



SevernWye
ENERGY AGENCY

**Energy Status Report for UK Communities:
Stroud and Swindon**

Executive Summary

Innovative Thinking

March 2008

Report

Intelligent Energy Europe

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1 Executive Summary

1.1 Introduction

The UK communities partnering on the Innovative Thinking project are Stroud District and Swindon Borough.

The local councils representing these communities, **Stroud District Council** and **Swindon Borough Council**, are working in partnership with a local not-for-profit energy agency, **Severn Wye Energy Agency**, to deliver the program.

The communities of Stroud and Swindon are located on the border between the Counties of Gloucestershire and Wiltshire. Whilst Stroud District (in Gloucestershire) is a predominantly rural area, Swindon (in Wiltshire) is a mainly urban area. The town of Swindon itself is growing rapidly with several large new residential and industrial developments planned in the area. Both municipalities have recently begun work towards developing climate change or carbon management strategies and aim to develop methods to engage the wider community with this process.

This summary document is designed to provide an energy ‘snap shot’ for the two communities using data available from national sources.

1.2 Stroud District

Key Statistics (2005)

Population

110,000

Total CO₂ Emissions from the District

817,000 tonnes

Per Capita CO₂ Emissions (for NI 186) for Stroud District

7.4 tonnes

Figure 1 shows the total CO₂ emissions from Stroud District Council for 2005 and a Figure 2 gives a detailed breakdown of the sources of those emissions.

The figures do not include emissions from organisations involved with the EU Emissions Trading Scheme, and emissions from diesel railways or motorway transport have also been removed.

