1 April 2020. Official range, economy figures, CO₂ emissions and BIK amended to WLTP measurement from 6 April 2020.