Commercial Vehicles

The Caddy

Environmental Commendation

There’s more to being good than just quality
The Environmental Commendation for the Caddy

Versatility and economy are the hallmarks of the Caddy. But no less impressive are the BlueMotion Technologies that enhance the environmental profile of the “best Caddy of all time”.

This in turn has a positive knock-on effect for the total cost of ownership, which includes taxes, insurance, registration charges and the vehicle operating costs. Because lower fuel consumption and compliance with more stringent exhaust emission standards will cut these cost factors, too.

Volkswagen aims to develop new models that present better environmental properties than their respective predecessors over the full life cycle. Environmental impacts are not restricted to the service life of a vehicle; they also occur during production of the raw materials, during manufacturing and ultimately during recycling and disposal. That’s why, when we plan and develop our vehicles, we do so not just in line with criteria such as safety, comfort and visual appeal, but also with the Group-wide environmental goals of the Technical Development department. This ensures that we not only meet the legal requirements in terms of emissions and materials, but also adopt a holistic approach that embraces the entire value chain.

In order to reduce environmental impacts to a reasonable minimum, the full life cycle of a product must be taken into account. To this end, Volkswagen draws up Life Cycle Assessments that analyse the creation of new vehicles, components and materials. On top of this we also consider the environmental impact of production of the fuel consumed during the vehicle’s service life.

In a Life Cycle Assessment in line with ISO 14040 the first step is to document all the relevant types and quantities of material and types and quantities of energy consumed in the production, use and recycling of the product. Step two is a

The Environmental Commendation

We use Environmental Commendations to inform our customers, our shareholders and other stakeholders within and outside the company how we are making Volkswagen’s products and production processes more environmentally compatible and what we have achieved in this respect. The information in this Environmental Commendation is based on a Life Cycle Assessment of the Caddy which has been verified and certified by the technical inspection organisation TÜV NORD. The TÜV certificate confirms that the Life Cycle Assessment is based on reliable data and that the methods used to compile it comply with the requirements of ISO standards 14040 and 14044

Life Cycle Impact Assessment which classifies the environmental impact of the product into categories such as global warming, photochemical ozone creation, soil and water acidification and eutrophication. This is followed by interpretation of the findings of the first two steps. For the Life Cycle Assessment of the Caddy®* we compared the two diesel-engined versions 1.6 TDI and 1.6 TDI BlueMotion Technology (75 kW) of the Delivery Van[1][2] and Startline[3][4] models with their similarly engined predecessors. All current models comply with the Euro 5 exhaust emissions standard.

