# VW Passat (2024)

1.5 ETSI BUSINESS PETROL FWD AUTOMATIC


## Sustainability Rating

2025 | ★★★☆☆ | 55%

### Clean Air
7.8 /10

### Energy Efficiency
5.5 /10

### Greenhouse Gases
3.4 /10

## Driving Experience

### Consumption & Range
ADEQUATE

### Cold Winter Performance
NOT APPLICABLE

### Charging Capability
NOT APPLICABLE

## Our verdict

The VW Passat tested here is equipped with a 1.5 eTSI petrol engine and is rewarded 3 Green stars thanks to its balanced performance in all three sustainability indices. However, the combustion engine is only supported by a weak hybridisation and the achievements of a conventional petrol powertrain remain limited.

- The Passat demonstrates solid and balanced exhaust emissions control in all test conditions, with low tyre abrasion but limited brake abrasion reduction due to minimal recuperation.
- Its fuel consumption is typical for its class, and while the lack of a battery helps reduce production energy demand, petrol use limits overall efficiency.
- Greenhouse gas emissions are high due to fossil fuel combustion, resulting in a low life cycle climate impact score despite reasonable fuel consumption figures.

Disclaimer

Think before you print

## Clean Air

7.8 /10

### Comments

The Passat scores controls its exhaust emissions well and robustly across all tests, likewise in the winter cold start test and in the high power demand Highway Test. None of the pollutant species require special attention, the performance is balanced and solid. Due to the reasonable mass and well controllable accelerator pedal response, the tyre abrasion emissions are low, however, there is no other factor but the limited 48 volt system recuperation possibility to reduce brake abrasion.

## Exhaust emissions

Exhaust pollutant emissions are produced from combustion engines. Although current emission legislation is very strict, this type of emission directly affects air quality, and not all vehicles perform equally well. Read more

ADEQUATE

8.1/10

### In laboratory

Green NCAP performs a wide range of tests on cars in the laboratory. This is the best way to ensure controlled conditions and guarantee that all cars are tested in the same way, making their results comparable. Read more

ADEQUATE

7.4 /10

| | NMHC | $NO_x$ | $NH_3$ | CO | PN | PM | Score |
|---|---|---|---|---|---|---|---|
| Legal test (WLTP) | ● | ● | ● | ● | ● | ● | 6.1/8 |
| Warm weather | ● | ● | ● | ● | ● | ● | 8.2/10 |
| Highway | ● | ● | ● | ● | ● | ● | 6.7/10 |
| Winter cold start | ● | ● | ● | ● | ● | ● | 7.1/10 |
| Winter warm start | ● | ● | ● | ● | ● | ● | 8.5/10 |

### On road

An on-road driving test , using portable emissions measuring equipment complements Green NCAP's laboratory tests. Read more

GOOD

9.0 /10

| | NMHC | $NO_x$ | $NH_3$ | CO | PN | PM | Score |
|---|---|---|---|---|---|---|---|
| Real-world mixed drive | ● | ● | ● | ● | ● | ● | 8.0/10 |
| Short city trip | ● | ● | ● | ● | ● | ● | 9.8/10 |
| Congestion | ● | ● | ● | ● | ● | ● | 2.0/2 |

● good ● adequate ● marginal ● weak ● poor ● not applicable

# Clean Air

7.8 /10

## Non-exhaust emissions

Driving a vehicle also produces emissions different from those of the exhaust pipe. Green NCAP evaluates vehicle properties that contribute to tyre and brake abrasion.

MARGINAL 5.7/10

### Tyre wear

ADEQUATE 5.1/6

Tyre abrasion releases small particles during driving, and some vehicle properties have major impact on it. Heavier vehicles, wheel alignment causing increased slip angle, and aggressive acceleration responses all increase tyre wear and particle emissions. Read more

| | Result | Score |
|---|---|---|
| Influence of mass | | 2.1/3 |
| Wheel alignment | | 1.0/1 |
| Accelerator response | | 2.0/2 |

### Brake wear

WEAK 1.7/6

Brake dust, produced by friction brakes, can be mitigated through filters, enclosed brake systems (like drums), or by reducing friction brake use with regenerative braking in electrified vehicles. Containment keeps dust inside the system, while recuperation lowers brake wear. However, heavier vehicles still generate more brake abrasion due to their greater stopping demands. Read more

| | Result | Score |
|---|---|---|
| Brake dust mitigation | | 0.0/4 |
| Brake dust containment | | 0.0/6 |
| Recuperative braking - warm test | | 1.7/6 |

