

Energy efficiency

a quick overview

The Energy efficiency strategy for Scotland

- Proposed in climate change consultation
- Expect to publish later this year

- The policy context
- Energy use
- Energy trends
- Existing energy efficiency initiatives
- Opportunities

The wider policy context

- Kyoto protocol
- UK Climate Change programme
- UK Energy White Paper
- EU policies

Energy White Paper Objectives

- to put the UK on a path to cut carbon emissions by 60% by 2050;
- to maintain security of supply;
- to promote competitive markets in the UK and beyond, raising the rate of sustainable economic growth, improving productivity;
- to ensure every home is adequately and affordably heated.

The policy context

Energy efficiency also helps:

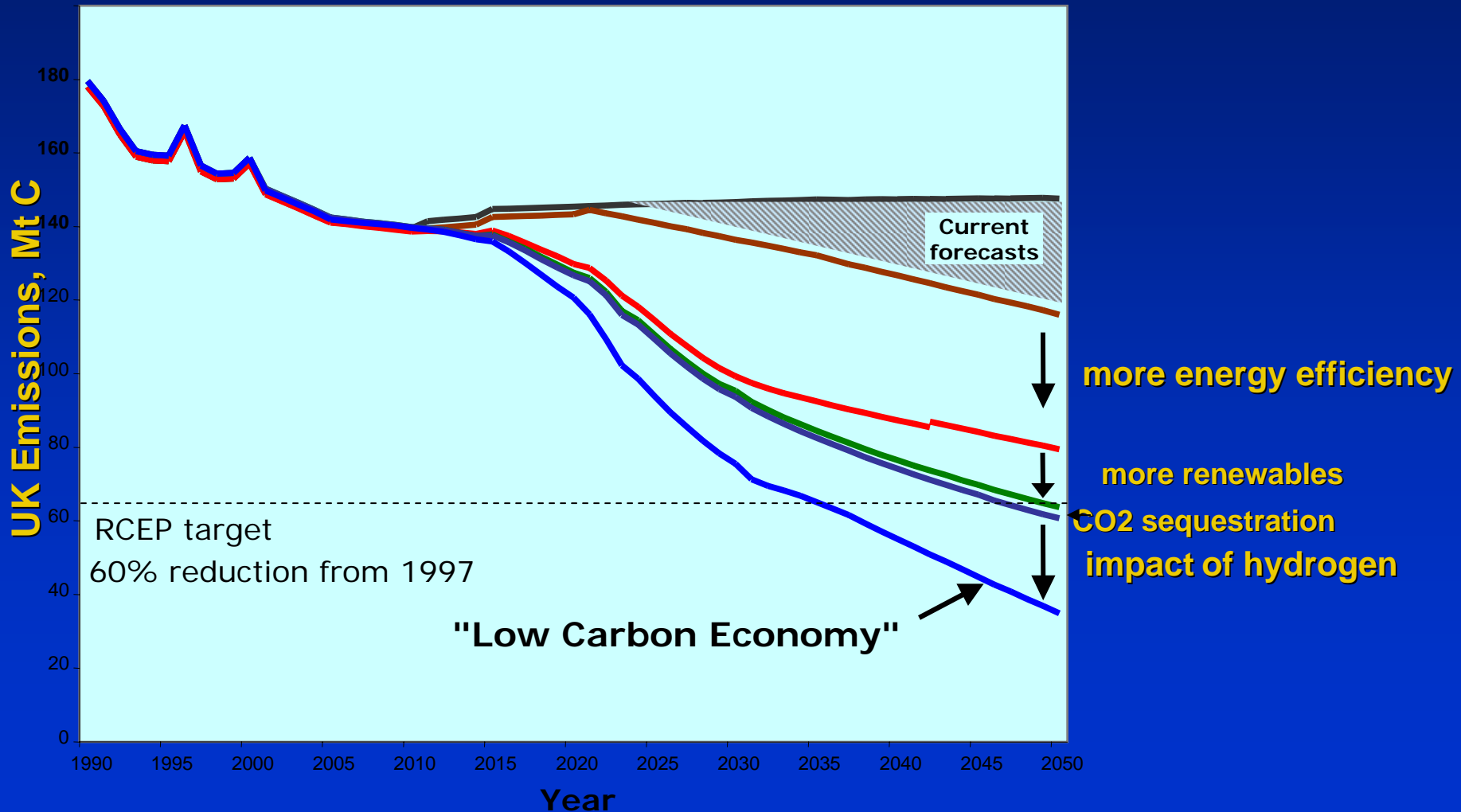
- Business resource efficiency
- Fuel poverty
- Public sector efficiency
- Air quality
- Low carbon economy
- Green jobs

Targets!

