

# 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

NEW



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

### Volvo XC90

T8 R-Design  
List price £66,645



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 CO<sub>2</sub> 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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 >>

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.

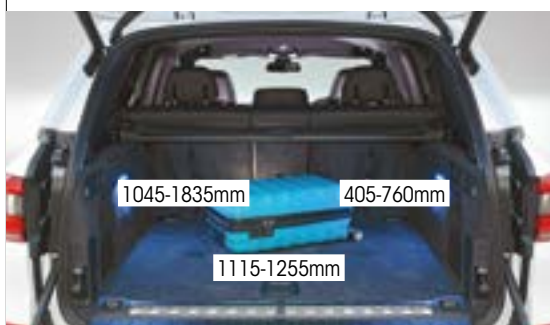
Mind you, the X5 has more naturally weighted steering that gets heavier as cornering forces and speed increase – just as it should. It's also very precise. The XC90's steering feels like the front wheels are half-buried in mud when you first turn the wheel, then there isn't enough weight build-up to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



- 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



- 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.



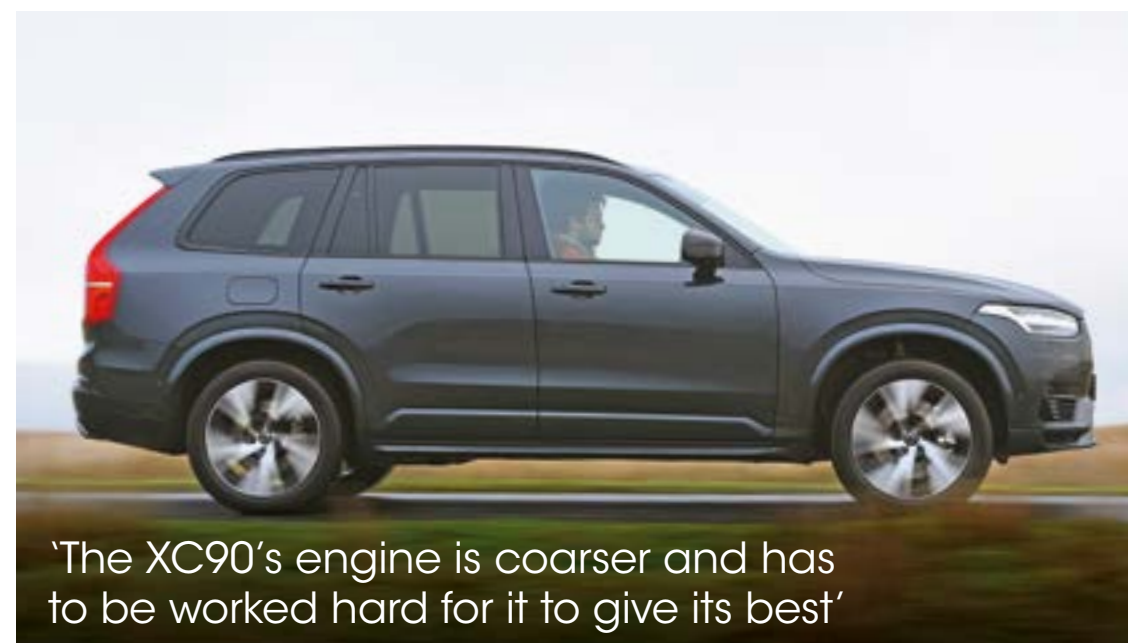
XC90 allows you to stretch out the most in the back, helped by the three sliding and reclining individual rear seats. It has a larger boot in five-seat mode, while its party trick is that it also has two decent third-row seats



Boot 262-640-1816 litres  
Suitcases 10

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



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

All prices correct at time of testing



BMW X5

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



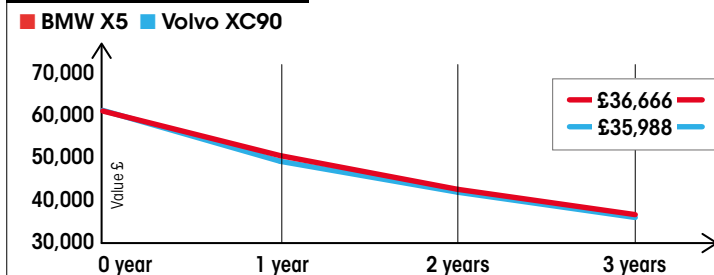
Volvo XC90

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

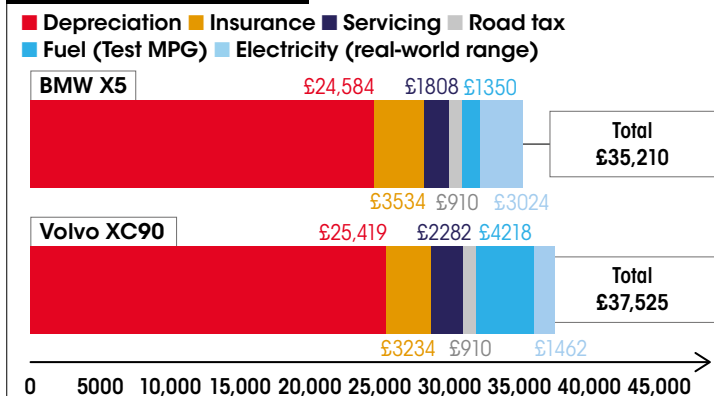
PRICES

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

RESALE VALUE BY YEAR



THREE-YEAR COST



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



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

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 other 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.

