

Sustainable development indicators in your pocket 2004

A selection of the UK
Government's indicators of
sustainable development



SUSTAINABLE
DEVELOPMENT



Sustainable development indicators in your pocket 2004

A selection of the **UK Government's** indicators of
sustainable development



Department for Environment, Food and Rural Affairs
Nobel House
17 Smith Square
London SW1P 3JR
Telephone 020 7238 6000
Website: www.defra.gov.uk

© Crown copyright 2004

Copyright in the typographical arrangement and design rests with the Crown.

This publication (excluding the logo) may be reproduced free of charge in any format or medium provided that it is reproduced accurately and not used in a misleading context. The material must be acknowledged as Crown copyright with the title and source of the publication specified.

Further copies of this publication are available from:

Defra Publications
Admail 6000
London
SW1A 2XX
Tel: 08459 556000

This document is also available on the Government sustainable development website www.sustainable-development.gov.uk.

Published by the Department for Environment, Food and Rural Affairs. Printed in the UK, April 2004, on material containing 75% post-consumer waste and 25% Elemental Chlorine Free pulp.
Product code PB 9541

CONTENTS

Foreword	6
Introduction	7
Indicators setting the scene	11
Economic growth, energy consumption and environmental impacts	11
Environmental impacts of households	12
Individual action for sustainable development	13
International context	14
Global population	14
World and UK materials consumption per head	16
International emissions of carbon dioxide per head	18
A SUSTAINABLE ECONOMY	
Economic stability and competitiveness	19
Economic output (Headline Indicator H1)	19
Investment (Headline Indicator H2)	20
New business start-ups net of closures	21
Freight transport by mode	22
Resource use and waste	23
UK resource use	23
Household waste and recycling (Headline Indicator H15)	24
All waste arisings and management (Headline Indicator H15)	25
Overseas travel	26
Area converted to organic production	27

Employment and education	28
Employment (Headline Indicator H3)	28
Education (Headline Indicator H5)	29
Adult literacy/numeracy	30

BUILDING SUSTAINABLE COMMUNITIES

Poverty, health and housing **31**

Poverty and social exclusion (Headline Indicator H4)	31
Health (Headline Indicator H6)	33
Death rates from cancer, circulatory disease, accidents and suicides	34
Housing – conditions (Headline Indicator H7)	35
Concentrations of persistent organic pollutants	36

Crime and social cohesion **37**

Crime (Headline Indicator H8)	37
Fear of crime	40
Voluntary activity	41

Travel and access **42**

Road traffic volume (Headline Indicator H11)	42
Road traffic intensity (Headline Indicator H11)	43
Road traffic, economic growth and environment impacts	44
How children go to school	45
Personal travel by mode	46
Real changes in the cost of transport	47
People finding access difficult	48
Access for disabled people	50

MANAGING THE ENVIRONMENT

Climate change and energy

Emissions of greenhouse gases (Headline Indicator H9)	51
Depletion of fossil fuels	52
Electricity from renewable resources	54

Air, water and radioactive waste

Air quality (Headline Indicator H10)	56
Industrial sector output, employees, energy consumption and environmental impacts	57
River water quality (Headline Indicator H12)	58
Abstractions by purpose	60
Compliance with Bathing Water Directive	61
Radioactive waste stocks	62
Fish stocks	63

Landscape and wildlife

Land use (Headline Indicator H14)	64
Wildlife – populations of wild birds (Headline Indicator H13)	65
Agricultural output, employment, inputs of fertilisers and environmental impacts	66
Native species at risk	67
Forest and woodland cover	69

Taking it on: the consultation to develop new UK sustainable development strategy

Enquiries about indicators or this publication

FOREWORD

Prior to the 2002 World Summit on Sustainable Development in Johannesburg, about a third of people in England had heard of the term 'sustainable development'. Yet it is a far-reaching concept that encompasses government, business and individuals' actions and decisions and their effect on everyone's quality of life.

It is about reconciling aspirations for social progress, economic development, protection of the environment and conservation of natural resources, and the integration of these into decision-making, so that progress in one does not adversely affect another. An example is reducing greenhouse gas emissions while still allowing for economic growth.

The aim of this booklet is to provide an easily accessible set of indicators covering a number of key sustainable development themes. It includes a variety of economic, social and environmental issues of everyday concern including health, housing, jobs, crime, education and our environment. It is hoped this handy-sized publication will be a useful reference to experts but also to others less familiar with the concept of sustainable development.

The indicators help to illustrate the breadth of issues covered by the sustainable development agenda, and it is hoped will encourage readers to find out more. Readers are also encouraged to participate in Taking it on – the consultation to develop new UK sustainable development strategy – which was launched on 21 April 2004, and to contribute their views and suggestions. Details are at the back of this booklet.

INTRODUCTION

The UK was one of the first countries to establish a sustainable development strategy (1994) and a set of indicators to monitor progress (1996). In 1999 the UK Government established a new set of 15 headline indicators and a wider set of core indicators, *Quality of life counts* (QoLC), to provide a baseline from which future progress could be reviewed.

The headline indicators, making up a 'quality of life barometer' of everyday issues were intended 'to provide a high level overview of progress, and be a powerful tool for simplifying and communicating the main messages for the public'. They have been updated regularly and reviewed in Government annual reports, *Achieving a better quality of life. A Quality of life barometer* leaflet summarises the indicators to make them more accessible.

An updated compendium of the wider core indicators, *Quality of life counts – update 2004*, was published on the sustainable development website in March 2004 – bringing them together for the first time since 1999.

Information and data for all the UK indicators of sustainable development are available on the UK Government's sustainable development website:

www.sustainable-development.gov.uk

The material in this booklet is almost exclusively based on a selection of indicators from the *Quality of life counts* compendium of nearly 190 indicators.

A few indicators are from other related initiatives to make up this booklet of around 50 indicators, which includes all the UK Government 15 headline indicators of sustainable development. However, these indicators should not be regarded as a top 50. Their selection was simply to try to meet the modest aims of providing some easy reference material and to help raise awareness and understanding.





Assessments of progress

For each indicator, where possible, an assessment of progress has been made by comparing the latest data with the position at three baselines:

- Since 1970
- Since 1990
- Since late 1990s

The baseline for the final assessment is the year for which data were available for the baseline assessment in *Quality of life counts* in 1999, which in most cases was 1998 or 1997, but varies from indicator to indicator.

‘Traffic light’ assessments are used as follows:

-  = significant improvement
-  = little or no change
-  = significant deterioration
-  = insufficient or no comparable data

Some indicators are for contextual purposes only and assessments of progress have not been made. In some cases, indicators are presented for Great Britain, England and Wales or England only, if consistent data are not available for the UK. Links to indicators developed separately for Scotland, Wales

and Northern Ireland are available on the sustainable development website.

The indicators are organised into three broad themes, within which there are in turn three sub-themes – these loosely reflect the framework in *Quality of life counts*. In addition there are a handful of indicators at the start that set the scene and provide an international context.

The themes are:

A Sustainable Economy

- Economic stability and competitiveness
- Resource use and waste
- Employment and education

Building Sustainable Communities

- Poverty, health and housing
- Crime and social cohesion
- Travel and access

Managing the Environment and Natural Resources

- Climate change and energy
- Air, water and radioactive waste
- Landscape and wildlife

Commentary on each indicator has been kept to the minimum necessary to explain trends, with very little reference to its policy context. For the background and policy relevance for each indicator please refer to *Quality of life counts*. The data behind each indicator are available on the sustainable development website: www.sustainable-development.gov.uk.

Most of the data used to compile the indicators come from Government sources and are National Statistics. In some cases, through necessity, data come instead from outside organisations.

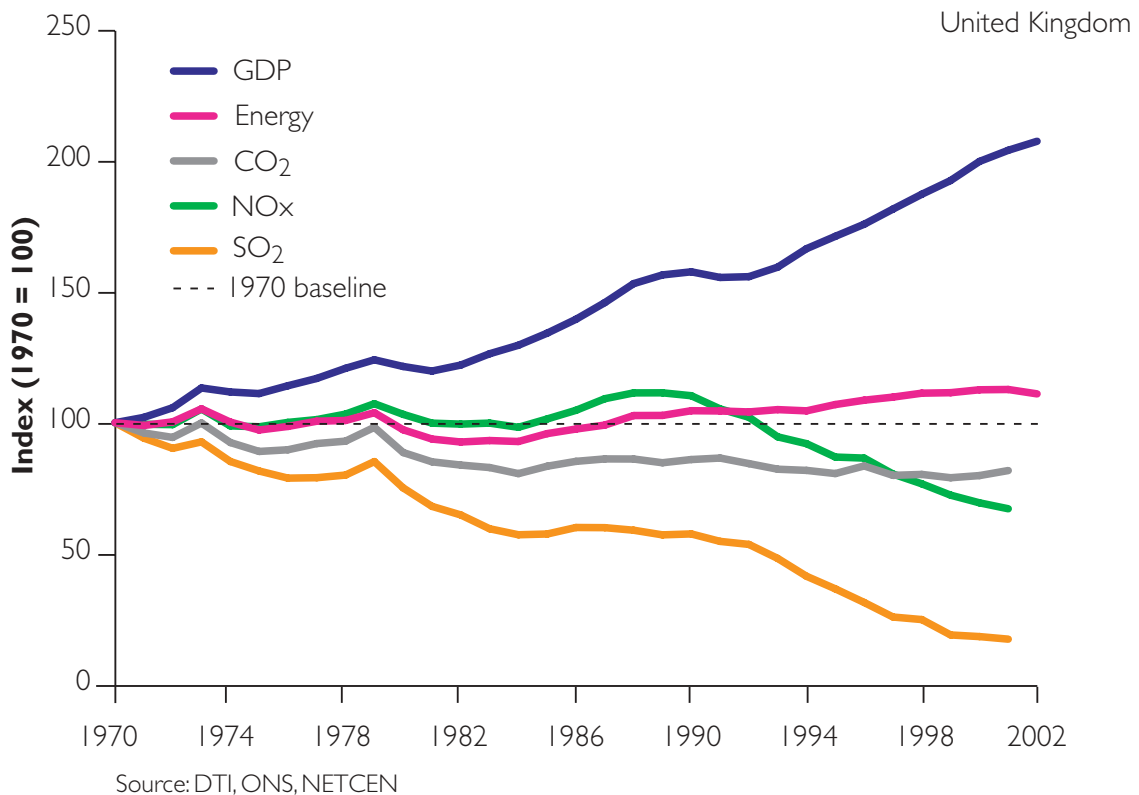
The assessment of progress and the compilation of the compendium have been undertaken by statisticians in Defra, in collaboration with statisticians and other colleagues in other Government departments.