- Kyoto – 12.5% carbon reduction by 2012
- UK – 20% reduction by 2010
 - 60% reduction by 2050
- Scotland committed to making an equitable contribution

Energy Efficiency : hitting the 2050 target

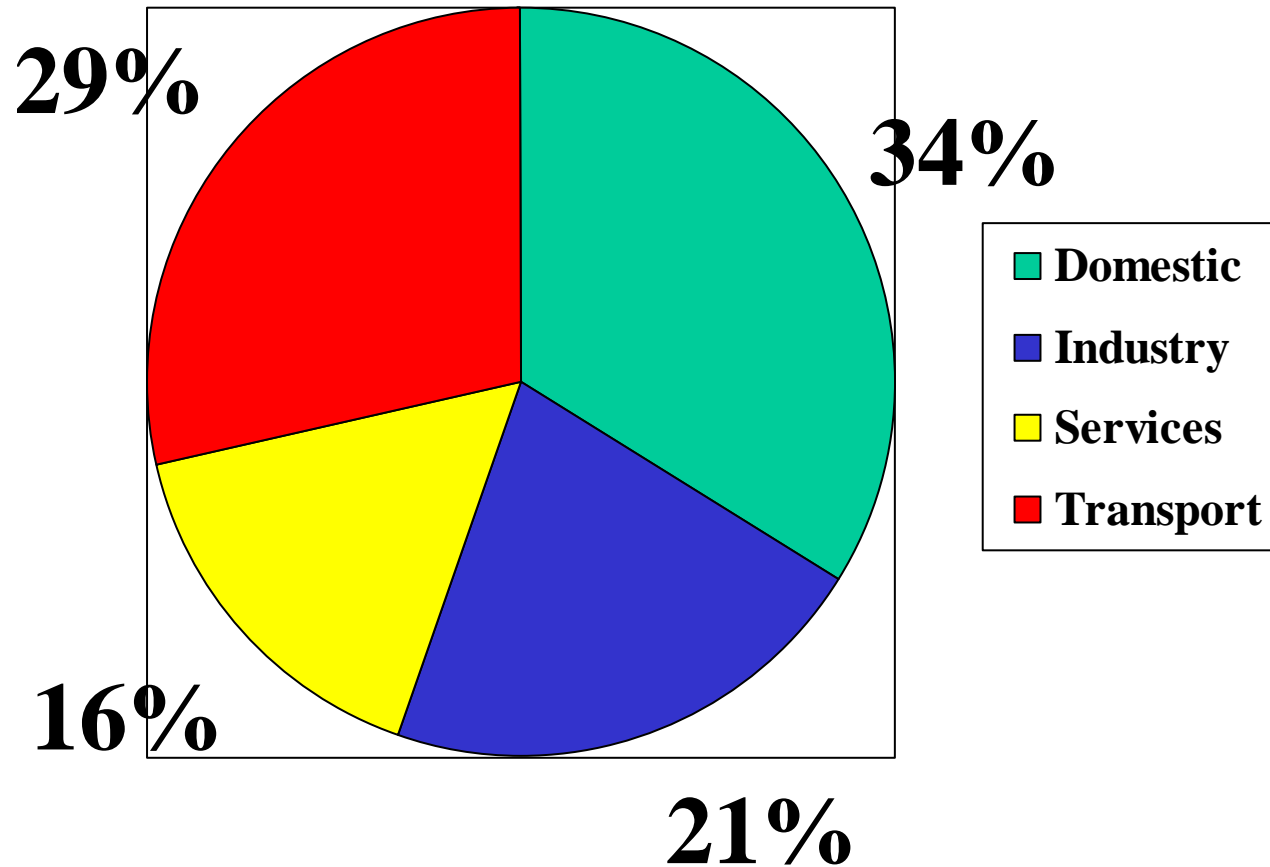
Potential impact of incremental low carbon technologies in the UK to 2050



