Drivers of recent EU energy consumption growth

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What explains the uptick since 2014?

EU 28 primary energy consumption and final energy consumption (Mtoe)

Source: Eurostat
Why focus on final energy consumption?

Factors affecting EU 28 primary energy consumption (Mtoe)

Source: Odyssee-Mure
Activity picks up; weather unpredictable; efficiency tails off

Annual changes in factors affecting EU 28 final energy consumption (Mtoe)

Source: Odyssee-Mure
Residential and transport sectors leading recent consumption growth

Change in EU 28 final energy consumption (Mtoe)

Source: Eurostat
Activity set to continue rising?

Indices of GDP and transport sector activity, 2000=100

Sources: Eurostat, European Commission Economic Forecast; European Commission Statistical Pocketbook
The market is shifting towards larger vehicles.

Diesel vehicles are losing market share

On-road performance has been weak

Source: International Council for Clean Transportation and European Environment Agency type-approval data
Residential sector consumption up markedly

Change in EU 28 final energy consumption (Mtoe)

Source: Eurostat
Space heating dominates

EU residential sector energy consumption breakdown by end-use, 2016

- Space heating: 64.4%
- Water heating: 14.3%
- Cooking: 5.1%
- Lighting and appliances: 14.6%
- Other end uses: 0.3%

Source: Eurostat
Weather-corrected space heating energy consumption stable since 2010

EU residential sector energy consumption

Source: Eurostat and Odyssee-Mure
Major changes happened before 2010

EU weather-corrected heating energy consumption by region

Source: Eurostat and Odyssee-Mure
Germany moved away from heating oil

Residential heating consumption shares by fuel, Germany

Source: Odyssee-Mure
UK policy shifted from cheap insulation

Remaining potential and properties insulated in Great Britain, 2008-14

Source: DECC, UK
Conclusions

- Sustained economic growth will lead to missed targets
- The weather poses an additional risk
- Efficiency gains have tailed off this decade
- Evaluation, monitoring and verification is critical
- Step change needed in the buildings sector
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