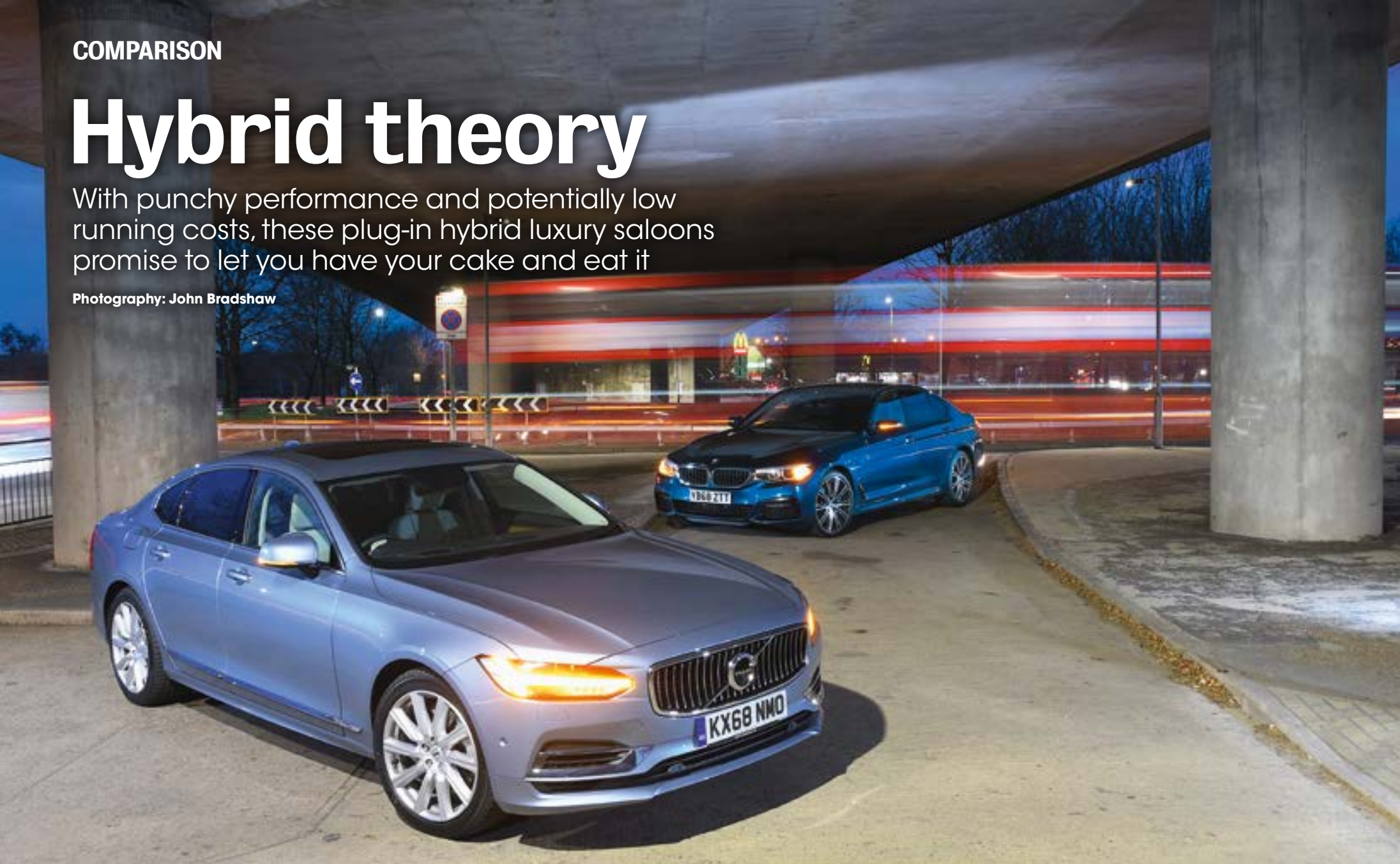


COMPARISON

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



BMW 5 Series vs Volvo S90

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

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

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

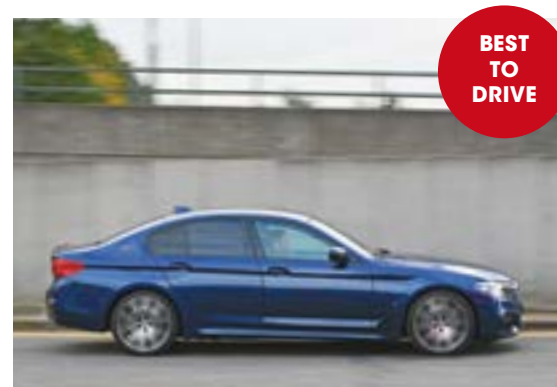
INFOTAINMENT

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).