Total CO2 Emissions Stroud District 2005

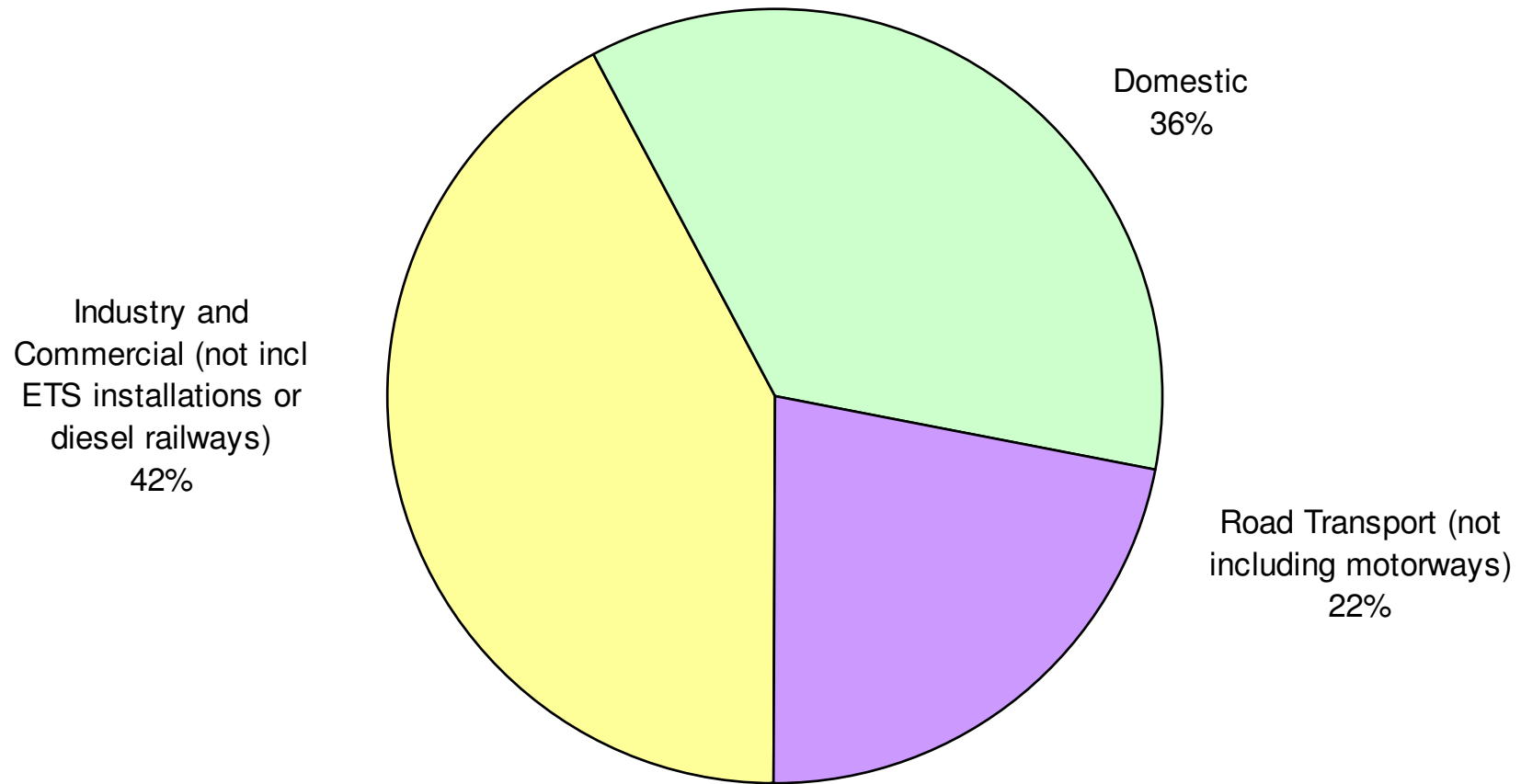


Figure 1: Total CO2 Emissions by Sector from Stroud District 2005

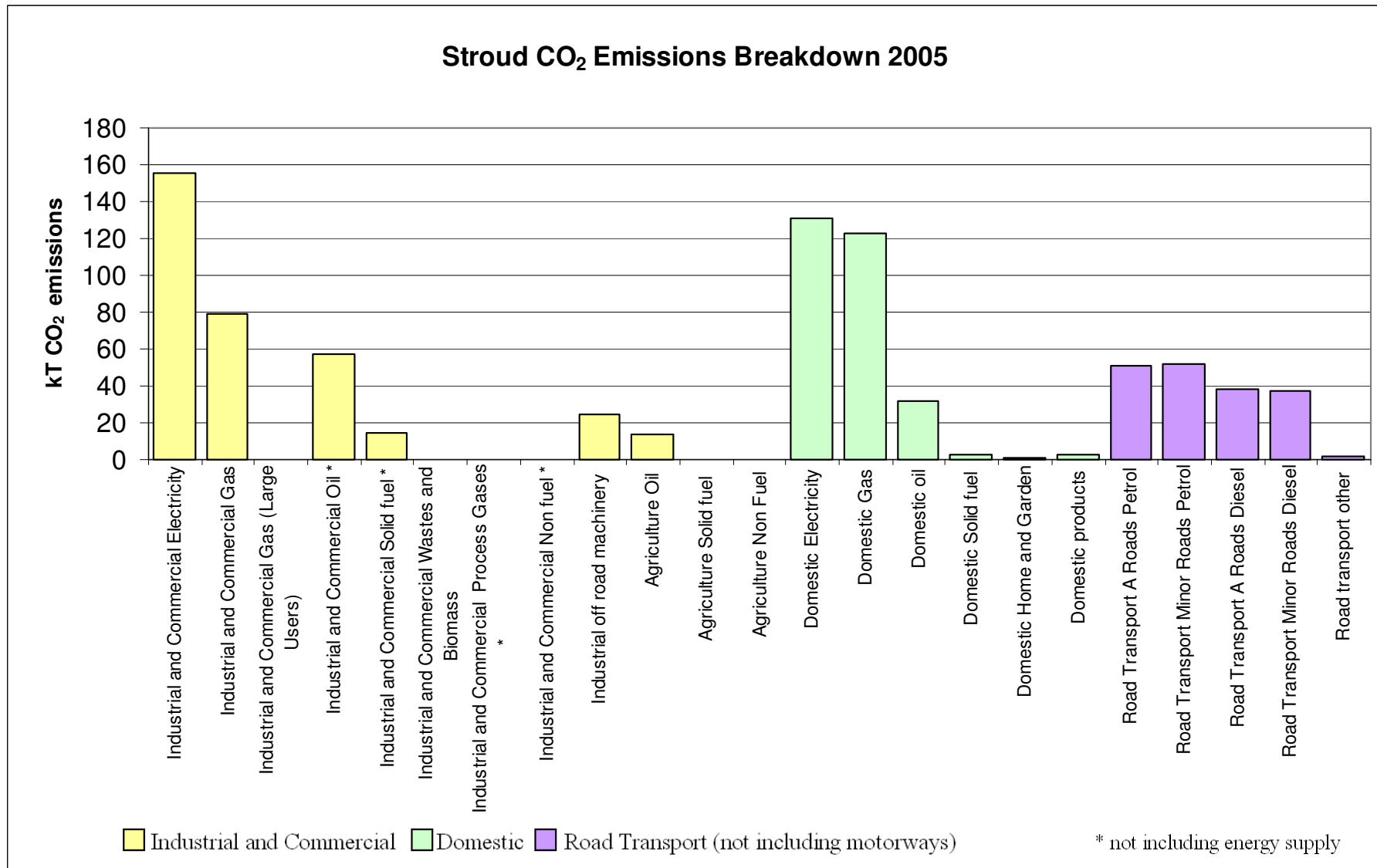


Figure 2: Breakdown of Emissions Stroud District 2005

Breakdown of Renewable Energy Contribution

Grid connected non domestic renewable electricity projects	10
Installed Capacity	2.61MW
Renewable Heat Projects	2
Installed Capacity	0.01MW
Total Installed Capacity	2.62MW
Percentage Contribution of Renewables and Waste	0.16%

Stroud District Council Activities

Stroud District Council has recently begun to assess its own carbon footprint. An initial estimate for the period 2006-07 is as follows:

Fleet and other business mileage	180.8 tonnes
Gas and oil consumption for heating for all sites managed directly by the council	360.9 tonnes
Total Emissions (CO₂)	541.7 tonnes

1.3 Swindon Borough

Swindon Borough has a wonderful blend of urban and rural landscapes including the North Wessex Downs area of outstanding natural beauty, 88 country wildlife sites and 2 nature reserves. The protection, conservation and improvement of these is vital to maintaining and improving our local biodiversity and the quality of life for all who live and work in the borough and beyond.

Population of Swindon Borough is 184,000 with a good mix of people from different cultures and countries.

There is a high projected population increase, estimated at 61,000 new residents by 2011.

Swindon is a major centre of employment, shopping, leisure and community facilities thanks largely to its excellent transport links and as such the town is the UK base for the corporate headquarters of several major companies such as Honda, BMW, RWE Innogy, Nationwide Building Society and Arrival PHH

Four of the government's Research Councils and the National Monument Record Office are based in Swindon and the town enjoys lower than the national average unemployment rates.

Key Statistics (2005)

Population

184,000

Total CO₂ Emissions from the Borough

1,401,000 tonnes

Per Capita CO₂ Emissions for Swindon Borough

7.6 tonnes

Breakdown of Renewable Energy Contribution

Grid connected non domestic renewable electricity projects	6
Installed Capacity	3.55MW
Renewable Heat Projects	2
Installed Capacity	0.1 MW
Total Installed Capacity	3.65MW
Percentage Contribution of Renewables and Waste	0.11%