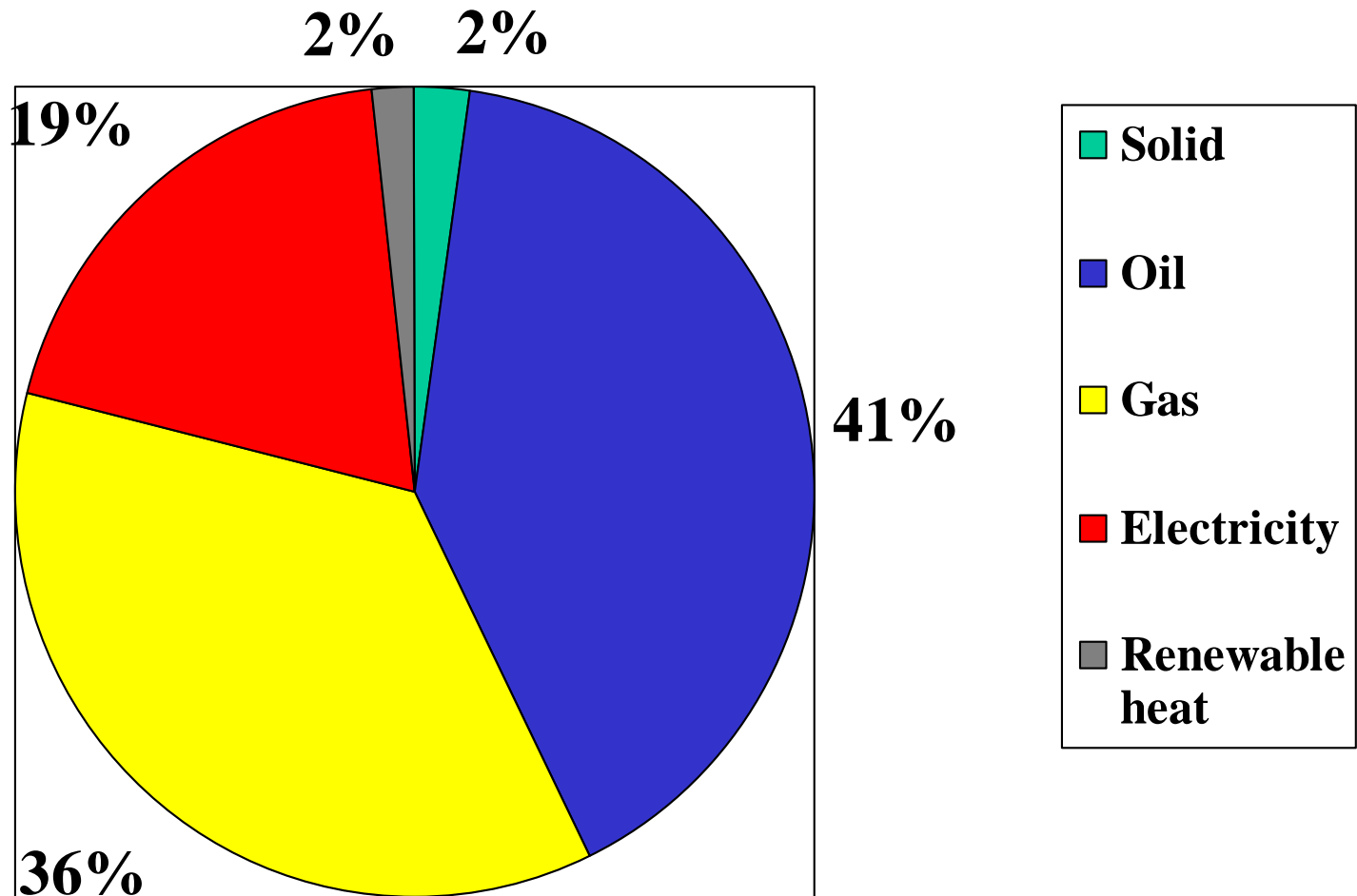
The Energy Study

- Volume 1: Base Year report 2002
- Volume 2: Trends 1990 to 2002
- Volume 3: Energy database
- Volume 4: Issues and Opportunities for Energy Efficiency
- Volume 5: Scenarios for energy supply and demand in 2020