A promise kept

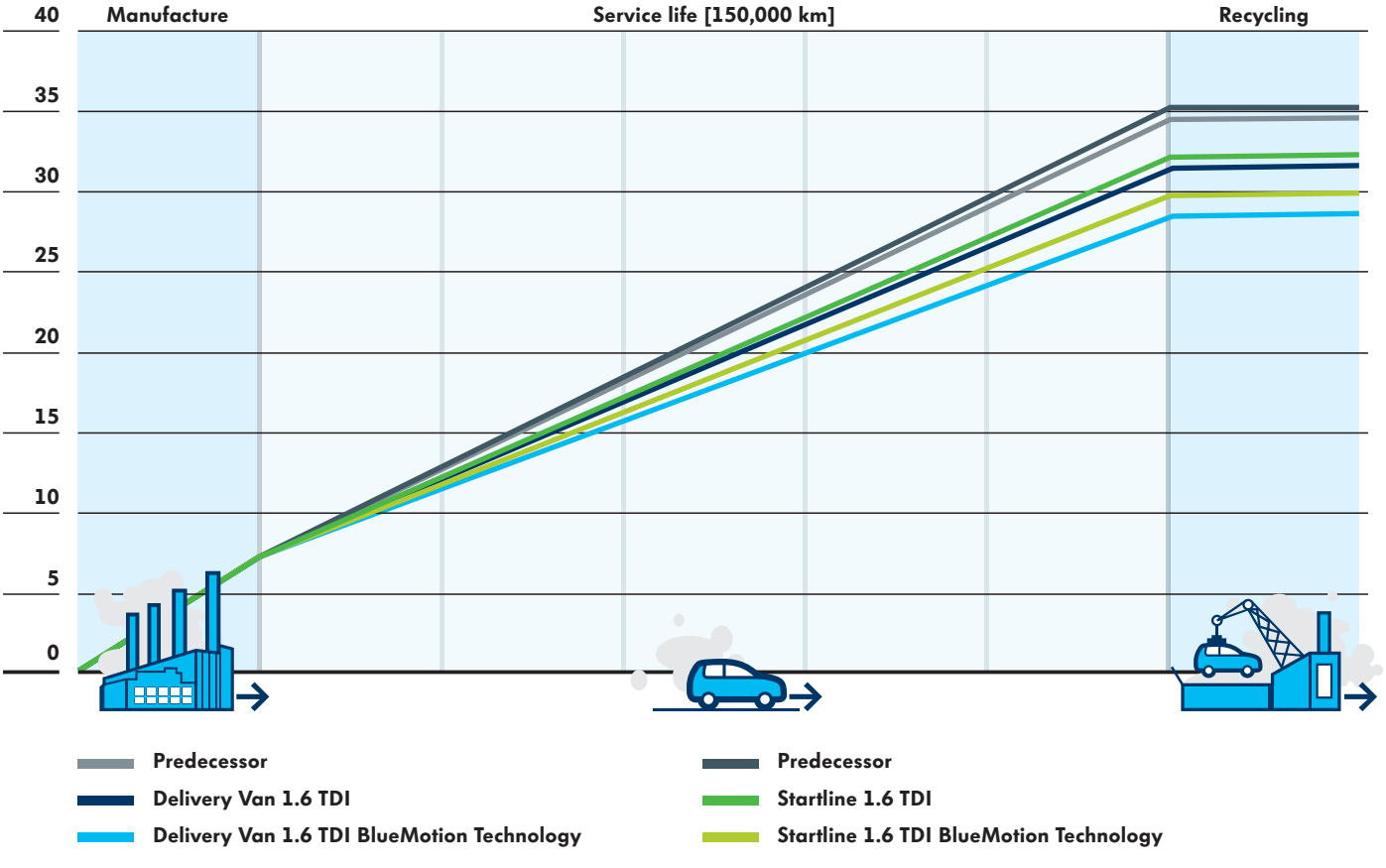
True to our goal of ensuring that each new model outperforms its predecessor in ecological terms, the new Caddy presents a better balance sheet over its full life cycle with regard to its environmental impact. The improvements are largely accounted for by lower fuel consumption and the

Urban/non-urban/combined, L/100 km; g CO_2/km

[1] 6.5/5.1/5.6 L/100 km; 147 g/km
[2] 5.7/4.5/4.9 L/100 km; 129 g/km
[3] 6.6/5.2/5.7 L/100 km; 149 g/km
[4] 5.9/4.7/5.1 L/100 km; 134 g/km

* The product name Caddy® is a registered trademark of Caddie S.A. and is used by Volkswagen Commercial Vehicles with the kind approval of Caddie S.A.

Comparison of impact on global warming potential
t CO_2 equivalents



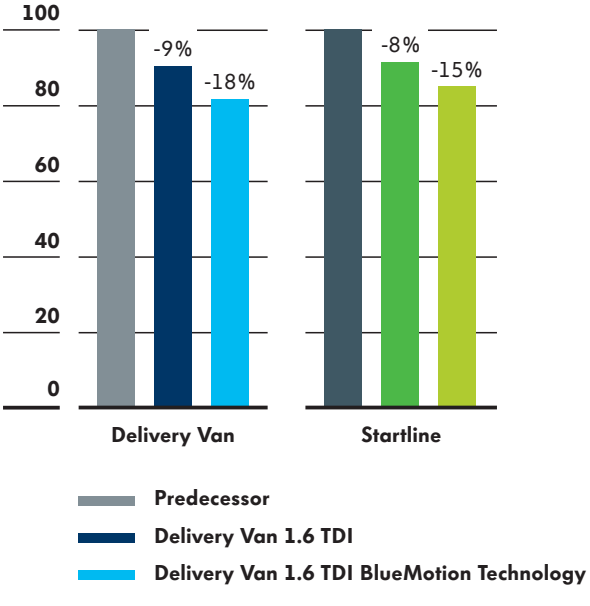
resultant drop in driving emissions and the accompanying reduced environmental impact of the fuel production process.

