Low-Carbon Cars In Germany

A summary of socio-economic impacts
Modelling approach for Fuelling Europe’s Future
The low-carbon scenario closely mirrors EU policy, OEM announcements.
Marginal cost of ICE increases to 2030; cost of e-drive reduces.
Total cost of ownership converges around 2030

Note(s): High and low sensitivities reflect high/low assumptions on electricity prices, fuel prices, mileage and borrowing costs.
Several €billion on charging infrastructure by 2030
Smart charging can offset grid reinforcement costs
National fuel spending declines sharply in central case
GDP gains due to efficiency, e-mobility, crude prices
Employment impacts are felt across multiple sectors
The net economic impact has been positive where studied.

<table>
<thead>
<tr>
<th>EU Region</th>
<th>GDP 2030</th>
<th>Employment 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>+0.2-0.4%</td>
<td>+850,000</td>
</tr>
<tr>
<td>France</td>
<td>+0.2-0.4%</td>
<td>+66,000 – 71,000</td>
</tr>
<tr>
<td>Britain</td>
<td>+0.1%</td>
<td>+7,000 – 19,000</td>
</tr>
<tr>
<td>Germany</td>
<td>+0.5-0.6%</td>
<td>+145,000</td>
</tr>
</tbody>
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Key findings:

• E-drive cars should reach cost parity during 2020s
• Infrastructure costs are high, but manageable
• Low-carbon mobility can deliver economic benefits BUT requires €billions in charging network
• Overall net employment is increased BUT skills/training challenges occur in auto sector
• Smart charging is essential to capture economic and environmental benefits