INDICATORS SETTING THE SCENE

Economic growth, energy consumption and environmental impacts

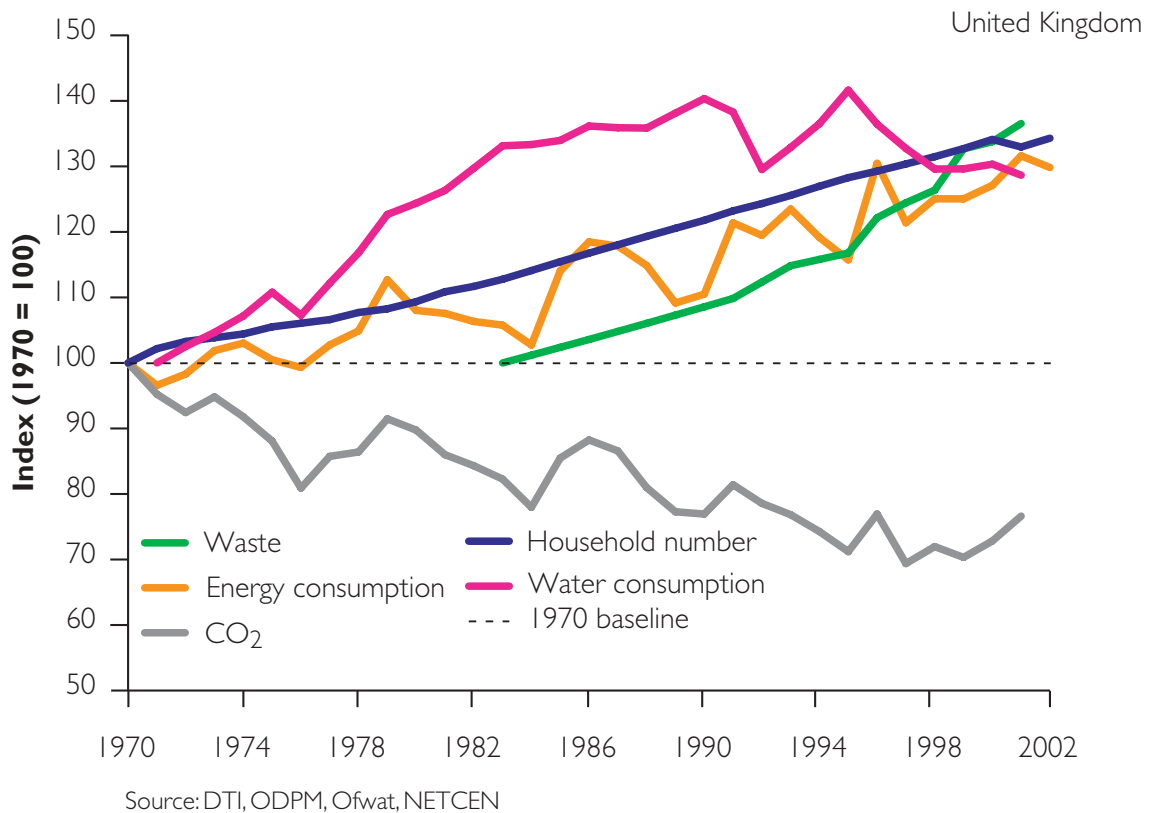
GDP, energy use and selected gaseous emissions: 1970 to 2002



- Between 1970 and 2002, GDP increased by 107 per cent while energy consumption only increased by 11 per cent. In general, energy consumption has risen much more slowly than GDP.
- There has been some success in uncoupling energy consumption from carbon dioxide emissions, mainly because of a switch from coal and oil to gas and nuclear power in power stations.

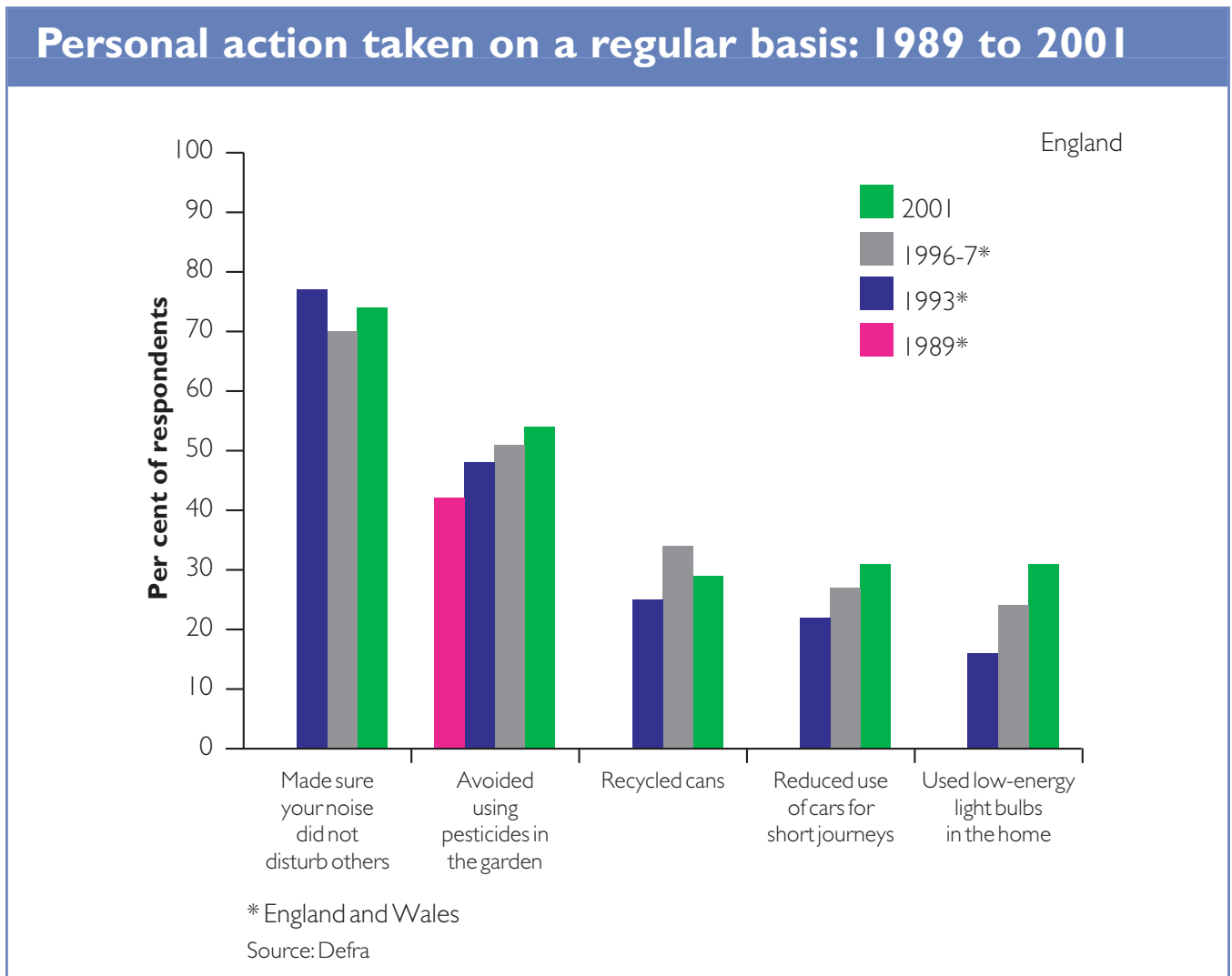
Environmental impacts of households

Household numbers, domestic water and energy consumption, domestic waste arisings and CO₂ emissions: 1970 to 2002



- Between 1970 and 2002, domestic energy consumption rose by 30 per cent, roughly in line with the number of households, which rose by 34 per cent.
- There have been some improvements in the energy consumption of appliances. For example, refrigerator models in 2002 consumed on average 36 per cent less electricity than new models in 1989.
- Between 1990 and 2001, household numbers increased by 9 per cent, while household waste increased by 26 per cent and household water use decreased by 8 per cent.

Individual action for sustainable development



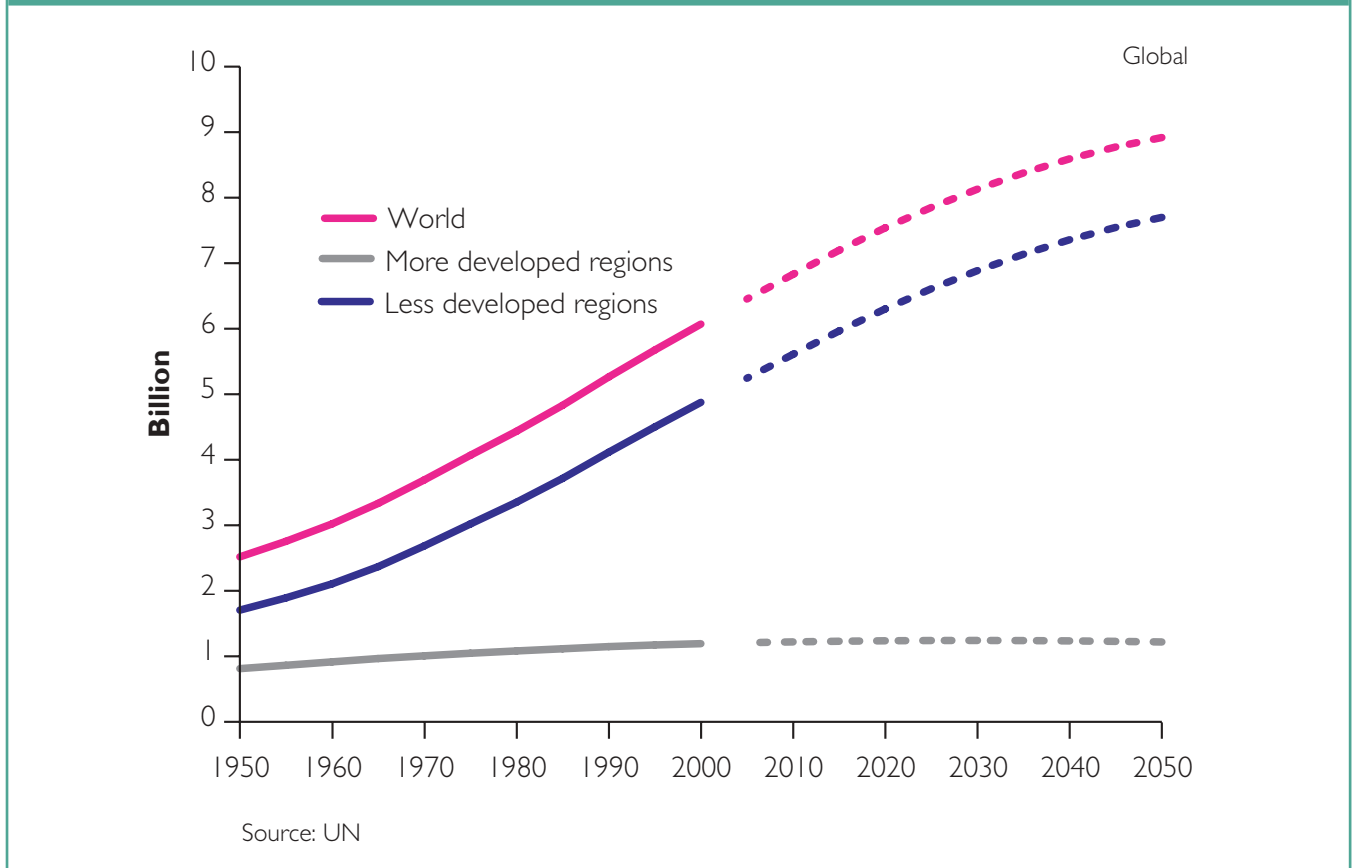
Change since: ⋮ 1970 ✓ 1990 ✓ 1996-7

- In a 2001 survey, around 30 per cent of people had regularly reduced the use of their car for short journeys, or regularly recycled cans or used low-energy light bulbs. 54 per cent regularly avoided using garden pesticides and 74 per cent regularly made sure their noise did not disturb others.
- Generally, there were increases in the proportions of people regularly taking environmental actions compared with earlier surveys.