For an assumed lifetime mileage of 150,000 kilometres our calculations for the Caddy Delivery Van indicate life-cycle emissions of 22.1 tonnes of CO_2 equivalents[2] for the 1.6 TDI and 19.4 tonnes for the model with BlueMotion Technology. The values for the Caddy Startline model worked out at 22.4 tonnes of CO_2 equivalents2 for the 1.6 litre model and 20.1 tonnes for the 1.6 TDI with BlueMotion Technology.

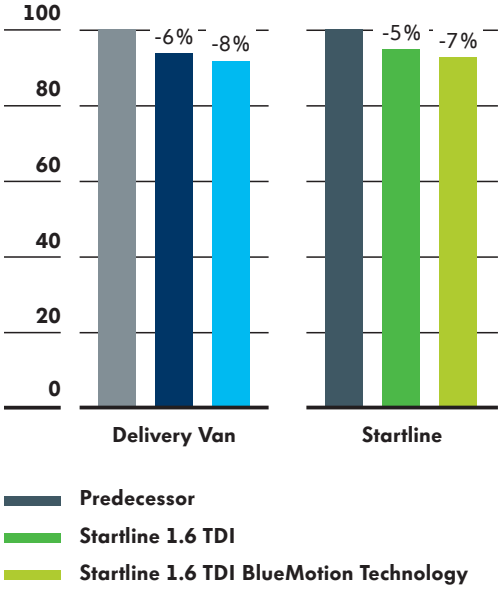
Viewed over the full life cycle, in terms of global warming potential this means a reduction of approximately 9% and 8% respectively for the two 1.6 litre Caddy models compared to their predecessors. For the BlueMotion Technology models we calculated savings of around 18% and 15% of CO_2 equivalents respectively.

In addition, the reduction in fuel consumption and the associated savings in terms of fuel production lead to a further easing of the burden on the environment, for example in terms of emissions that can lead to impairment of local air quality (photochemical ozone creation potential[2]). Further details on the Life Cycle Assessment of the Caddy can be found in the Background Report to the Environmental Commendation at www.environmental-commendation.com

Reduction in global warming potential over full life cycle
in %



Reduction in photochemical ozone creation potential over full life cycle
in %



Environmental Description, Caddy

Generally improved environmental profile over the full vehicle life cycle compared with the predecessor model due to lower fuel consumption and reduced emissions

Global warming potential – less CO2 emissions overall*

– Delivery Van -9% (1.6 TDI**) or -18% (1.6 TDI BlueMotion Technology**)
– Startline -8% (1.6 TDI**) or -15% (1.6 TDI BlueMotion Technology**)

Reduced photochemical ozone creation potential (improvement of local air quality)*

– Delivery Van -6% (1.6 TDI**) or -8% (1.6 TDI BlueMotion Technology**)
– Startline -5% (1.6 TDI**) or -7% (1.6 TDI BlueMotion Technology**)

Reduced driving emissions (CO2)*

– Delivery Van 147 g/km (1.6 TDI**) or 129 g/km (1.6 TDI BlueMotion Technology**) compared to predecessor's 164 g/km
– Startline 149 g/km (1.6 TDI**) or 134 g/km (1.6 TDI BlueMotion Technology**) compared to predecessor's 164 g/km

Reduction of other driving emissions (CO, NOx, particulates) through

– Euro 5 exhaust emissions standard instead of Euro 4

Reduction of fuel consumption through

– new 4-cylinder TDI engines
– transmission ratios selected for optimised fuel consumption

Additional savings in models with BlueMotion Technology through

– tyres with optimised rolling resistance
– engine with stop-start system
– regenerative braking (recuperation)
– wheel spoilers

Resource conservation through

– Use of long-lasting components (maintenance-free particulate filters)
– Longer service and oil-change intervals
– Use of renewable raw materials (e.g. for filter materials)

Other highlights

– Recycling type approval successfully completed

* Applies to the actual vehicles assessed in this test series
** See inside for fuel consumption and emissions figures

The Caddy
Environmental Commendation

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Environmental Commendation

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