good adequate marginal weak poor not applicable

## Clean Air

7.8 /10

## Additional Life Cycle Assessment information

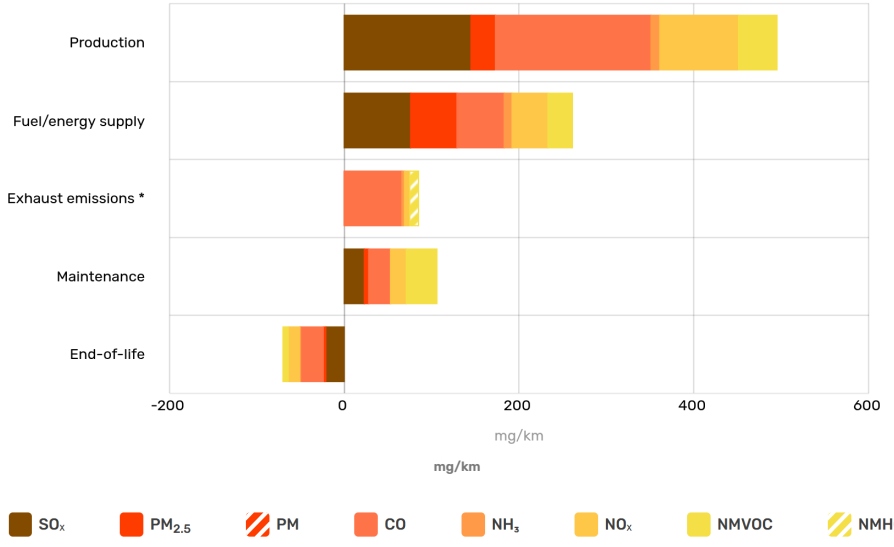
Life Cycle Assessment (LCA) investigates the environmental impact of a car over its entire lifetime, 'from cradle to grave'. In this section, pollutants are estimated in the various stages of a vehicle's life other than use. The chart also displays the measured emissions related to usage, which are taken as an average from the tests and are scored separately in the 'Exhaust emissions' part above. The end-of-life approach uses results in negative values because the benefit of materials recovery and recycling exceeds the effort of obtaining and processing virgin raw materials.

GOOD

9.4 /10

### Pollutants

Most of the vehicle exhaust pollutant species are also emitted in others life cycle phases. These are health- and nature-damaging compounds, the amount of which should be reduced as well.




* Exhaust emissions are not contributing to the score in Additional Life Cycle Assessment information because they are scored in the Exhaust emissions section above

good adequate marginal weak poor not applicable

## Energy Efficiency

5.5 /10

### Comments

The car's petrol consumption figures are as expected for this type of vehicle. In terms of life cycle assessment, the total primary energy demand benefits from the absence of a heavy battery, the production of which would increase the need for energy, but the amounts of fuel needed by a conventional combustion engine limit the achievable score in this section.

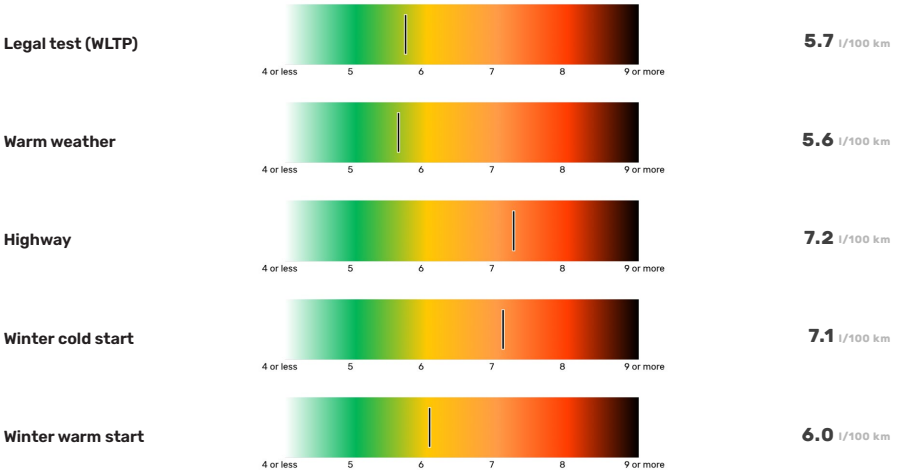
## Energy demand

MARGINAL 5.4 /10

### Propulsion energy consumption in laboratory

MARGINAL 3.1 /10

The vehicle's measured consumption figures are displayed in the bar chart. The colour scheme positions the values relative to low and high figures in a typical range. The ranges are different for combustion engine and pure electric vehicles.




good adequate marginal weak poor not applicable

# Energy Efficiency

5.5 /10

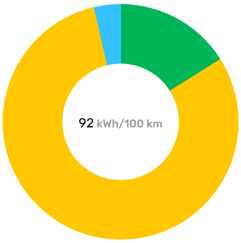
## Additional Life Cycle Assessment information

GOOD

10.0/10

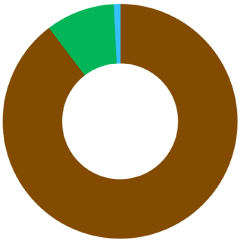
Life Cycle Assessment (LCA) investigates the environmental impact of a car over its entire lifetime 'from cradle to grave'. In this section, the total vehicle life cycle primary energy demand is displayed. The scoring does not consider the direct propulsion energy use, because it is scored separately in the 'Propulsion energy consumption in laboratory'.

### Total LCA energy consumption




- Production & recycling 16.1%
- Battery production 0.0%
- Fuel/energy supply * 80.3%
- Maintenance 3.6%

### Energy source share in total LCA consumption



- Fossil 89.7%
- Renewable 9.5%
- Other 0.8%

**Direct propulsion energy share is not shown, it is included in 'Fuel/energy supply'.**

## Rolling resistance

Rated here is the vehicle's resistance to movement at low speeds. Different factors have an impact on it, but the most significant one is mass.