INTERNATIONAL CONTEXT

Global Population

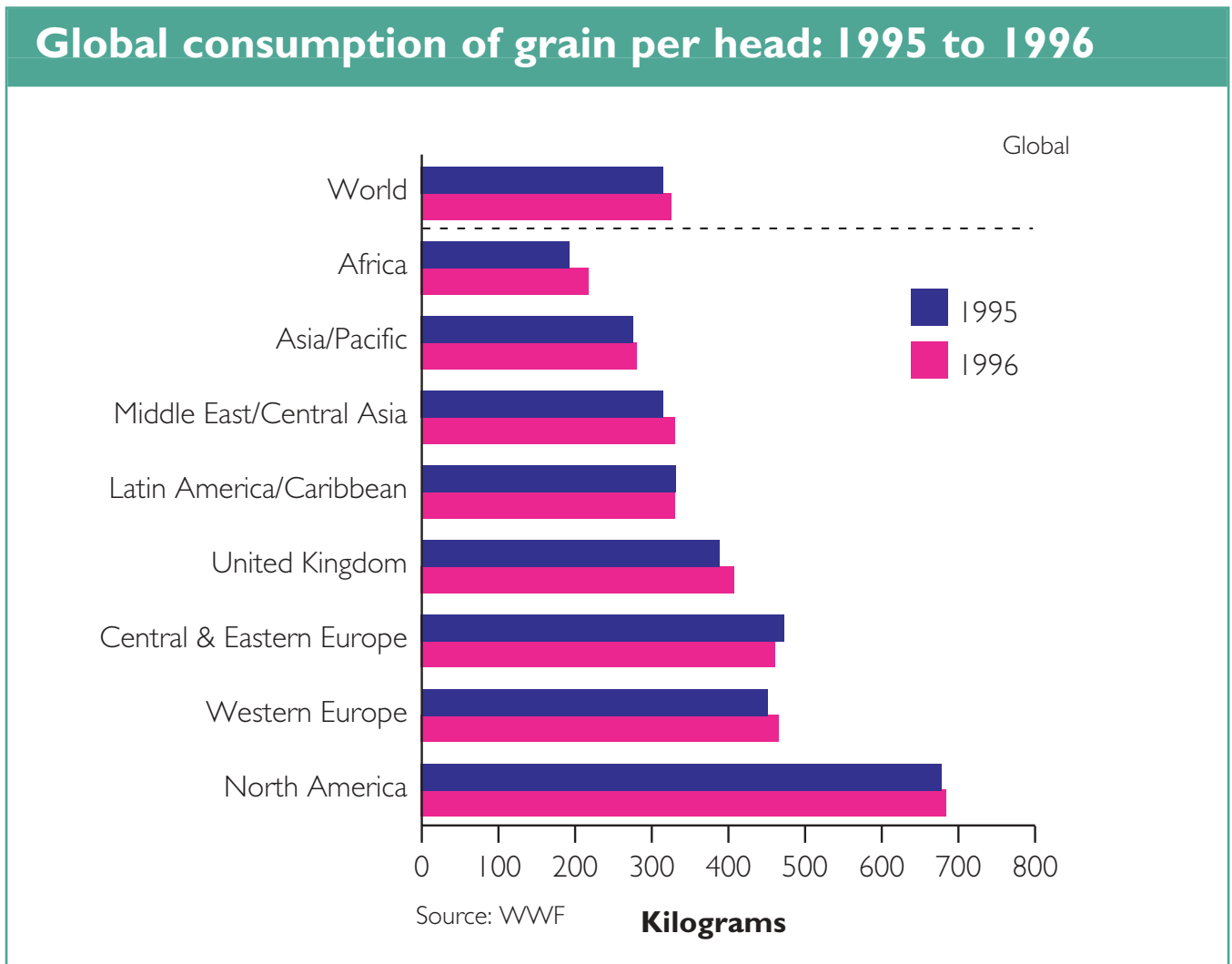
Global population estimates and projections: 1950 to 2050



- The world's population reached 6 billion by the year 2000. Fertility rates are declining globally and numbers of older people are rising significantly. Current projections suggest that the planet's population will be close to 9 billion by 2050.
- Population growth is concentrated in less developed regions: populations in more developed regions are projected to reach a peak between 2025–2035 and then decline slightly.

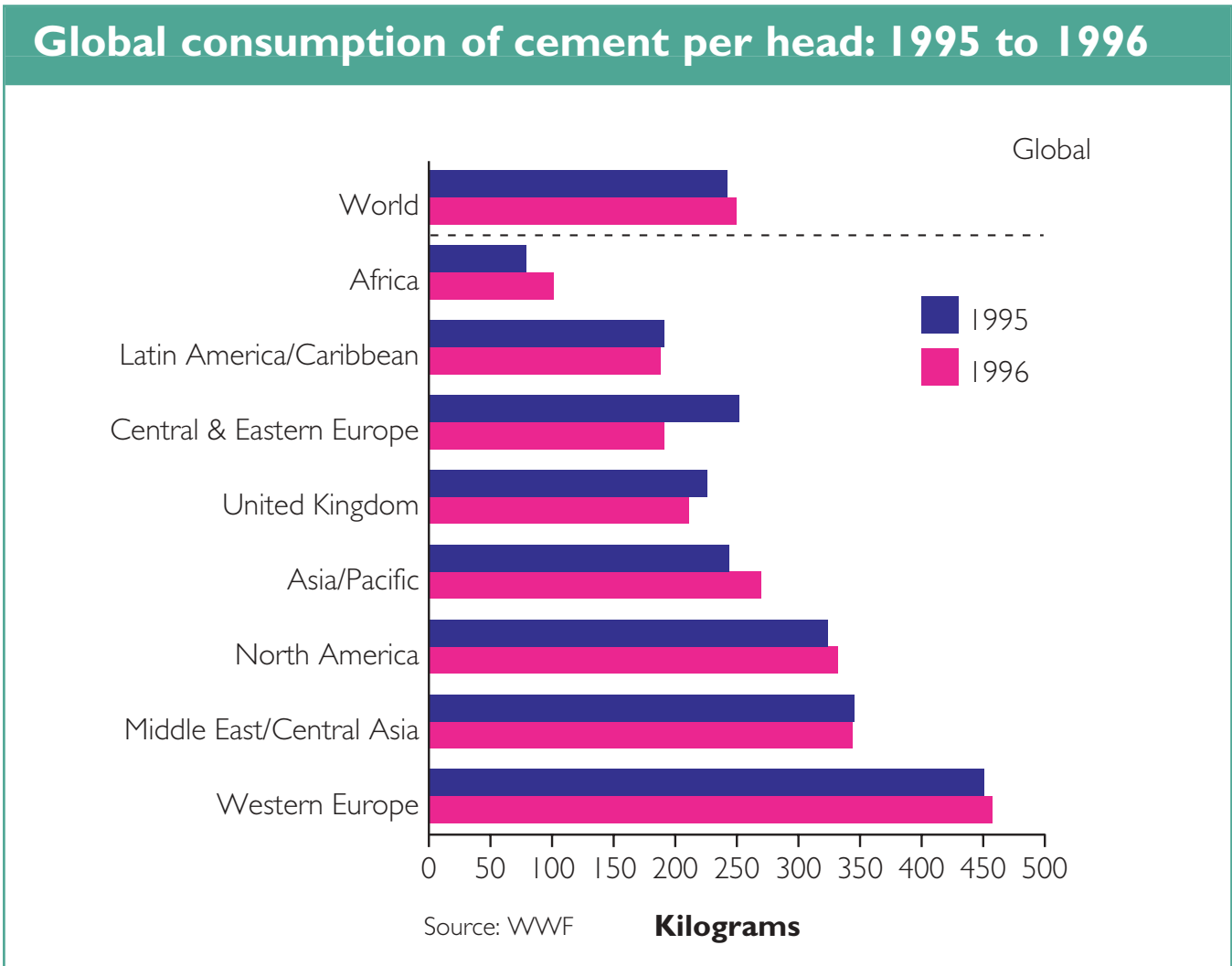
- The percentage of people living in extreme poverty (on less than \$1 per day) is projected to decline between 1990 and 2008, from 28.3 to 21.6 per cent. Thereafter it is projected to reduce further to 12.5 per cent of the world's population.
- Poverty reduction rates are projected to vary considerably across the globe. Absolute poverty is projected to decline relatively rapidly in Asia but more slowly in other regions. Indeed, poverty rates are projected to rise in Europe and Central Asia, the Middle East and Africa by 2008.
- The UK's Official Development Assistance (ODA) to poorer countries as a percentage of Gross National Income (GNI) rose by 15 per cent between 1998 and 2002, to 0.31 per cent of GNI. However, this figure is lower than those of the 1970s and it is also lower than the UN target of 0.7 per cent.
- The majority of UK ODA is direct country-to-country assistance (bilateral ODA): in 2002, 71 per cent of all ODA was of this type.

