# Chapter 13

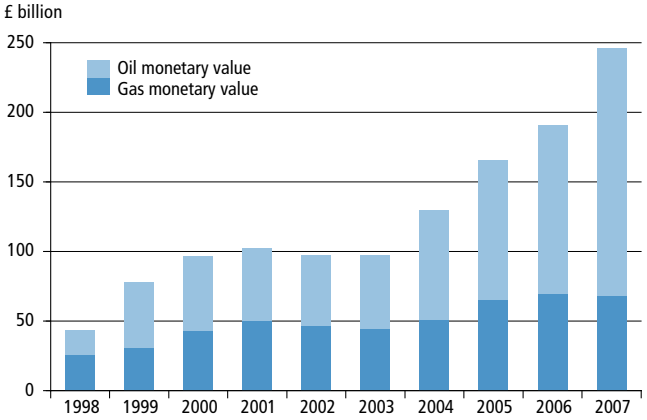
# The UK Environmental Accounts at a glance

## Oil and gas reserves

UK oil reserves were valued at £177.9 billion while gas reserves were estimated to be worth £68.3 billion at the end of 2007.

The value of the UK's recoverable oil and gas reserves mainly depend upon the estimated physical amounts remaining, the rate of extraction and the assumed future price per unit of oil or gas, net of the cost of extraction. Since 1998, the estimated physical stock of reserves has fallen as a result of extraction, but the value of the reserves has generally risen, with values being sensitive to fluctuations in the price of oil and gas.

### Value of oil and gas reserves, 1998–2007

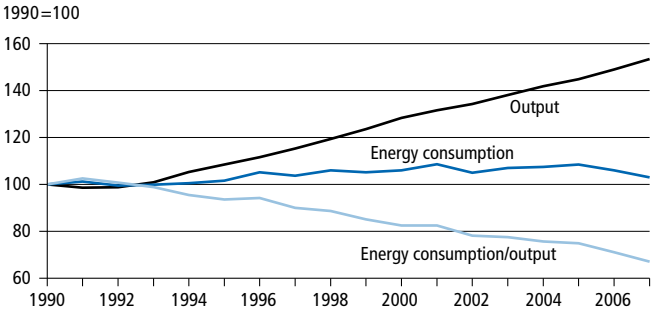



***Source: ONS***

## Energy consumption

Energy consumption, including electricity, by UK companies and the public sector (and excluding households) increased by 3.0 per cent between 1990 and 2007, while output (Gross Domestic Product) rose by 53.5 per cent in real terms. As a result, energy intensity (energy consumed per unit of output) has decreased by 32.9 per cent over the same period. The percentage of energy derived from renewable sources was 1.7 per cent in 2007 compared with 0.8 per cent in 1990.

### Non-domestic energy consumption and output (Gross Domestic Product, CVM), 1990–2007




***Source: ONS***

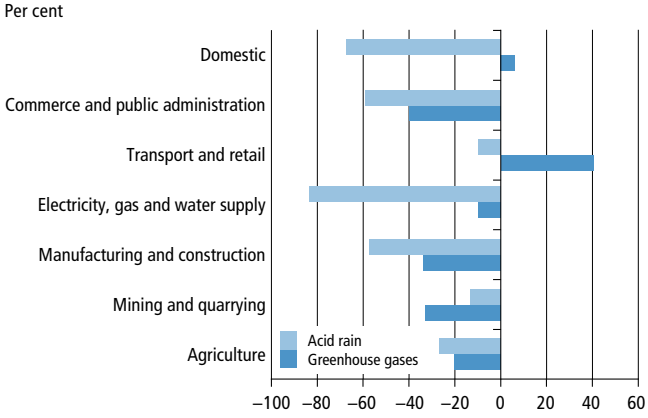
## Atmospheric emissions

Total greenhouse gas emissions on a National Accounts basis have fallen by 12.6 per cent since 1990, driven by a 16.7 per cent reduction in emissions from UK companies and the public sector. In contrast, emissions from the household sector have risen by 6.3 per cent between 1990 and 2007 but the trend has started to reverse in the last three years with a 2.6 per cent fall in 2007.

Between 1990 and 2007, the largest falls in greenhouse gas emissions occurred in other services (52.3 per cent) and manufacturing (36.8 per cent). The largest increase was in transport and communications, up 43.6 per cent.

Emissions of the chemicals that cause acid rain have fallen by 61.2 per cent since 1990. Over this period there have been reductions in all industries. Emissions from households were 67.1 per cent lower in 2007 than in 1990, mainly reflecting falling emissions from the use of vehicles as a result of cleaner technology.