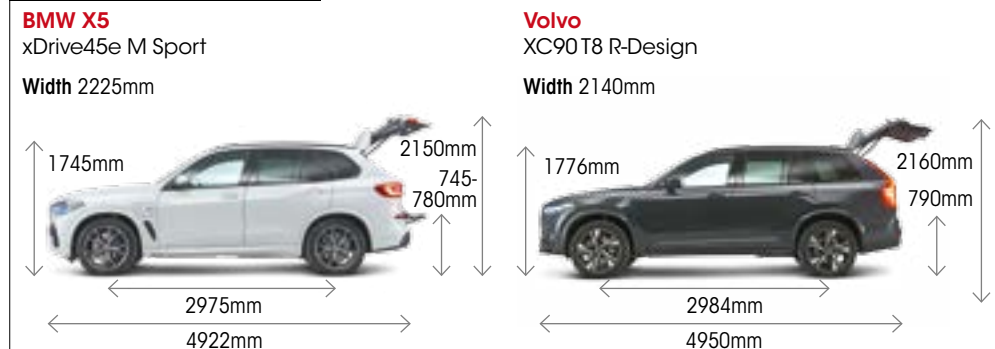
However, it's worth bearing in mind that most private buyers, who don't benefit from choosing a plug-in hybrid anywhere as much as business drivers, will be better off with a regular diesel version of either car, simply because they're cheaper to buy in the first place.

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



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 <sub>2</sub> emissions (WLTP)	39g/km	CO <sub>2</sub> emissions (WLTP)	66g/km

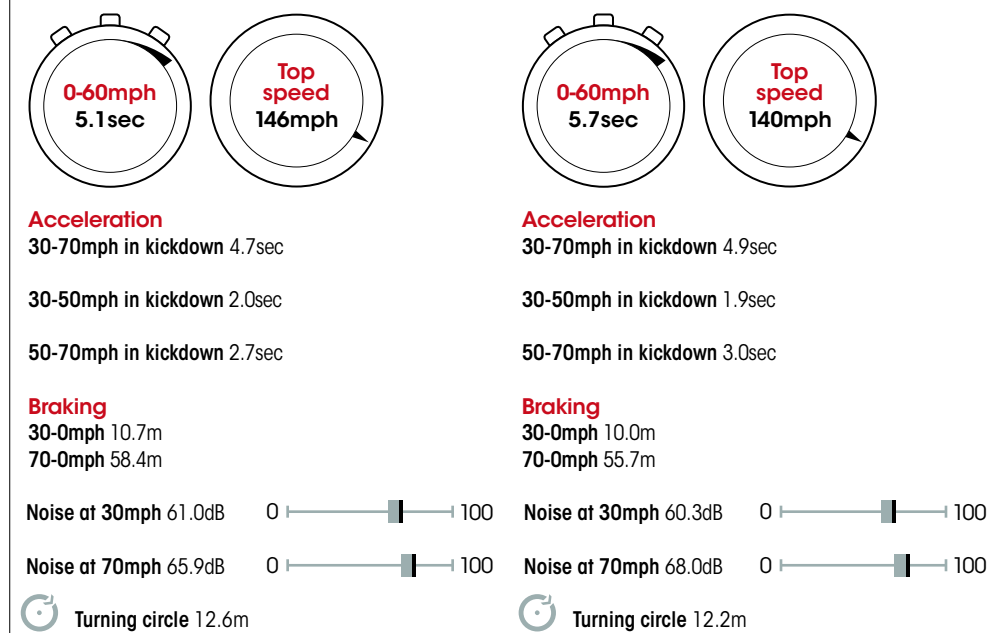
SAFETY

Euro NCAP rating (2018)	★★★★★	Euro NCAP rating (2015)	★★★★★
All protection	89% 86% 75% 75%	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



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)

EQUIPMENT

✓ Standard ✗ Not available	Alloy wheel size	Adaptive cruise control	Climate control	DAB radio/Bluetooth	Sat-nav	Infotainment screen size	Apple CarPlay/Android Auto	Leather seats	Keyless entry/start	Electric/gesture tailgate	Rear-view/360 deg camera	Metallic paint
BMW X5	19in	£2295*	2-zone	✓/✓	✓	12.3in	✓/✗	✓	£2350**/✓	£2350**/✓	✓/£2095***	✓
Volvo XC90	20in	✓	4-zone	✓/✓	✓	9.0in	£300	✓	✓	✓/✓	✓/£525	£700

\*Part Driving Assistant Professional pack \*\* Part of Comfort pack \*\*\* Part of Technology Pack

WHAT CAR? 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.



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

Recommended options

Type 2 cable (£165)



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 (£50), metallic paint (£700)