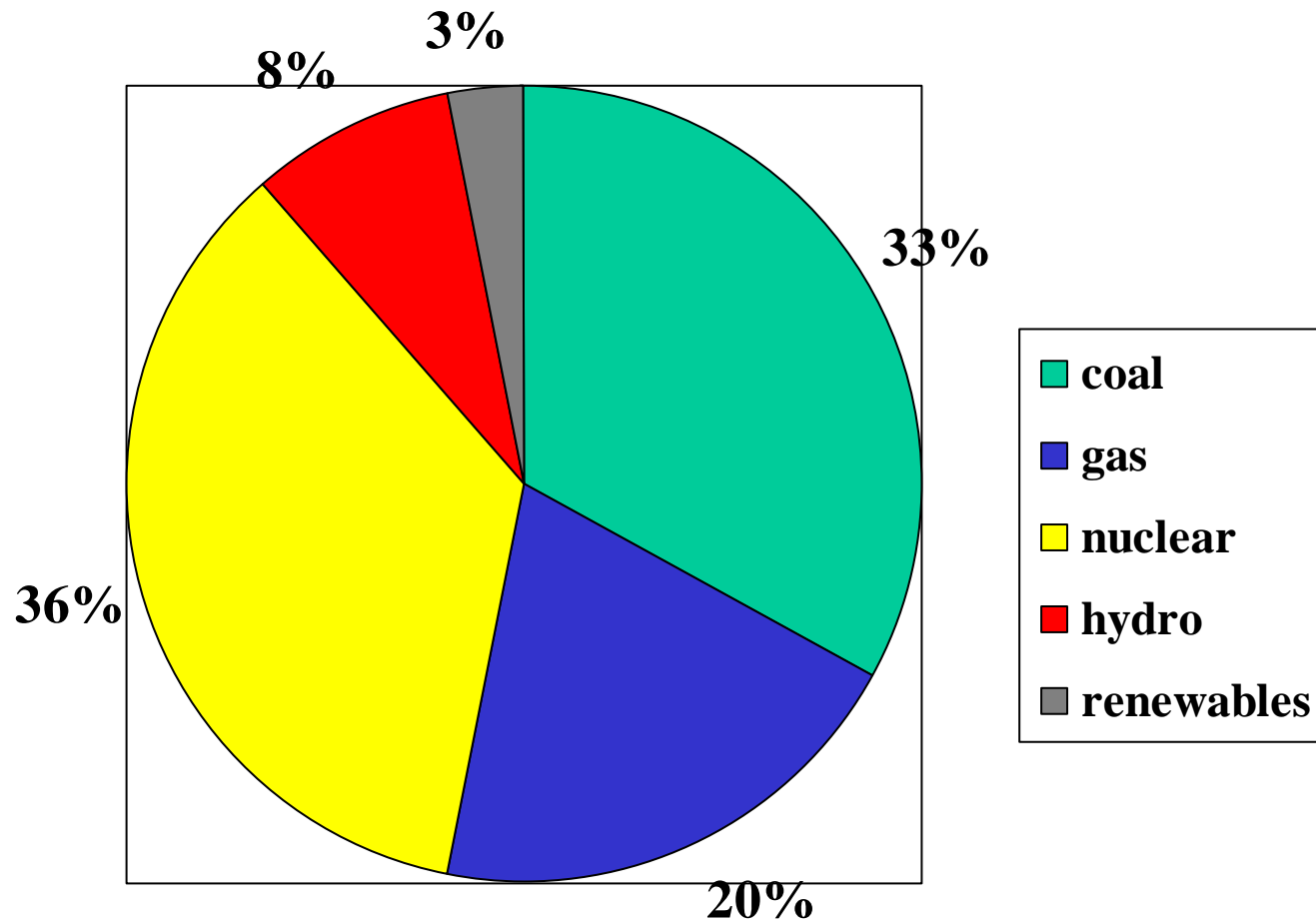
Energy use in Scotland by sector



Energy consumed in Scotland by fuel type

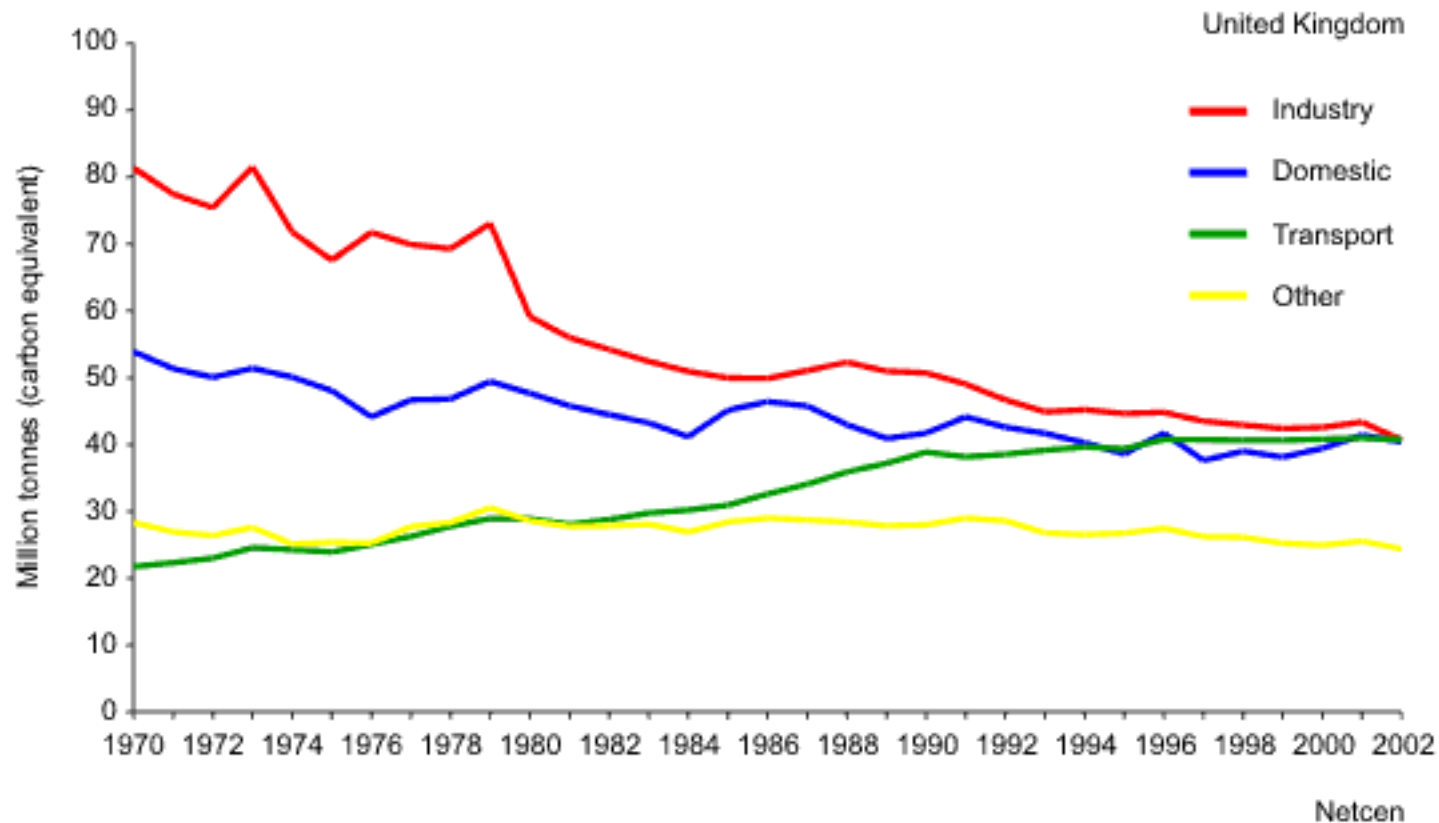