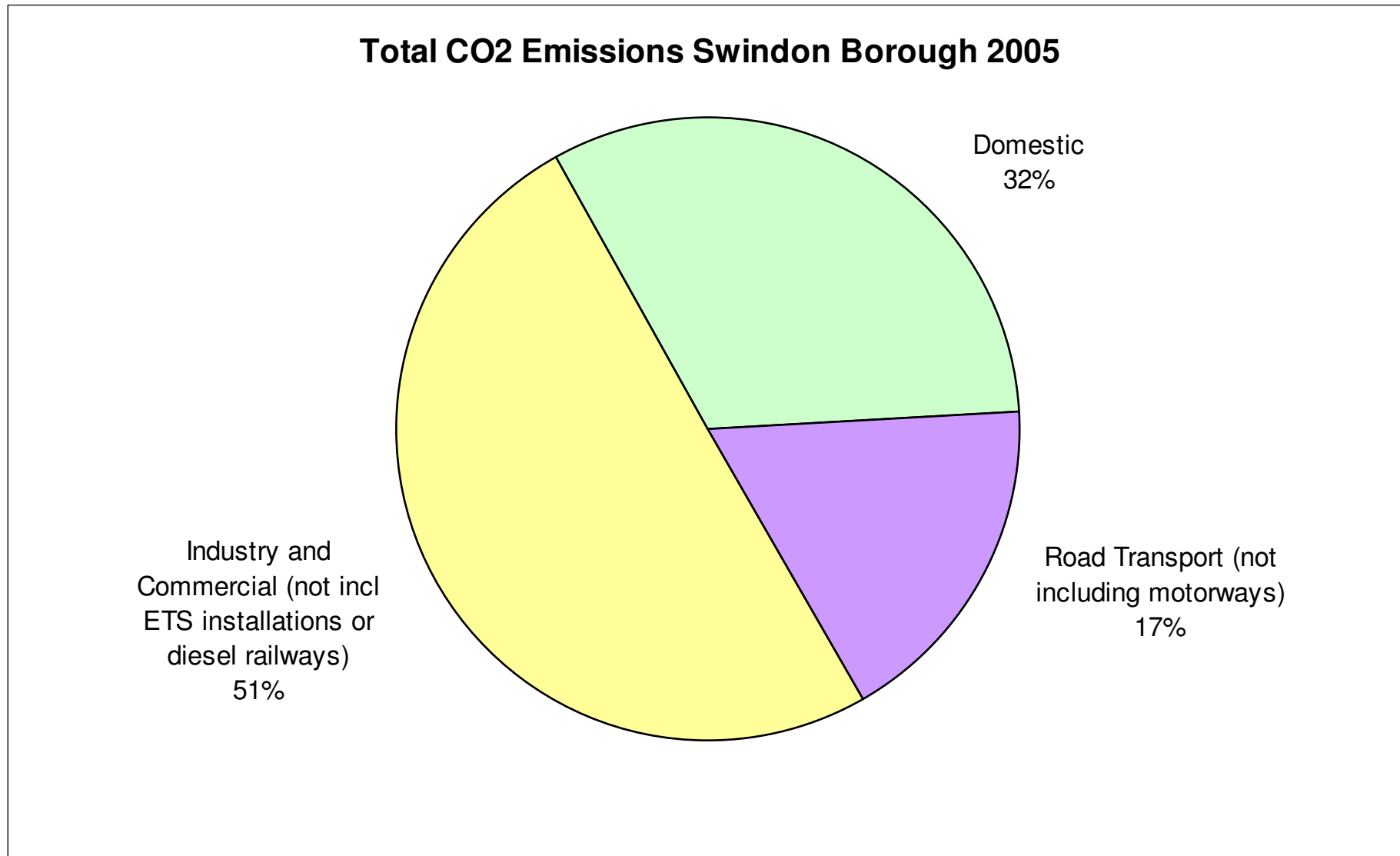


Figure 3: Total CO2 Emissions from Swindon Borough by Sector 2005

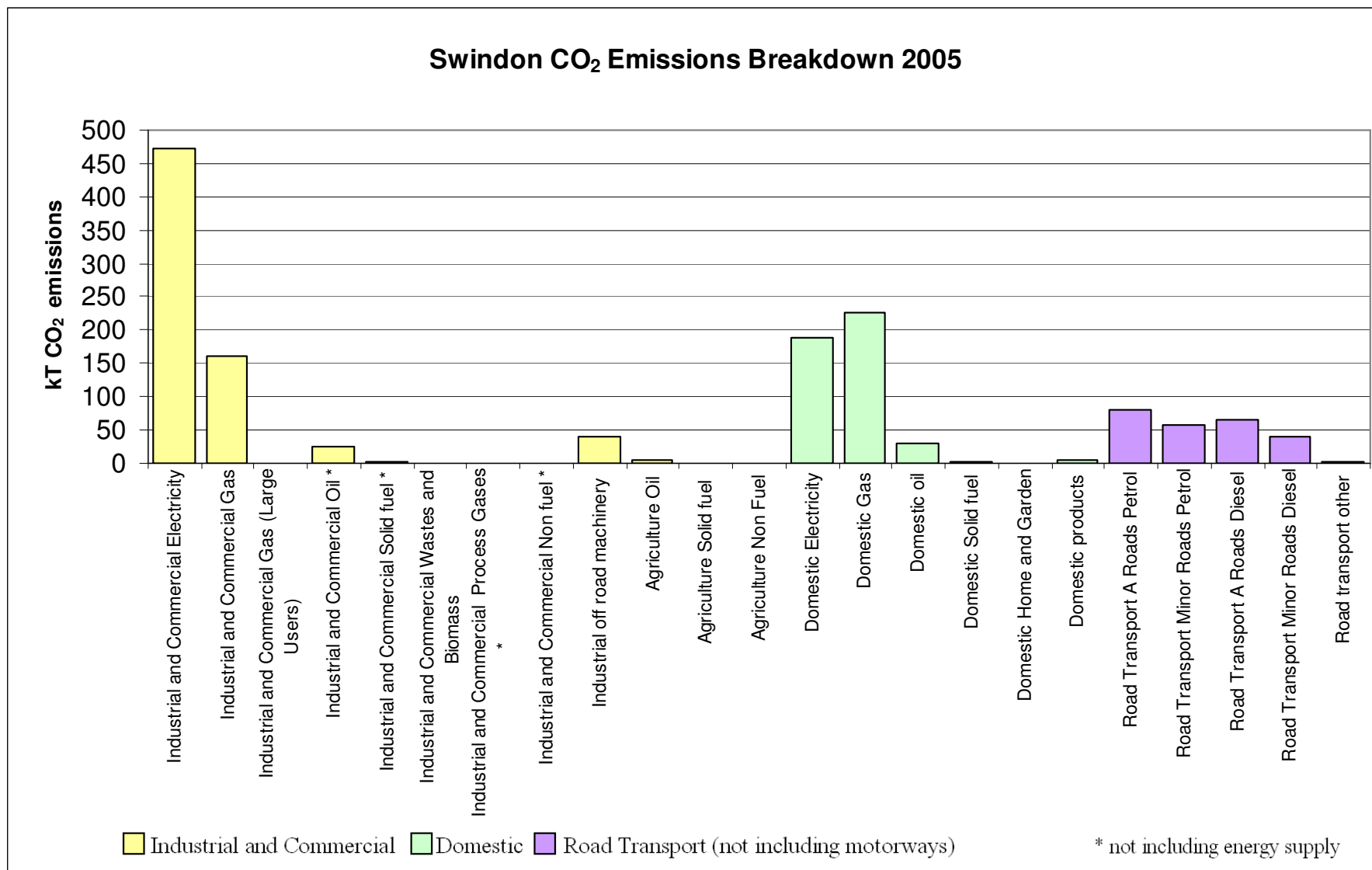


Figure 4: Breakdown of CO₂ Emissions Swindon 2005

2 Conclusions

The per capita emissions from the two communities are quite similar – 7.4 tonnes per person in Stroud and 7.6 per person in Swindon. For both communities the figures are lower than the average for the South West region of 7.7 tonnes per person and lower than the UK average of 7.9 tonnes per person.

Industrial and commercial energy use and emissions are high in both communities and concerted action to tackle this sector is crucial. In Swindon Borough in particular the emissions from electricity consumption in the non domestic sector are significant – action on improving efficiency in the commercial sector should be a priority.

The use of natural gas for heating and electricity in domestic properties makes up a significant proportion of the emissions in both communities and action to improve energy efficiency, particularly in older housing stock, is vital.

Transport emissions make up the smallest share of emissions from in both communities (22% in Stroud and 17% in Swindon) but these figures do not include emissions from motorways and diesel railways that pass through the areas.

Use of renewable energy, both electricity and heat needs to be significantly increased in both communities, current contribution to overall energy use stands at 0.16% in Stroud District and 0.11% in Swindon Borough. These figures need to increase urgently for the communities to be contributing to both national and regional targets on renewable energy.

