An overview of Euro VI for trucks over 3.5t

Brought to you by Mercedes-Benz
What is Euro VI?

Euro VI is a limit set for the emissions of Heavy Duty vehicles. It states maximum values for what is allowed to come out of the exhaust.

In a typical diesel engine exhaust, the emissions are:

- 99.5% Unregulated
- 0.5% Regulated

For health and air quality, the most important regulated emissions are:

- NO\textsubscript{x} (Oxides of Nitrogen)
- PM (Particulate Matter)

Also regulated are:

- HC (Hydrocarbons)
- CO (Carbon monoxide)
- NH\textsubscript{3} (Ammonia)
What’s different about Euro VI?

Euro VI enforces a large reduction in pollutants:
- Over 99% reduction in Particulate Matter
- Over 97% reduction in NOx

What about CO₂?
- CO₂ is currently not included in any truck emissions standard as it is not a regulated emission. It is however directly linked to fuel used; a 5% saving in fuel is a 5% reduction in CO₂.

What about Euro VII?
- Currently, nobody knows what Euro VII will be, or when it will come. It is very likely that it will include a CO₂ measurement for the first time.

When do you need to think about it?

When do I have to change?
- New Euro V trucks can be registered until 30 December 2013.
- If the Euro V truck is built on or before 30 September 2013, it can be registered any time until 31 October 2014*.

Should I change earlier?
- Euro VI trucks registered before 30 December 2013 are eligible for a Reduced Pollution Certificate (RPC), saving up to £500 per year in Road Fund Licence until 2017, depending on taxation class.** Please check with the DVLA for the latest rates of vehicle tax.

Future Proofing:
- London and many other European cities have low emission zones that only let vehicles of clean emission standards in, and many cities in the UK are looking to follow suit.
- In Germany, the road pricing system rewards cleaner vehicles with lower road tolls. Any scheme introduced locally may follow the same route.

*30 December 2014 if it complies with the new “General Safety Regulation.”
**£500 p/a 32t+, £240-£370 p/a 16-31t, £5-£40 p/a up to 15t at the time of publication.
How is Euro VI achieved?

This standard is the most stringent so far and the most effective in reducing regulated emissions. But, this has resulted in a number of potentially negative effects including increased diesel and AdBlue® consumption and higher maintenance costs. And the initial cost for a Euro VI vehicle will be higher than for an equivalent Euro V vehicle, but the difference will depend on the specification of the truck.

At Euro IV and V the emission regulations could be met by choosing from the available technologies. To achieve Euro VI a combination is required. The diagram on the right lists the technologies, as well as the effects of using each system at Euro VI.

### Available technologies

<table>
<thead>
<tr>
<th>Technology</th>
<th>What does it do?</th>
<th>What is it?</th>
<th>Effects</th>
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<tbody>
<tr>
<td><strong>SCR (Selective Catalytic Reduction)</strong></td>
<td>- Reduces NO(_x) (Oxides of Nitrogen)</td>
<td>- Addition of Ammonia to exhaust system (using AdBlue®)</td>
<td>- Increased vehicle weight</td>
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<tr>
<td><strong>EGR (Exhaust Gas Recirculation)</strong></td>
<td>- Reduces NO(_x) (Oxides of Nitrogen)</td>
<td>- Cooled exhaust gas added to intake air</td>
<td>- Increased fuel consumption</td>
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<tr>
<td><strong>DPF (Diesel Particulate Filter)</strong></td>
<td>- Reduces PM (Particulate Matter)</td>
<td>- Filters out soot particles from exhaust gas</td>
<td>- Increased maintenance to remove ash</td>
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How can Mercedes-Benz help you with Euro VI?

It’s not all bad news.

- At Mercedes-Benz we have chosen to use all three technologies, precisely controlled, to give the lowest possible overall running cost and best driveability.

- We have developed a new range of trucks and engines with improvements in fuel consumption, AdBlue® consumption and maintenance costs.

- These improvements are so great that they more than cancel out the potential negative effects of Euro VI, and actually lower running costs!
Using a long distance truck as an example, the chart above shows how new Actros at both Euro VI and Euro V compares to the very best of the previous generation at Euro V.

<table>
<thead>
<tr>
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<th>Euro V Actros</th>
<th>Euro V New Actros</th>
<th>Euro VI New Actros</th>
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<tbody>
<tr>
<td>Fuel Consumption</td>
<td>-7%</td>
<td>-5%</td>
<td>-6%</td>
</tr>
<tr>
<td>AdBlue® Consumption</td>
<td>-5%</td>
<td>-5%</td>
<td>-5%</td>
</tr>
<tr>
<td>Maintenance Costs</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
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New Actros Euro V models are only available in selected configurations to let you take advantage of the increased fuel saving on long distance operations.

Residual Values for Euro VI trucks will be significantly higher.
For more information on Euro VI and how we can help you lower running costs, please contact your local Mercedes-Benz Commercial Vehicle Dealer by visiting www.mbtrucks.co.uk/dealerlocator or by calling 0800 090 090.