Scottish electricity generation



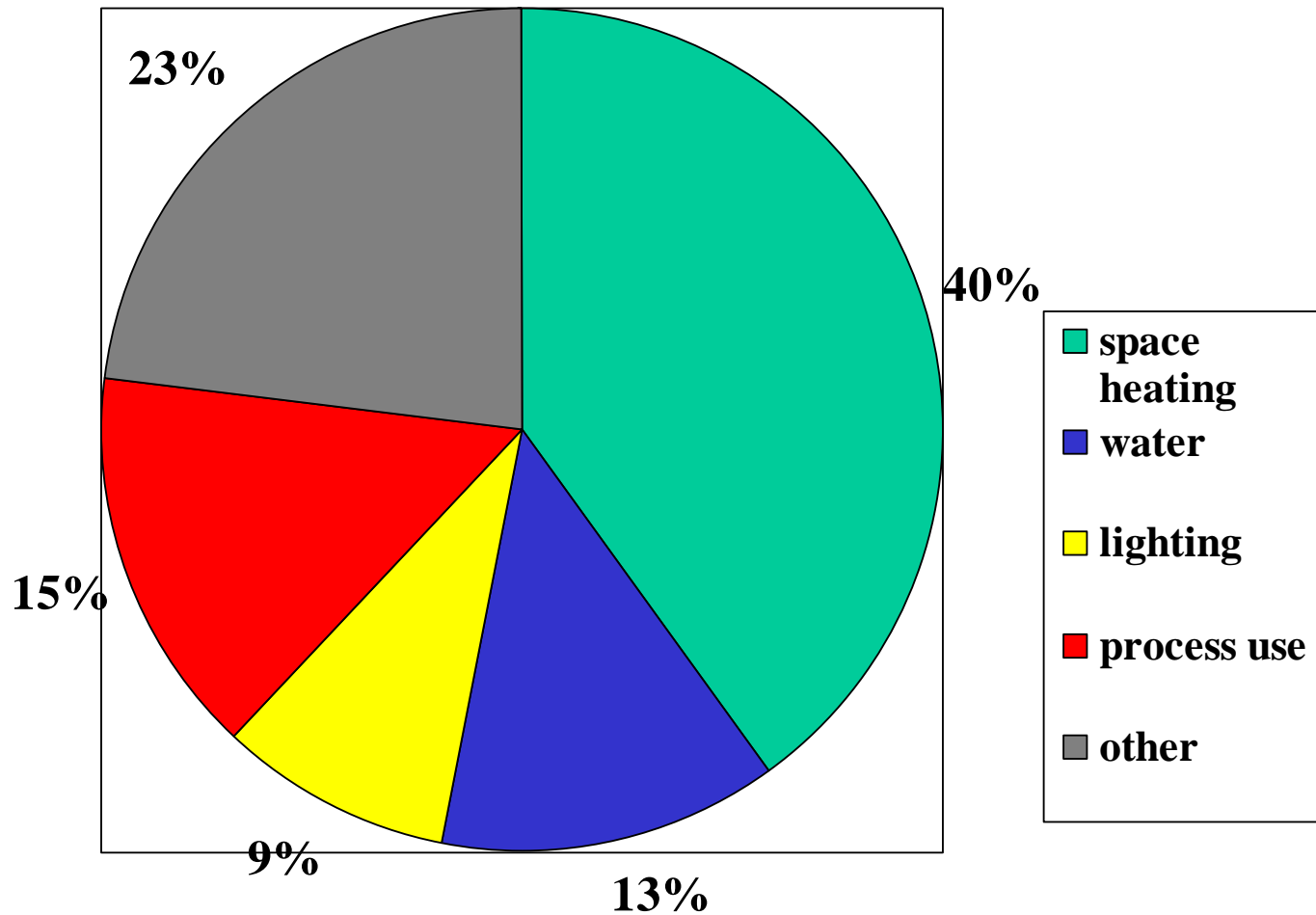
Energy consumption trends

Figure 7: Carbon dioxide emissions by end user: 1970-2002