### Atmospheric emissions of greenhouse gases and acid rain precursors, percentage change, 1990–2007

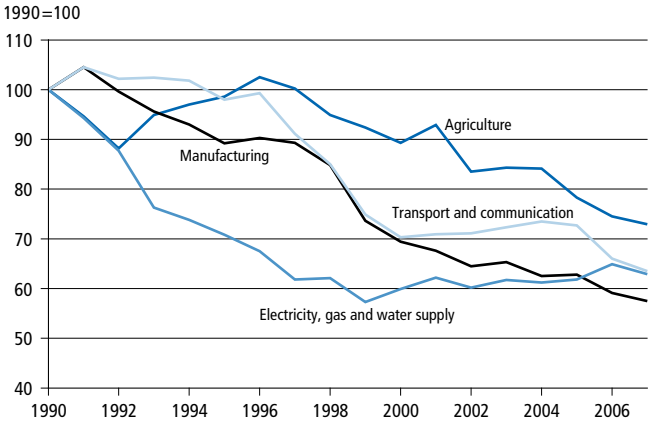



***Source: ONS***

Much of the period 1990 to 2007 has seen strong economic growth in the UK. Allowing for this growth, there have been substantial improvements in emissions intensity across the non-household sector in 2007 with levels of emissions per unit of output 46.9 per cent below those in 1990. Greenhouse gas emissions per unit of output over this period fell 37.1 per cent in electricity, gas and water supply, 42.5 per cent in manufacturing, 36.5 per cent in transport and communications and 27.1 per cent in agriculture. These four sectors account for approximately 80 per cent of greenhouse gas emissions from the non-household sector.

There have been falls in emissions intensity across most other sectors since 1990, most notably in education, health and social services (46.9 per cent), other business services (54.7 per cent) and other services (69.9 per cent).

### Greenhouse gas emissions per unit of output, (Gross value added CVM), 1990–2007

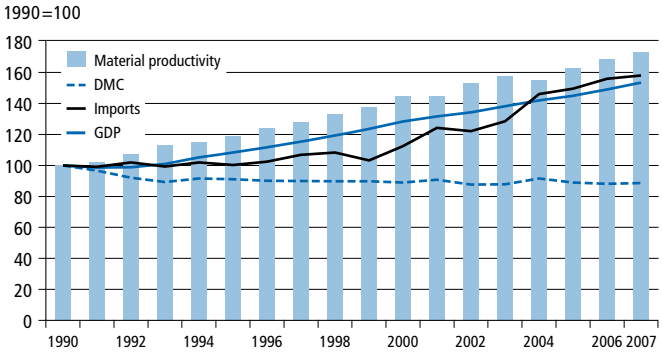



***Source: ONS***

## Material flow accounting

Material productivity has increased between 1990 and 2007. This trend indicates that material use is falling in relation to the level of economic activity in the UK and supports evidence that domestic material use and economic growth have decoupled since 1990. However, levels of imports have generally risen over the same period suggesting that some of the environmental impacts associated with consumption are being transferred abroad.

### Material flows in the UK




***Source: ONS***

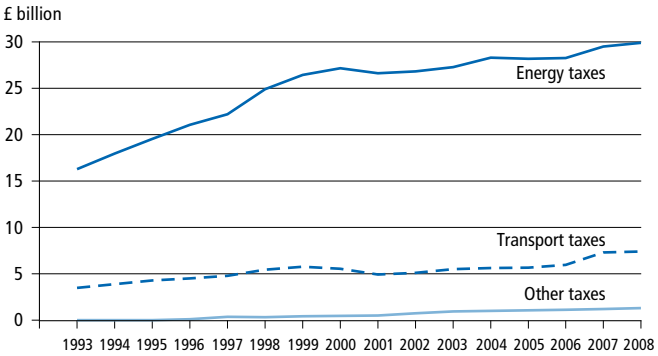
## Environmental taxes

In 2008, environmental tax receipts amounted to £38.5 billion. By far the largest contributor to environmental taxes is duty on hydrocarbon oils such as petrol and diesel, which accounted for 64.3 per cent of the total in 2008, and where receipts increased by approximately £0.3 billion compared with the previous year. Receipts from Vehicle Excise Duty were the next largest increase, up by £0.1 billion to £5.5 billion in 2008.

Environmental taxes were 2.7 per cent of Gross Domestic Product in 2008.

Table 13.8 contains a breakdown of these taxes by 13 industries for 2007. This shows that UK households pay £20.9 billion in environmental taxes, over half of all environmental taxes and more than three times the next highest contributor, the transport and communications industry.

### Government receipts from environmental taxes, 1993–2008



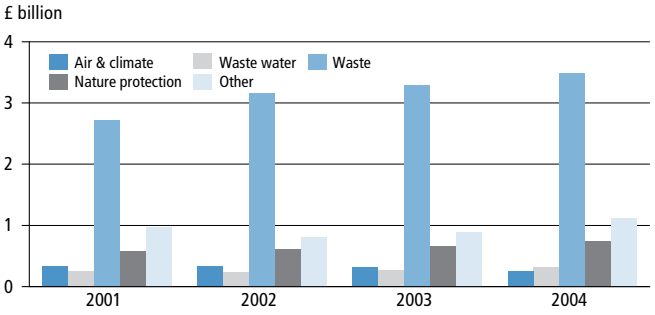

***Source: ONS***

## Environmental protection expenditure

In 2004, public sector environmental protection expenditure was estimated at £5.9 billion with £3.5 billion spent on waste management and a further £0.7 billion on nature conservation, but only £0.3 billion directly on waste water management. Measures to protect air quality and the climate amounted to a further £0.3 billion.

Environmental protection expenditure data by industry for 2006, published by the Department for Environment, Food and Rural Affairs (Defra), is also included in this chapter.

### Public sector environmental protection expenditure, 2001–2004




***Source: ONS***