3 Data Sources

3.1 DBERR Regional Energy Statistics

The main data source used for the energy status report is the Regional Energy Statistics produced by the Department of Business, Enterprise and Regulatory Reform (DBERR). The data is compiled annually and gives total final energy consumption for each Local Authority area in the UK. The dataset combines natural gas consumption, electricity consumption, use of other fuels (solid fuels, renewables, industrial petroleum and coal) and use of transport fuels for each area.

The data currently takes around 3 years to become available hence the latest figures used in this report are for 2005.

According to DBERR 'the data is produced to emphasise the importance of local and regional decision-making for energy policy in delivering a number of national energy policy objectives'

The statistics are available at

<http://www.berr.gov.uk/energy/statistics/regional/index.html>

3.2 DEFRA CO₂ Emissions

The report will also use the experimental statistics of carbon dioxide emissions for local authority areas produced by AEA Technology on behalf of DEFRA for years 2003, 2004 and 2005 – see

<http://www.defra.gov.uk/environment/statistics/globalatmos/galocalghg.htm>

The CO₂ emissions data used in this report is for 2005 only and will serve as a baseline position for future years.

3.3 Renewable Energy

The renewable energy data for the report has been sourced from the *REGENSW Renewable Energy Projects in the South West* April 2007 document available at <http://www.surveys.energysw.com/>

3.4 Contact Details

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