World and UK materials consumption per head



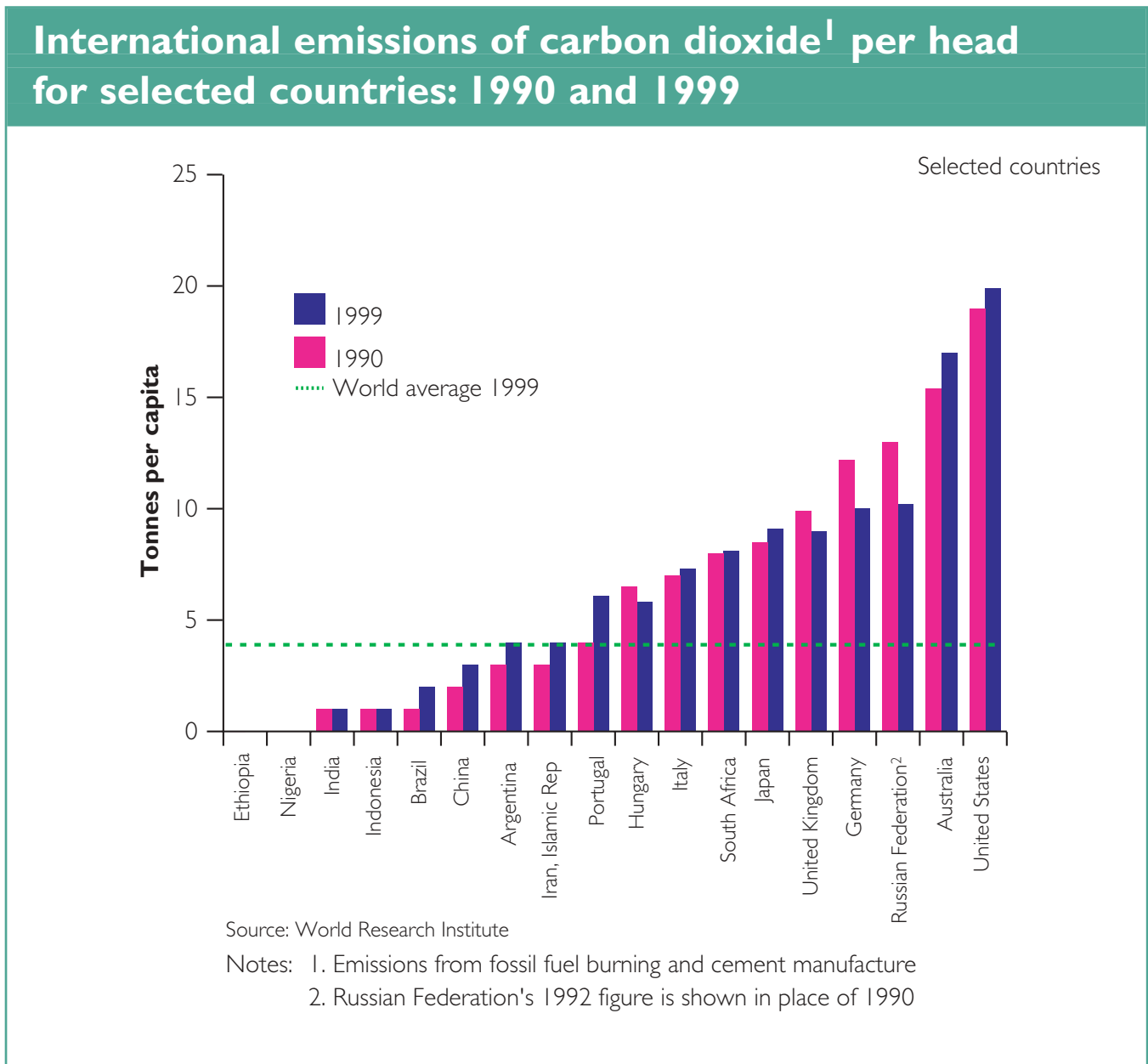
- These indicators were chosen to be indicative of renewable and non-renewable resources (grain and cement respectively). It has not been possible to update the data beyond 1996.

World and UK materials consumption per head



- There was greater per capita consumption of grain in the UK than the global average and less per capita consumption of cement. UK consumption was less than other developed parts of the world such as Western Europe and North America.

International emissions of carbon dioxide per head

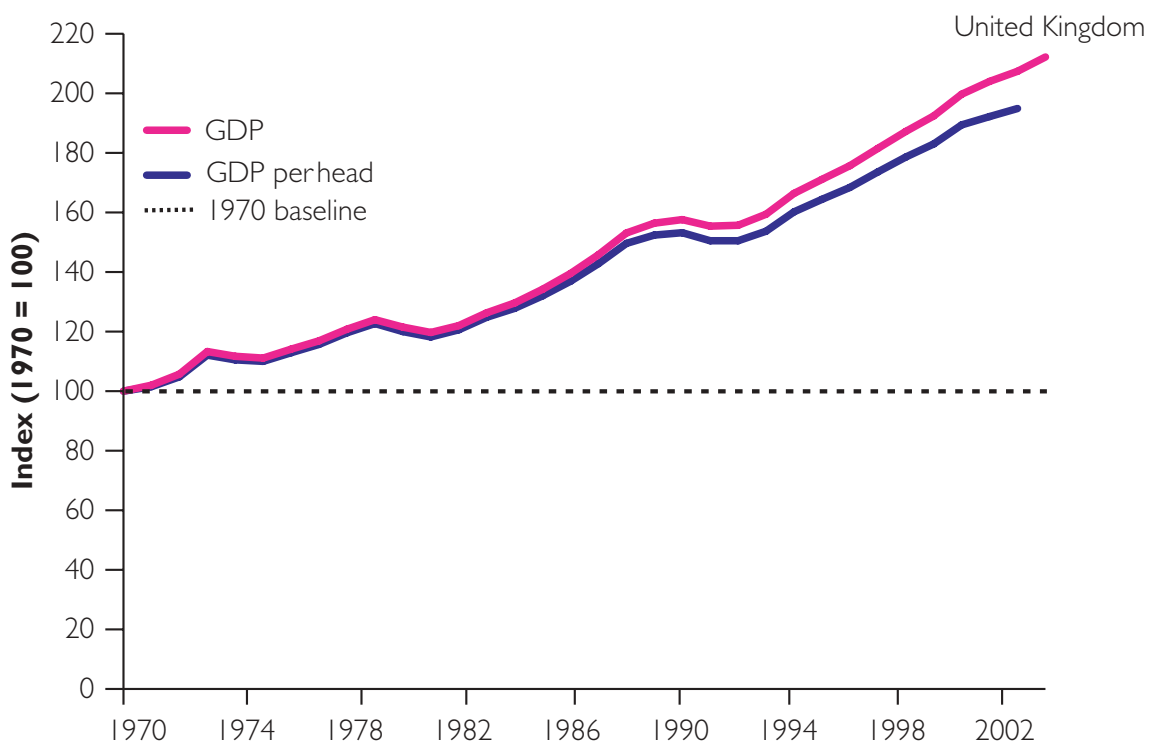


- The UK is one of relatively few countries to reduce carbon dioxide emissions per head since 1990.
- The UK, with 1.0 per cent of the world's population, emitted 2.3 per cent of global CO₂ in 1999.
- UK emissions per head in 1999 were similar to the EU average, just under half those of the United States, and 2.3 times the average for the world as a whole.

A SUSTAINABLE ECONOMY: ECONOMIC STABILITY AND COMPETITIVENESS

Economic output

GDP and GDP per head: 1970 to 2003



Source: ONS

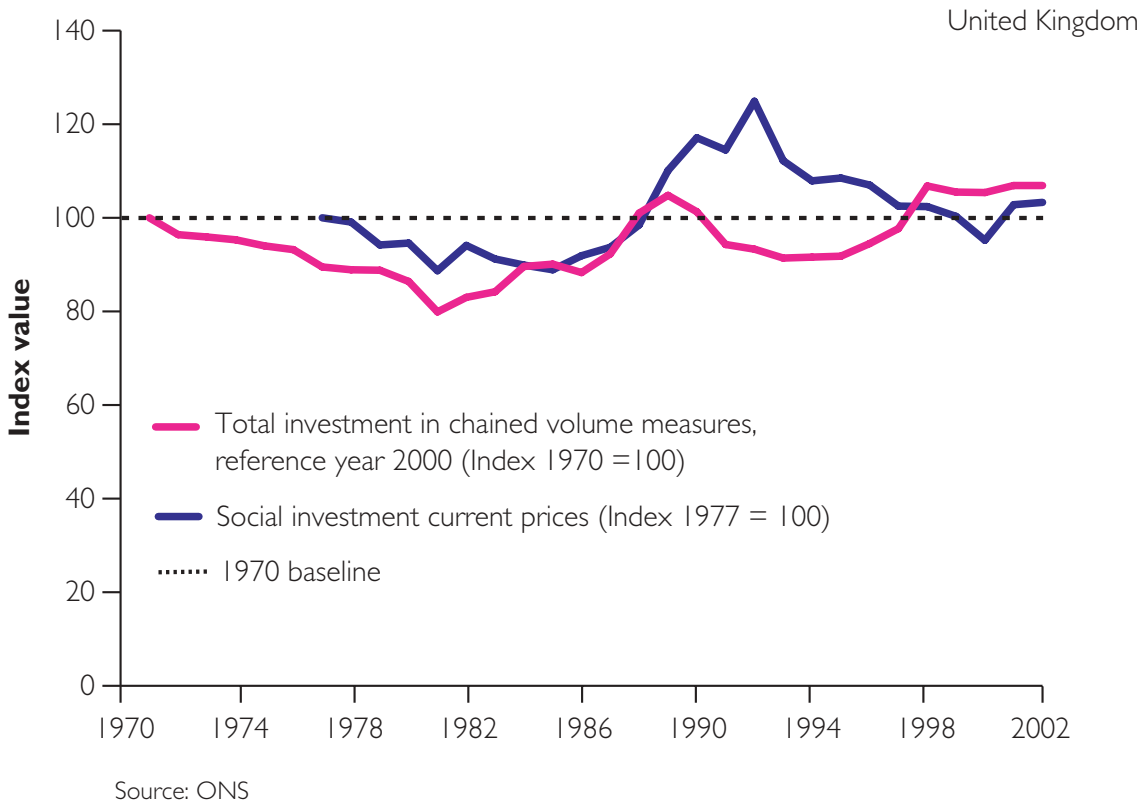
Note: Chained volume measures rebased to 1970 = 100.

Change since:  1970  1990  1998

- Between 1990 and 2003, GDP grew in real terms by 35 per cent. Output has increased steadily since the early 1990s, with a 13 per cent rise between 1998 and 2003.
- Output per head has increased at a slightly slower rate, by 27 per cent between 1990 and 2002 and just 9 per cent from 1998 to 2002, reflecting the fact that the population has also increased.

