Energy Efficiency in Industry

Germany’s approach to decarbonising industry

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BMWi IIC6 -Energy Research-

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The *Energiewende* represents the long-term energy and climate strategy of Germany

<table>
<thead>
<tr>
<th>Climate</th>
<th>Achieved 2016</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
<th>2045</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>% greenhouse gas reduction (vs. 1990)</td>
<td>27.6%</td>
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<tr>
<td>% gross electricity consumption</td>
<td>31.7%</td>
<td>35</td>
<td>40 to 45</td>
<td>50</td>
<td>55 to 60</td>
<td>65</td>
<td>80</td>
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<tr>
<td>% gross final energy consumption</td>
<td>14.8%</td>
<td>18</td>
<td>30</td>
<td>45</td>
<td>60</td>
<td></td>
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<tr>
<td>Energy Efficiency</td>
<td></td>
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<tr>
<td>primary energy consumption (vs. 2008)</td>
<td>-6.9%</td>
<td>-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-50</td>
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<tr>
<td>primary energy demand buildings (vs. 2008)</td>
<td>-15.9% (2015)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-80</td>
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<tr>
<td>transport final energy consumption (vs. 2005)</td>
<td>+1.3% (2015)</td>
<td>-10</td>
<td>-15 to -20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-40</td>
</tr>
</tbody>
</table>

Source: BMWI 2016, UBA 2017
Challenges in Industry – Need to change in fossil heating

Final energy according to energy sources and applications
A sound mix of energy efficiency instruments is key to achieve Germany’s emissions reduction targets

KfW CO₂ building renovation programme
Market incentive programme
Technology grants
Highly efficient “cross-sectional technologies”
Competitive invitations to tender for power efficiency (STEP up!)

Statutory requirements placed on buildings quality and energy consumption for new buildings and renovations (EnEV)
EDL Act
Energy consumption labelling (EU)

Provision of information by the public sector
Offers of advice
Comprehensive communication measures

EU emission trading
Energy charge, electricity tax, car tax, truck toll

Financial assistance
Quantitative measures
Regulatory law
Price measures
Information & advice
Research & development

Broad-based and well networked energy research

Source: BMWi 2017
Thank you for your attention

Contact details

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