MARGINAL

5.9/10

good adequate marginal weak poor not applicable

## Greenhouse Gases

3.4 /10

### Comments

Although the non-usage LCA phases of a conventional vehicle emit less greenhouse gases compared to an electric car, the combustion of the fossil fuel increases the emissions disproportionately and leave the Passat with a low score in this part of the assessment, despite the reasonable consumption figures given its petrol engine.

## Exhaust GHG emissions

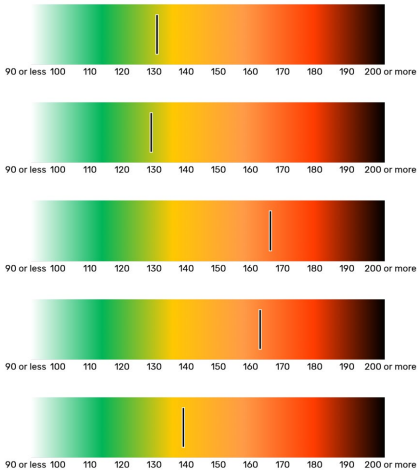
Combustion of conventional fuels releases greenhouse gases at the vehicle's tailpipe. The most significant of these gases are the emissions of $CO_2$. Green NCAP's assessment considers methane ($CH_4$) and laughing gas ($N_2O$) as well. Together, these are counted with their global warming potential to a sum known as $CO_2$ equivalent.

WEAK

1.5 /10

### In laboratory

Green NCAP performs a wide range of tests on cars in the laboratory. This is the best way to ensure controlled conditions and guarantee that all cars are tested in the same way, making their results comparable. Read more




good adequate marginal weak poor not applicable

## Greenhouse Gases

3.4 /10

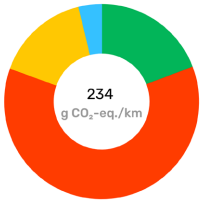
## Additional Life Cycle Assessment information

Life Cycle Assessment (LCA) investigates the environmental impact of a car over its entire lifetime, 'from cradle to grave'. In this section, the total vehicle life cycle greenhouse gas emissions are displayed.

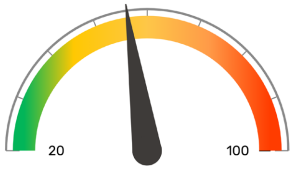
ADEQUATE

8.4 /10

### Total LCA GHG emissions




- Production & recycling 19.3%
- Battery production 0.0%
- Tailpipe emissions * 61.3%
- Fuel/energy supply 15.7%
- Maintenance 3.7%




tonnes $CO_2$-equivalent/vehicle

Vehicle Life Cycle average emissions **56** (+/-)
(best **51** | worst **62**)

* The scoring does not consider the direct exhaust GHG emissions at the tailpipe, because they are scored separately in 'Exhaust GHG emissions' above.

good adequate marginal weak poor not applicable

# Driving Experience

## Consumption & Range

ADEQUATE

## Cold Winter Performance

NOT APPLICABLE

## Charging Capability

NOT APPLICABLE

**Green NCAP Comment**

The Driving Experience evaluation of conventional vehicles focuses only on the performance in section 'Consumption and Range'. The Passat's estimated real-world consumption figures are seen as adequate in all conditions – warm weather and cold winter, urban, rural, highway and mixed driving scenarios. The consumption readings on the computer display board are accurate.

## Consumption & Range

ADEQUATE

### Estimated actual consumption

ADEQUATE

What consumption can be expected in real world conditions?

In-laboratory measured consumption values are only partially representative of real-world use. Green NCAP's estimates aim at providing more realistic figures, which are based on measured results, modified by correction factors.

| Conditions | Urban | Rural | Highway | Mixed | |
|---|---|---|---|---|---|
| Warm weather | 8.0 | 5.4 | 5.9 | 6.2 | l/100 km |
| Cold Winter | 9.6 | 6.2 | 6.8 | 7.3 | l/100 km |

### Accuracy of display

GOOD

Is the consumption figure on the display correct?

good adequate poor not applicable

## Cold Winter Performance

NOT APPLICABLE

good adequate poor not applicable

## Charging Capabilities

NOT APPLICABLE

good adequate poor not applicable

## Specifications

**Vehicle class**
Large Family Car

**System power/torque**
110 kW/250 Nm

**Engine size**
1,498 cc

**Declared consumption**
5.7 l/100 km

**Declared driving range**
Overall n.a.
City n.a.

**Declared $CO_2$**
129 g/km

**Declared battery capacity**
Usable (net) n.a.
Installed (gross) 0.7 kWh

**Mass**
1,574 kg

**Heating concept**
Waste heat

**Tyres**
235/45 R18

**Emissions class**
Euro 6 EA

**Tested car**
WVWZZZCJ7RD00xxxx

**Publication date**
09 2025

## Also covered by this rating

**Other models**
Škoda Superb
1.5 TSI mHEV petrol FWD automatic