Investment

Total investment and social investment relative to GDP: 1970 to 2002



Change since:



1970



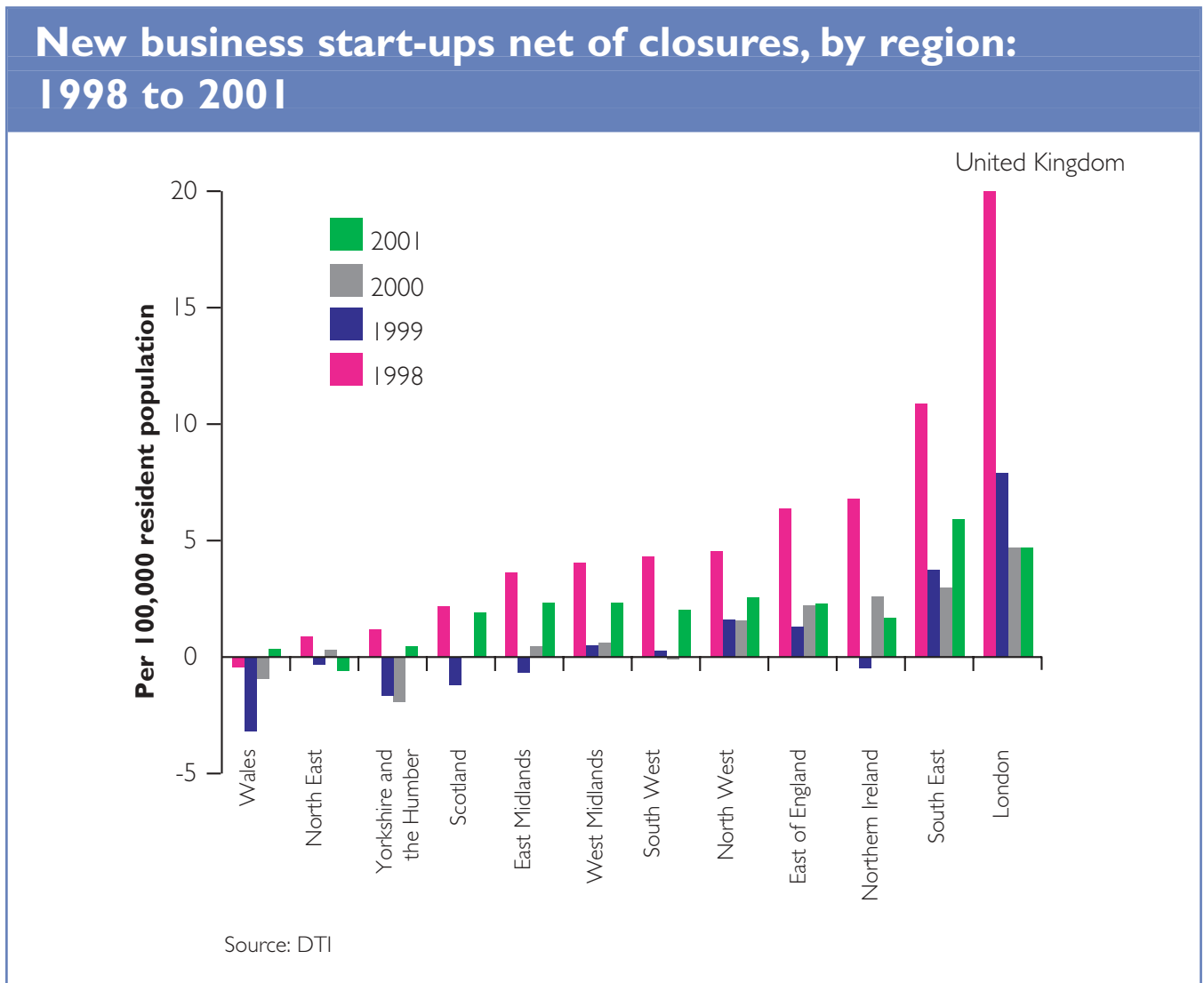
1990



1998

- Total investment in real terms grew by 5 per cent relative to GDP between 1990 and 1998, and has since remained relatively stable.
- Social investment (railways, hospitals, schools) in current prices was around 2.0 per cent of GDP in 1990, and was 1.7 per cent in 2002.

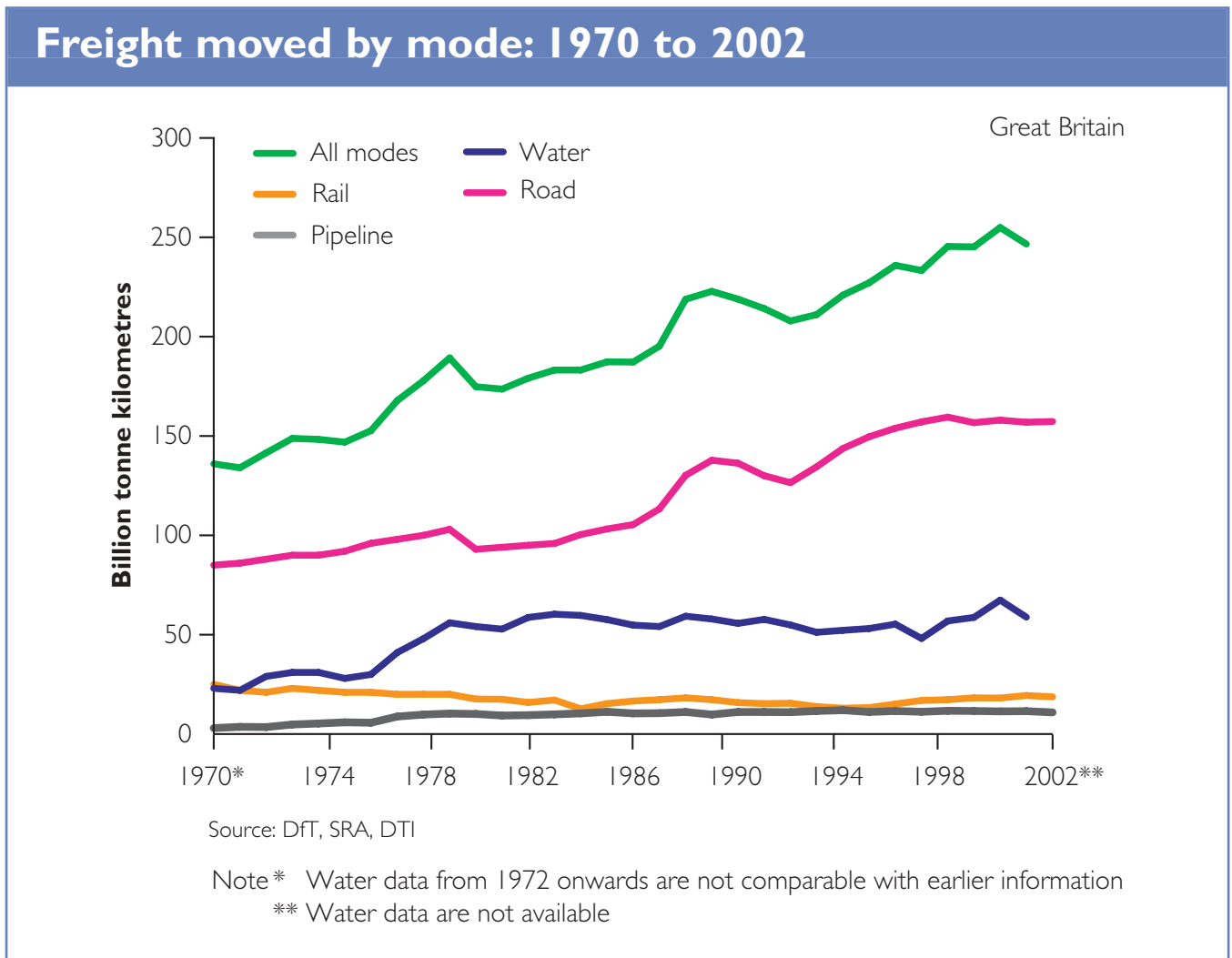
New business start-ups net of closures



Change since: ⋮ 1970 ✓ 1990 ≈ 1998

- Between 1998 and 2001, growth in new businesses, net of closures, was strongest in London and the South East of England and weakest in Wales. This compares with 1984 when all regions saw overall net closures (not shown).
- For the UK as a whole, growth was concentrated in the hotel, restaurant and other services sectors, with losses in the more industrial sectors and in retailing (not shown).

Freight transport by mode



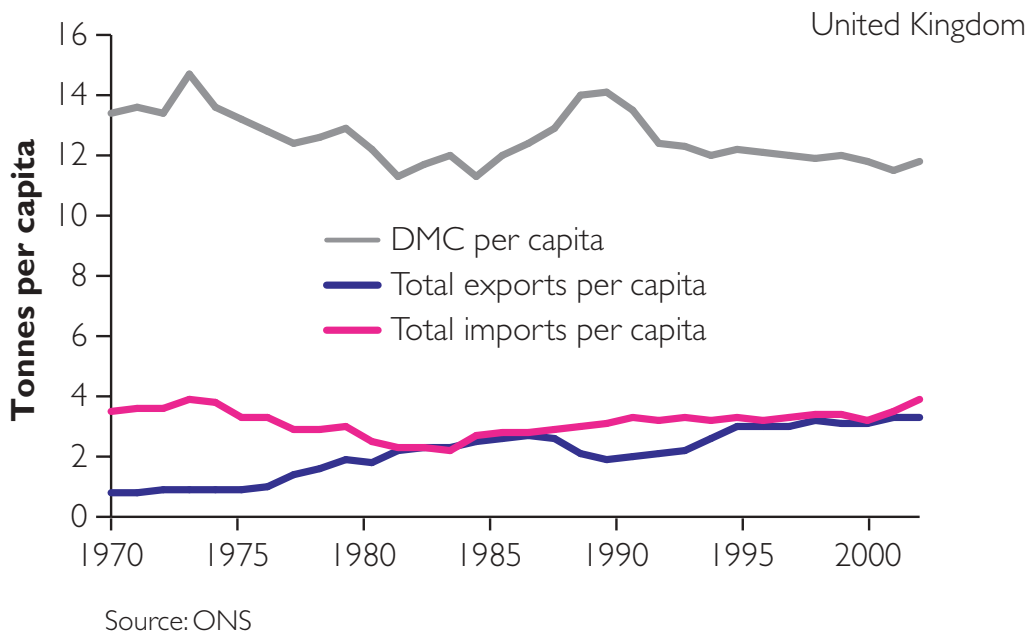
Change since: ⊗ 1970 ⊗ 1990 ≈ 1998

- Total freight moved increased by 81 per cent between 1970 and 2001.
- In 2001, 64 per cent of freight transport was by road, similar to the 1970 share, whilst the proportion moved by rail fell from 18 per cent to 8 per cent.
- Between 1998 and 2002, rail freight increased by 8 per cent while road freight remained fairly constant.