BEST DRIVING POSITION

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

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 >>>

| 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

BMW 5 SERIES

Best Front Space

1105-1970mm (width), 280-375mm (depth), 855-1390mm (length)

950mm (width), 1440mm (length), 755mm (width)

985mm (width), 1495mm (length), 1120mm (width)

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

Best Boot Space

Best Rear Space

1120-2030mm (width), 485mm (depth), 1025mm (length)

940mm (width), 1425mm (length), 785mm (width)

935mm (width), 1460mm (length), 1095mm (width)

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 | £50,000 | £58,555 |
| Company car tax (until April 2019, 2020) | £216, £266 | £254, £312 |
| Contract hire (per month) | £380 | £529 |

RESALE VALUE BY YEAR

0 year: BMW 5 Series ~£45,000, Volvo S90 ~£45,000
1 year: BMW 5 Series ~£35,000, Volvo S90 ~£35,000
2 years: BMW 5 Series ~£30,000, Volvo S90 ~£30,000
3 years: BMW 5 Series £23,000, Volvo S90 £25,764

THREE-YEAR COST

BMW 5 Series
Total £32,571 (Depreciation £22,737, Insurance £1,791, Servicing £880, Road tax £1,076*)

Volvo S90
Total £40,454 (Depreciation £29,617, Insurance £1,836, Servicing £880, Road tax £1,217*)

* 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 | BMW 5 Series | Volvo S90 |
|-----------------------------------|----------------|----------------|
| Monthly cost | £565 | £564 |
| Manufacturer deposit contribution | £5953 | £2000 |
| Optional final payment | £18,054 | £25,764 |
| Representative APR | 5.0% | 0% |
| Excess mileage charge | 11.6p per mile | 14.9p per mile |
| Other fees | na | 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 | Volvo S90 |
|--------------------|--------------------|
| 530e M Sport | T8 Inscription Pro |
| Width 1868mm | Width 2025mm |
| 1479mm (height) | 1443mm (height) |
| 667mm (wheelbase) | 685mm (wheelbase) |
| 2975mm (wheelbase) | 2941mm (wheelbase) |
| 4936mm (length) | 4963mm (length) |

ECONOMY & EMISSIONS

| OFFICIAL MPG (WLTP) | Combined | 122.8mpg | OFFICIAL MPG (WLTP) | Combined | 128.4mpg |
|----------------------------|------------|----------|----------------------------|------------|----------|
| Test MPG | 33.1mpg* | | Test MPG | 25.8mpg* | |
| Fuel cost per 12,000 miles | £1441** | | Fuel cost per 12,000 miles | £1629** | |
| Tank | 46 litres | | Tank | 60 litres | |
| CO2 emissions (NEDC) | 49g/km | | CO2 emissions (NEDC) | 49g/km | |
| Real-world electric range | 18.1 miles | | 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 | ★★★★★ | Euro NCAP crash rating | ★★★★★ |
| All protection | 91% (85% 81% 59%) | All protection | 96% (84% 74% 76%) |

POWERTRAIN

| | | | |
|-------------|--|-------------|---|
| Engine | 4cyl, 1998cc, turbo, petrol, plus electric motor | Engine | 4cyl, 1969cc, turbo/supercharged, petrol, plus electric motor |
| Peak power | 248bhp @ 5000rpm (combined) | Peak power | 385bhp @ 6000rpm (combined) |
| Peak torque | 214lb ft @ 1350-4250rpm (engine) | Peak torque | 295lb ft @ 2200-4800rpm (engine) |
| Gearbox | 8-spd automatic | Gearbox | 8-spd automatic |

PERFORMANCE Weather conditions Dry

| | | | |
|---------|--------|-----------|--------|
| 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