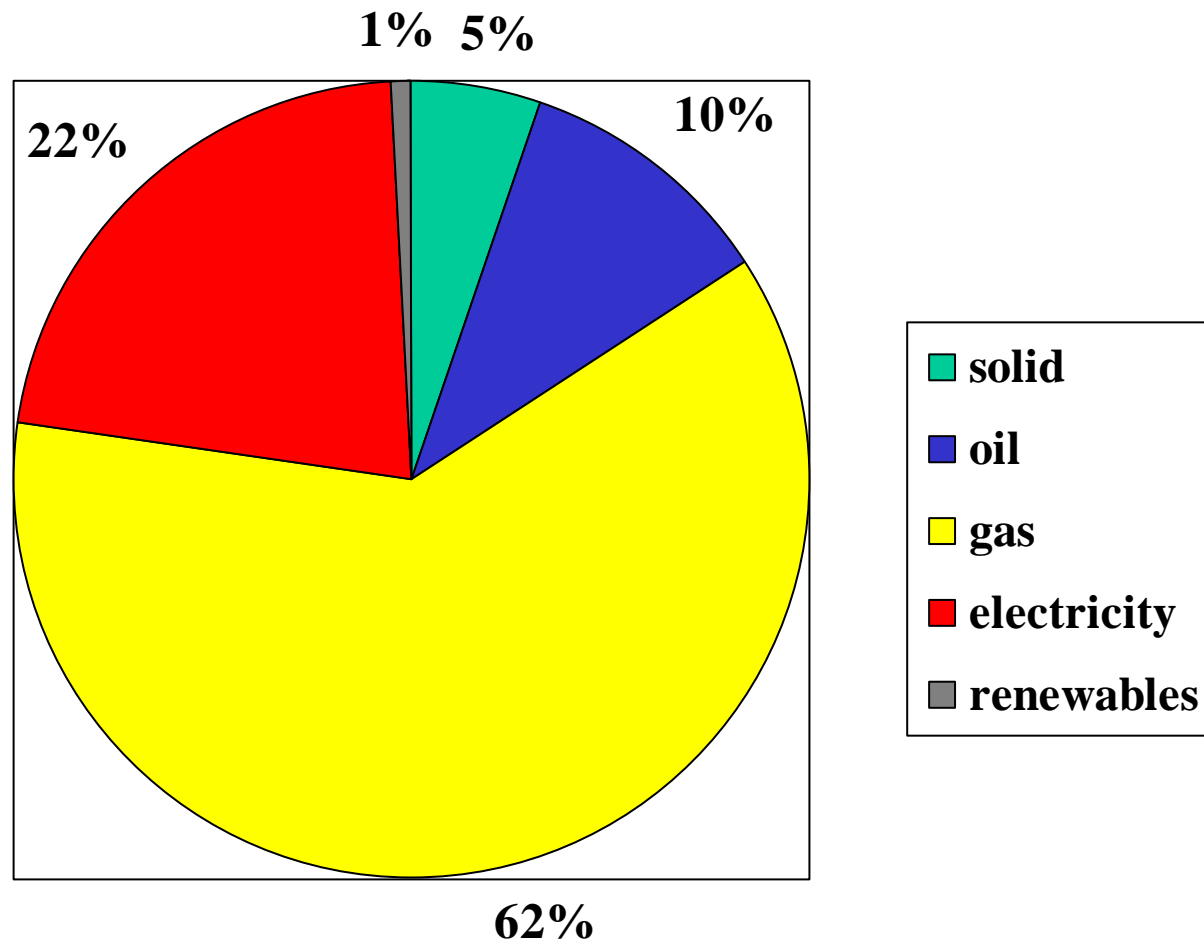


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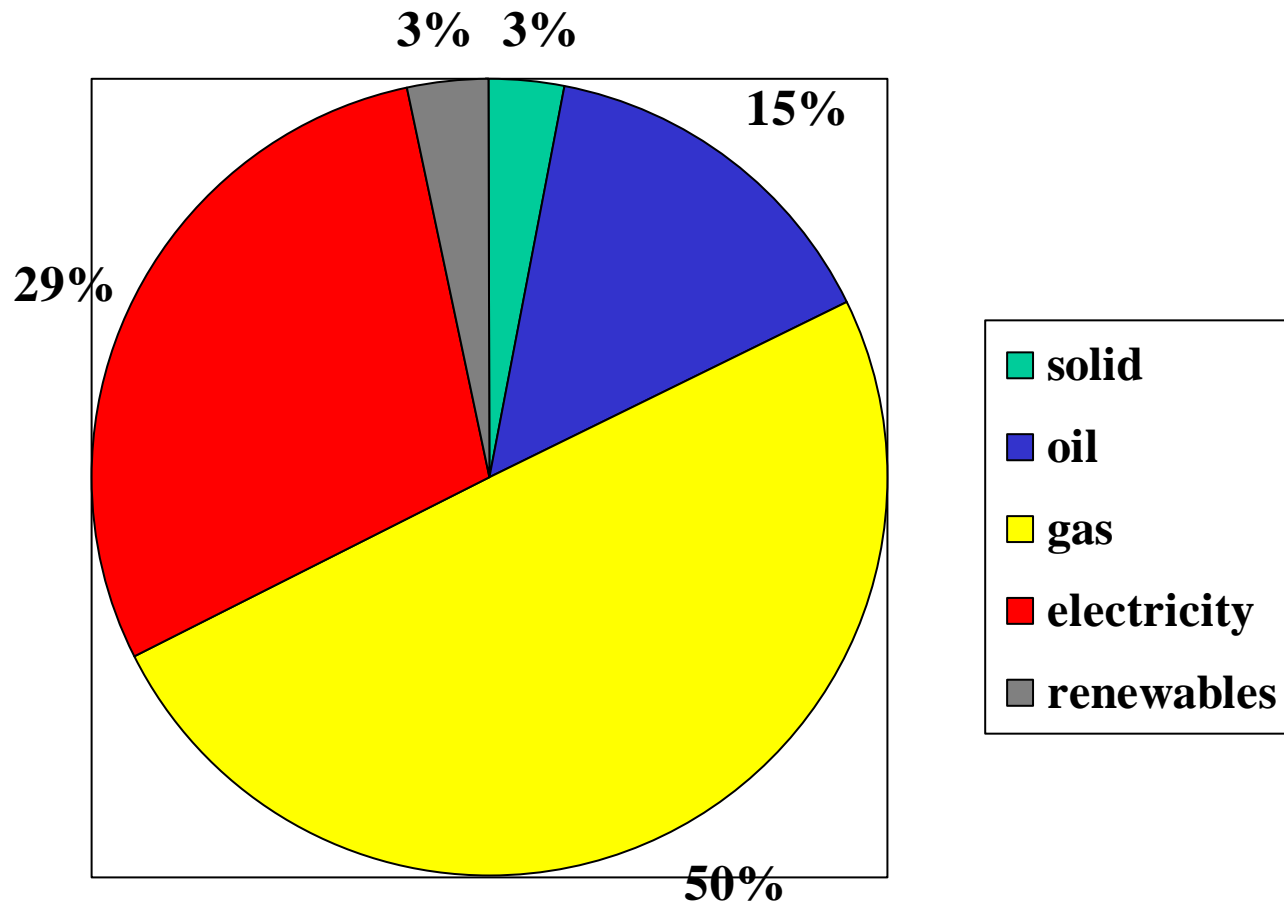
Non transport energy use