A SUSTAINABLE ECONOMY: RESOURCE USE AND WASTE

UK resource use

Direct Material Consumption, total imports and total exports per capita: 1970 to 2001



Change since:



1970



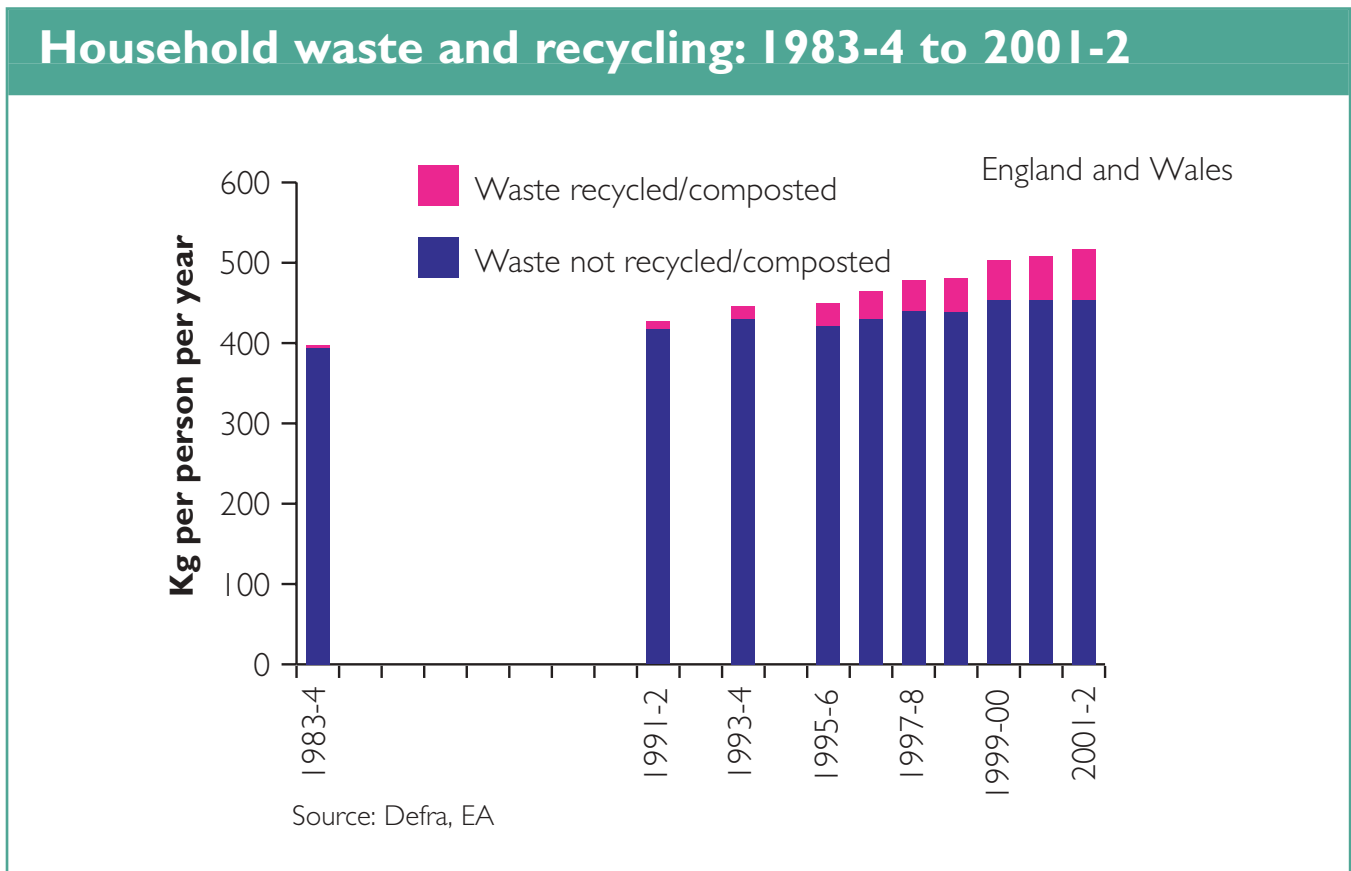
1990



1997

- Direct material consumption (DMC) measures the amount of natural resources and products directly consumed by the UK economy by adding together the mass of materials used. It includes all renewable and non-renewable natural resources (except water) extracted domestically or abroad and imported for UK consumption, but excludes exports.
- Since 1970, despite fluctuations DMC has decreased by about 10 per cent. Imports have remained roughly constant, while exports have tripled over the same period.

Household waste and recycling



Waste arisings –

Change since: ⋮ 1970 ✗ 1990 ✗ 1997-98

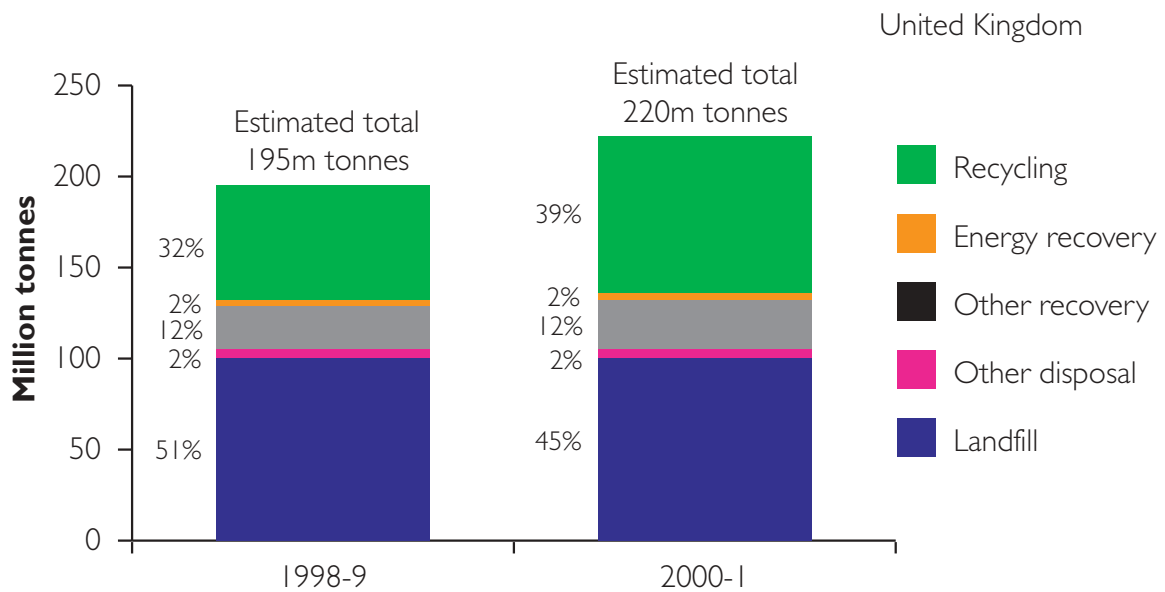
Recycling –

Change since: ⋮ 1970 ✓ 1990 ✓ 1997-98

- Recently, household waste has grown by 2 to 3 per cent per year. In 2001-2, over half a tonne was generated per person. Whilst the total has increased, so has the proportion recycled from 9 per cent in 1998-9 to 12 per cent in 2001-2.
- Despite the fact that non-recycled waste represents a decreasing proportion of all waste, overall increases in waste generation mean that the actual amount still increased by about 4 per cent between 1998-9 and 2001-2. The majority of this was disposed to landfill.

All waste arisings and management

Waste arisings and management of controlled waste from households, commerce and industry: 1998-9 and 2000-1



Note: Includes estimated figures for industrial and commercial waste.

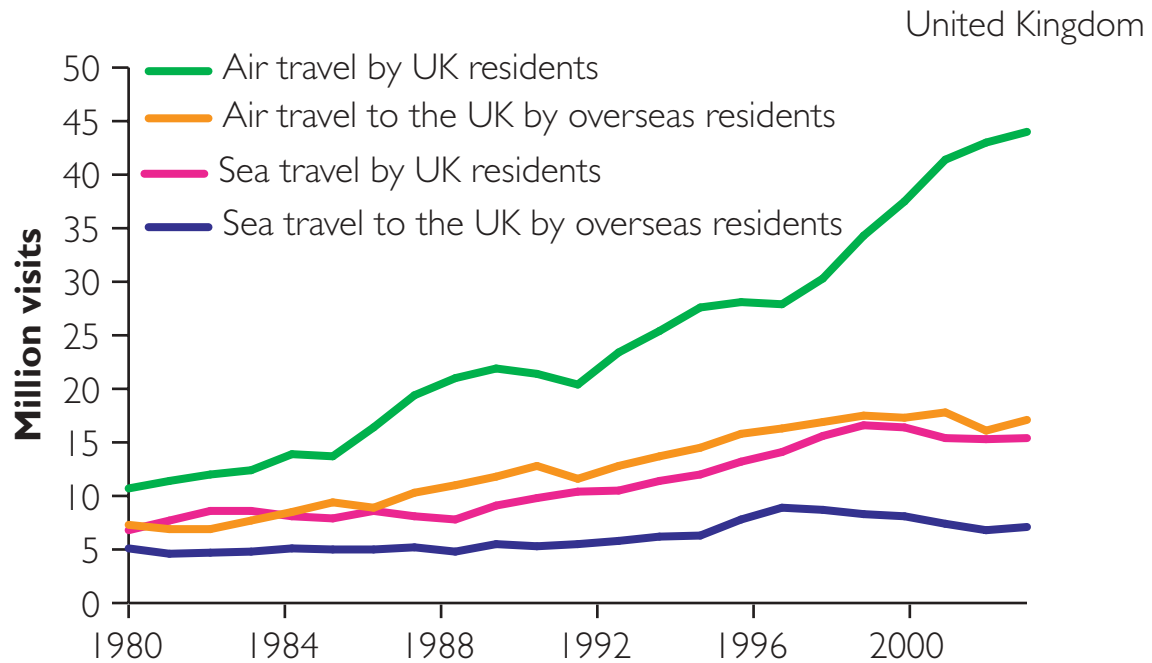
Source: Defra, EA, ODPM, SEPA, WAG, NIEHS

Change since: ⋮ 1970 ⋮ 1990 ≈ 1998

- In 2000-1, around 220 million tonnes of controlled waste was produced by households, commerce and industry (including construction and demolition). Just under half was disposed of in landfill sites.
- The increase in total arisings from 1998-9 to 2000-1 is not statistically significant.

