

Low CO₂ MOTION

training and workshop on greener fuels and vehicles

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Alternative Fuels and Vehicles



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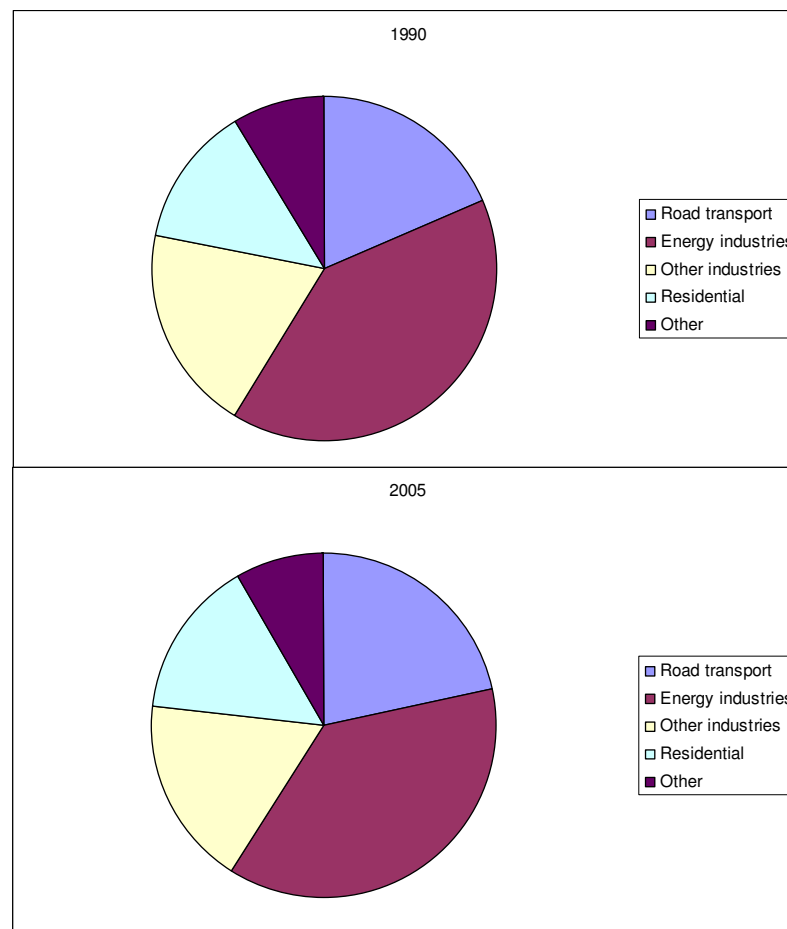
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Alternative fuels and vehicles in the UK

- Background
- Range of alternatives
- Use and availability
- Assessing best options
- Examples

Background

- In the UK, transport produces 22% of CO₂ emissions (2005)
- Between 1990 – 2003 the share of CO₂ from transport increased by 24%
- EU Biofuel Directive and the UK RTFO



Range of alternatives



- Biodiesel
 - Fossil diesel substitute
 - Produced from plant oils and animal fats
- Bioethanol
 - Fossil petrol substitute
 - Produced from starch, sugar and sometimes cellulose plants
- Pure Plant Oil
 - Fossil diesel alternative in modified engines
 - Produced from vegetable oil seeds
- Biogas
 - Fossil gas fuel alternative
 - Produced from plant or animal waste

Range of alternatives



- Hydrogen
 - Produced from hydrocarbon source or electrolysis



- Hybrid



- Electric

Use and Availability



- Biodiesel
 - Increasing production and improving refuelling infrastructure



- Bioethanol
 - Concentration in 2 regions: East Anglia, Somerset



- PPO/SVO
 - Small scale production and use at local level



- Biogas
 - Some trials
 - Availability planned in next 5 years

Use and Availability



- Hydrogen
 - Used in handful of pilot projects, promising technology, not yet economically viable



- Hybrid



- Electric