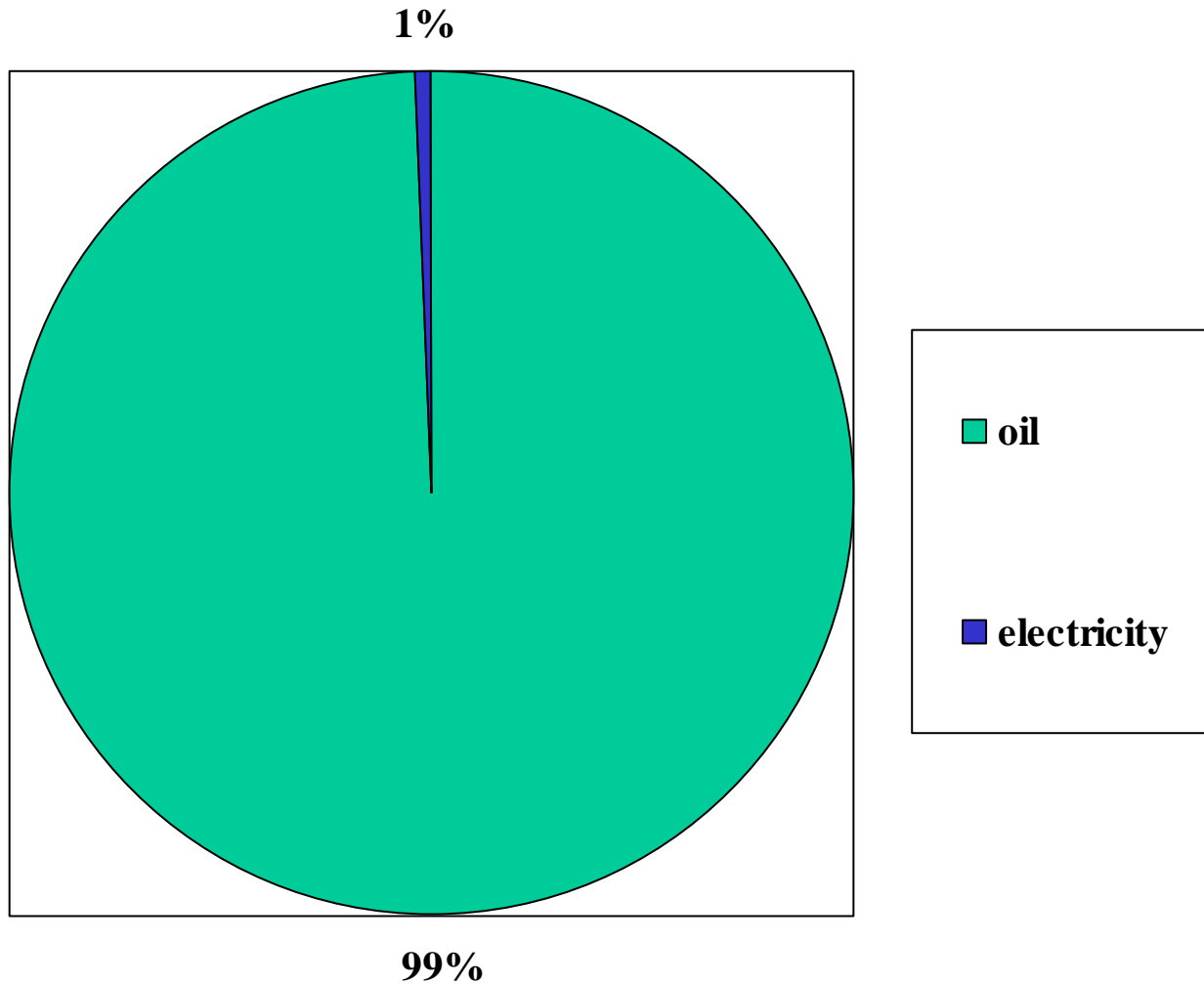
Domestic sector by fuel type



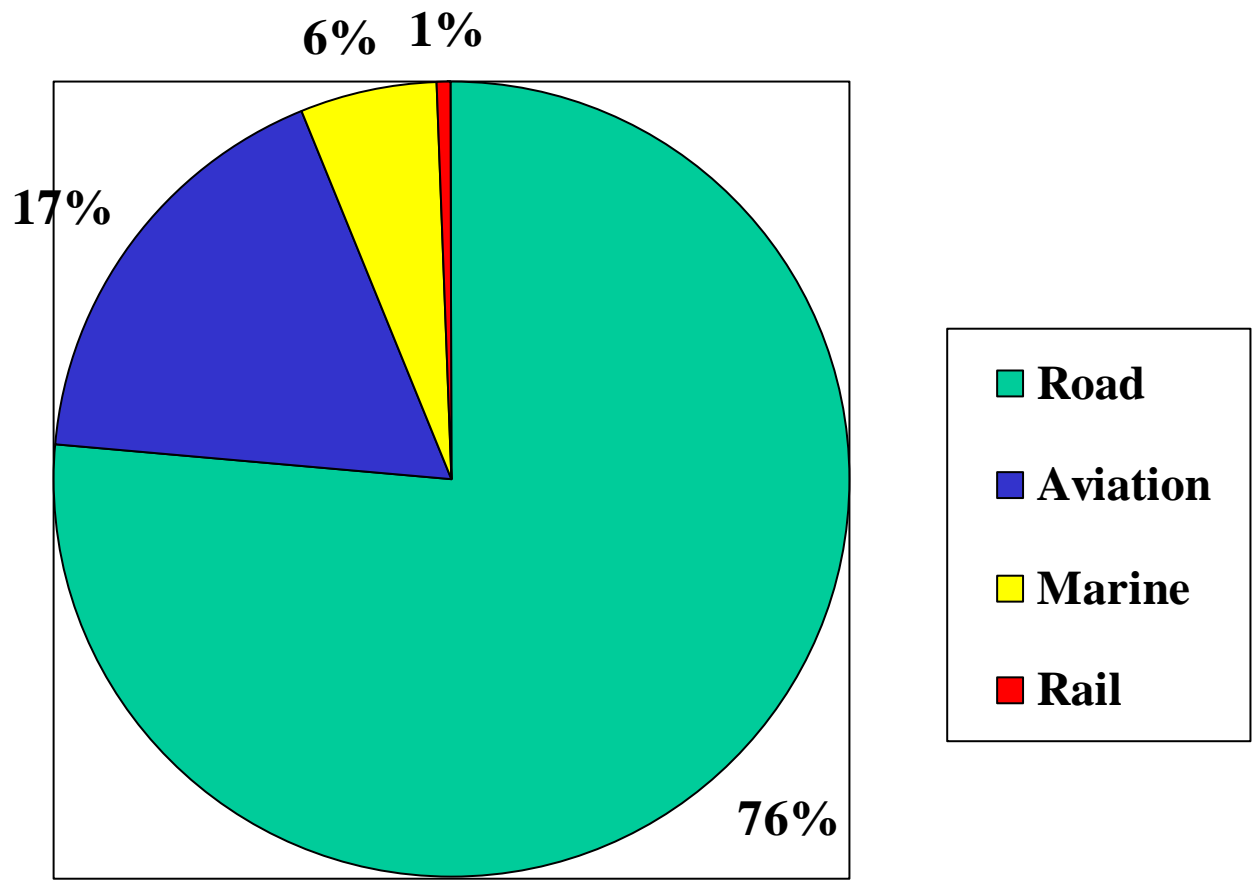
Industry sector by fuel type



Transport sector by fuel type



Transport sector energy split



Energy consumption trends 1990 to 2002

Overall energy consumption slightly down but

- Domestic consumption 16% up
- Industrial consumption 30% down
- Transport 12% up
- Services 10% up

Domestic Sector Issues

- More households/fewer occupants
- More appliances
- Wealthier homes are more efficient
- Fuel poverty
- Distinctive housing stock
- Harsher climate
- Increasing energy prices

Transport Issues

- Increasing car use
- Larger cars
- Congestion
- Increasing air travel
- Increasing fuel prices

Industry Issues

- Competition
- Energy not seen as a key issue
- Short term planning
- Increasing energy prices

Public sector

- Targets in the NHS and local authority sectors
- Drive for efficient government
- PPP/PFI
- Sustainability agenda
- The need to lead by example

Target sectors?

- Domestic – growing – difficult to target
- Transport – growing – difficult to target
- Industry – reducing – easier to target
- Services – growing – easier to target
- Public sector – reducing – easier to target

Existing Energy Efficiency Initiatives

- UK action
 - Fuel tax
 - Road tax
 - Company car tax
 - Climate change levy
 - Energy efficiency commitment
 - Energy labelling of goods
 - Enhanced capital allowances
 - Community Energy programme
 - Carbon Trust
 - Energy Saving Trust

Existing Energy Efficiency Initiatives

- Scottish action
 - Carbon Trust
 - Energy Saving Trust
 - DALCAL
 - Warm Deal
 - HECA
 - Support for public transport
 - Public Sector energy efficiency
 - Building regulations

Types of Energy Efficiency Initiative

- Fiscal (reserved)
- Regulation (reserved except for building regulations)
- Carbon Emissions Trading
- Research
- Promotion/advertising
- Education/training
- Advice
- Grants/subsidy
- Transport infrastructure
- Energy infrastructure
- Procurement policy

Opportunities

- your ideas are welcome!

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