Overseas travel

Air and sea visits by UK and overseas residents: 1982 to 2002



Note: Sea travel includes the Channel Tunnel from 1995

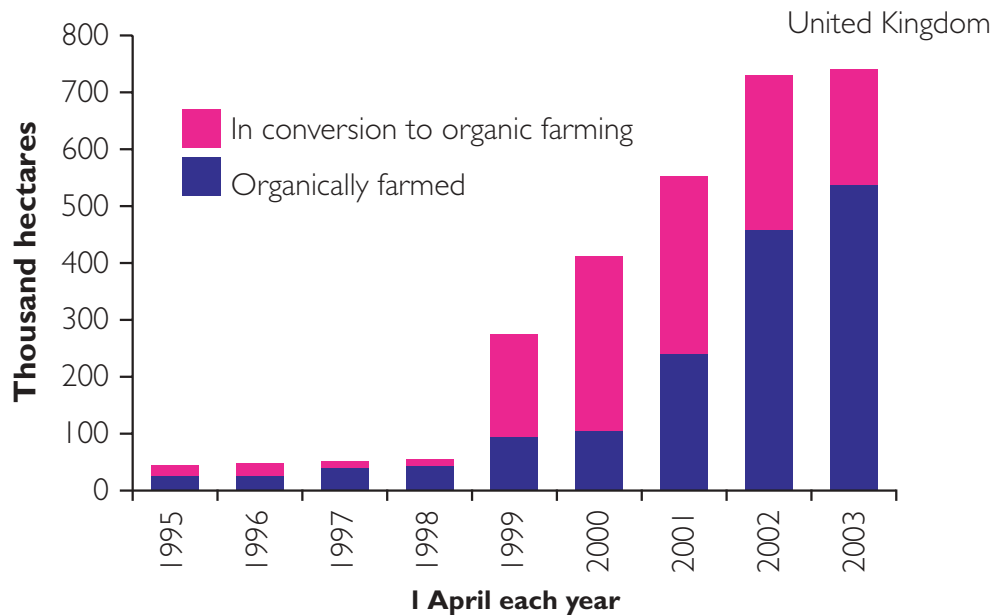
Source: ONS, DfT

Change since: **X** 1970 **X** 1990 **X** 1998

- Overseas flights by UK residents more than quadrupled between 1980 and 2002, and visits to the UK by air more than doubled.
- Although air travel by UK residents has continued to increase significantly since 1998, the number of overseas visitors to the UK by air was 2 per cent lower in 2002 than in 1998, partly due to the aftermath of the September 11 terrorist attacks.

Area converted to organic production

Area of land converted or in conversion to organic farming: 1995 to 2003



Change since:



1970



1990



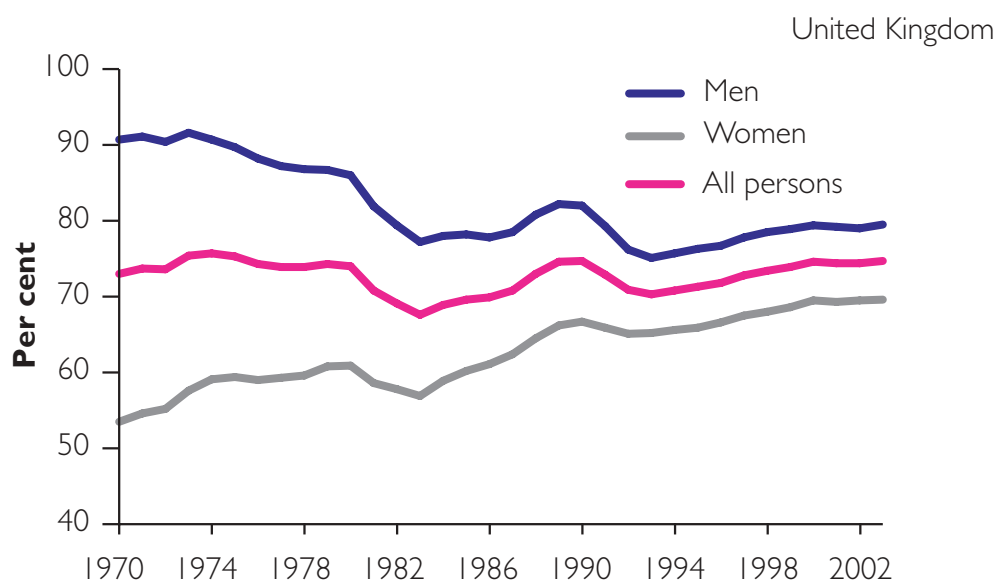
1999

- The area of land converted or in conversion to organic production has dramatically increased since 1999.
- In 2003, 537,000 hectares were organically farmed and a further 204,000 hectares were in conversion to organic farming – a total of 741,000 hectares, compared with 276,000 hectares in 1999 and just 55,000 hectares in 1998.

A SUSTAINABLE ECONOMY: EMPLOYMENT AND EDUCATION

Employment

Percentage of people of working age¹ who are in work²: 1970 to 2003



Source: DWP, ONS

Notes: 1. From 1959-71 working age was 15-59/64;
from 1972 onwards, 16-59/64.

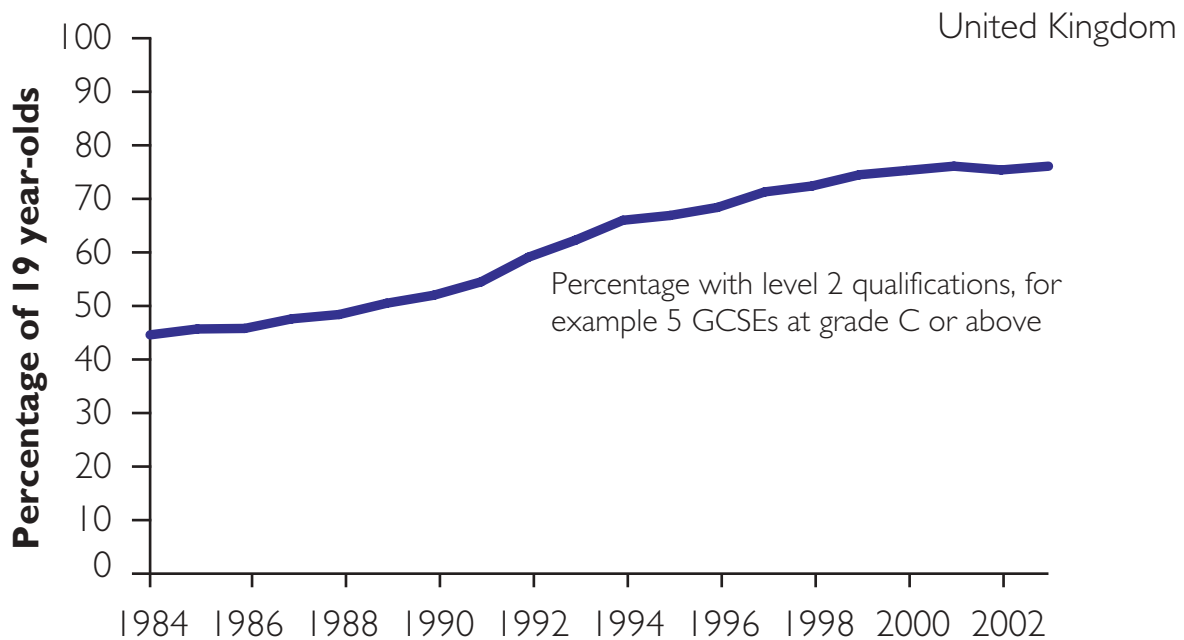
2. Rate as in May-July quarter each year (seasonally adjusted).

Change since:  1970  1990  1999

- In 2003, the percentage of working-age people in work was 74.7 per cent, the same level as in 1990, but an increase from 73.9 per cent in 1999.
- There was a reduction in the proportion of working age men in employment between 1970 and 2003, from 90.7 per cent to 79.5, but a small increase was seen from 78.9 per cent in 1999. The proportion of women in employment continues to increase.

Education

Qualifications at age 19: 1984 to 2003



Source: DfES

Note: Spring quarter each year

Change since:



1970



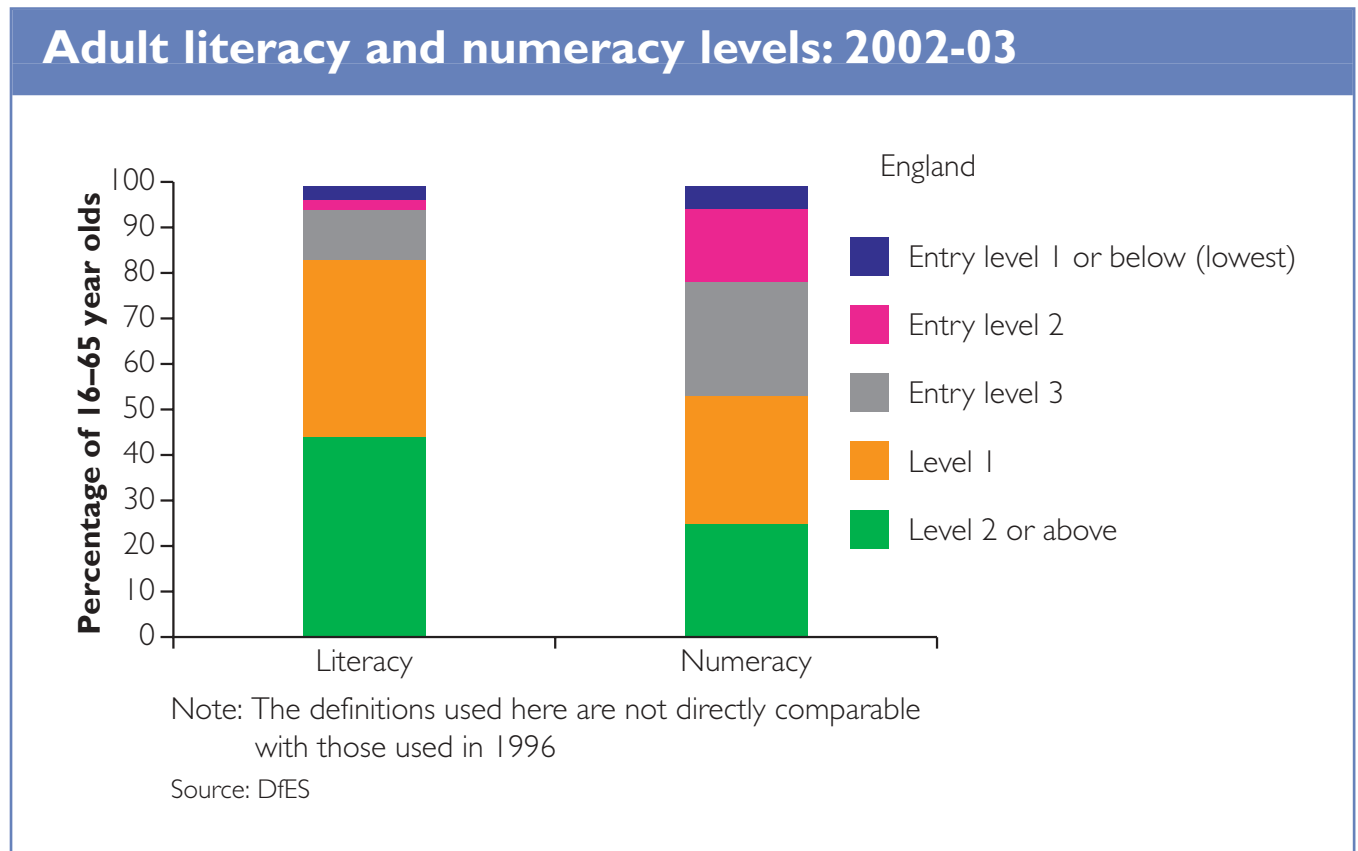
1990



1999

- The percentage of 19 year-olds with level 2 qualifications (e.g. five GCSEs at grades C or above, NVQ level 2 or equivalent) was 76.1 per cent in 2003 compared with 52.0 per cent in 1990.
- At present just under a quarter of young people do not achieve qualifications equivalent to level 2 by the age of 19, and a small minority, 7.4 per cent, achieve no qualifications at all by this age.

Adult literacy/numeracy



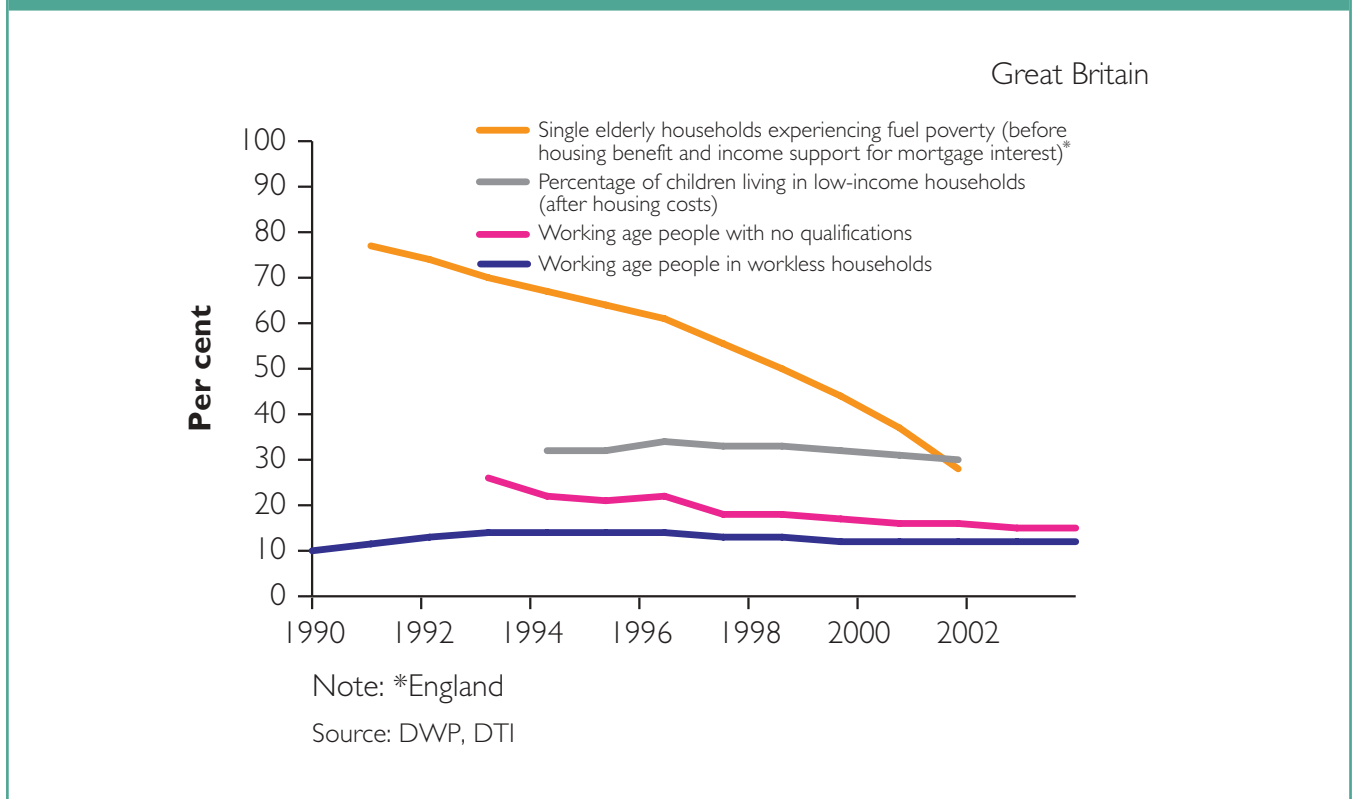
Change since: (⋮) 1970 (⋮) 1990 (⋮) 1996

- Figures from a 2002-3 survey of adult literacy and numeracy in England show that about 16 per cent of respondents were assessed to have a relatively low level of literacy (entry level 3 or below). The proportion assessed to have relatively low numeracy was 47 per cent.
- In a one-off survey in 1996 over a fifth of all adults of working age in the UK were estimated to have low literacy and numeracy skills. Prose, document and quantitative literacy were measured. The two surveys are not comparable so it has not been possible to make an assessment of progress.

BUILDING SUSTAINABLE COMMUNITIES: POVERTY, HEALTH AND HOUSING

Poverty and social exclusion

Selected indicators for working age people, children and the elderly: 1990 to 2003



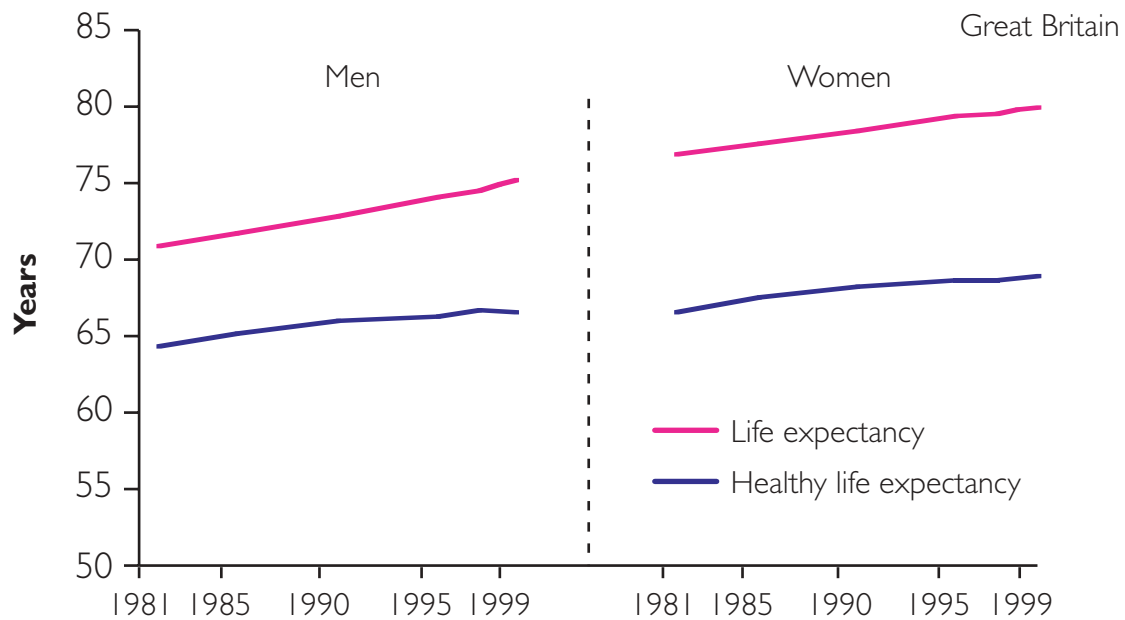
Change since: ⊗ 1970 ≈ 1990 ✔ 1999

- The proportion of working-age people who live in households where no one works has fallen gradually since the mid-1990s. There has been steady progress in reducing the proportion of working-age people without a qualification, which has fallen from 26.4 per cent in 1993 to 14.8 per cent in 2003.

- The proportion of single elderly households experiencing fuel poverty fell from 77 per cent in 1991 to 28 per cent in 2001. The proportion of children living in households with relative low-incomes fell between 1996-7 and 2001-2, from 34 per cent to 30 per cent.

Health

Expectancy at birth of years lived in good or fairly good general health: 1981 to 1999



Source: ONS, GAD

Change since:



1970



1990

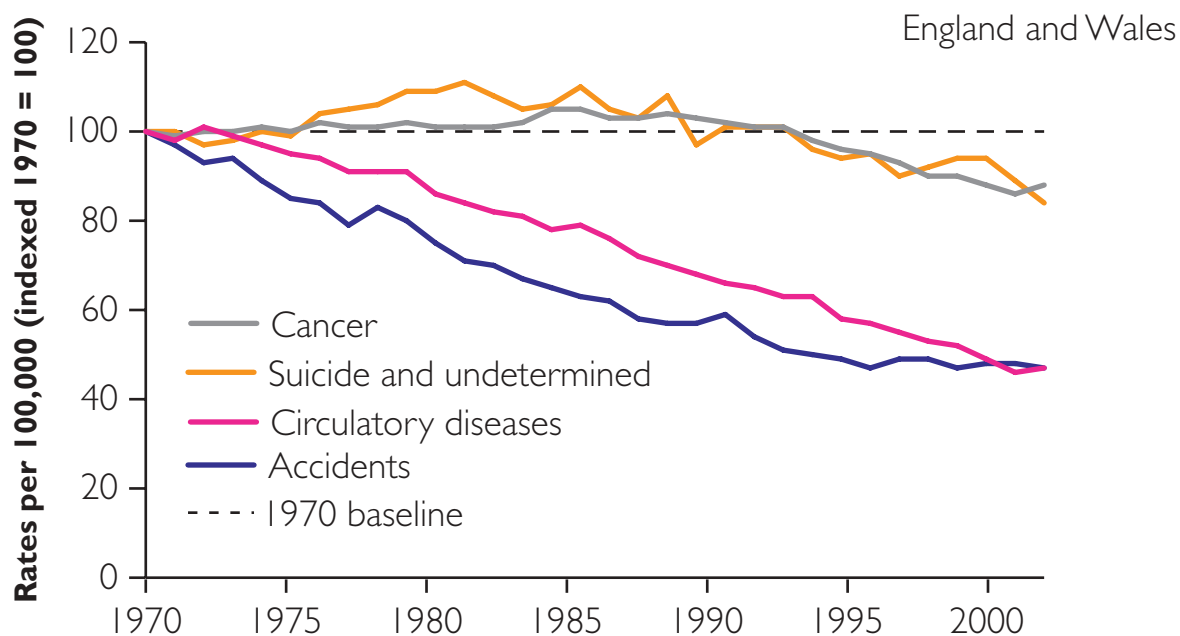


1995

- Between 1981 and 1999 average life expectancy increased from 70.9 to 75.1 years for men (by 4.2 years) and from 76.8 to 80.0 years for women (by 3.2 years).
- Over the same period healthy life expectancy increased from 64.4 to 66.6 years for men (by 2.2 years) and from 66.7 to 68.9 for women (by 2.2 years). Therefore, whilst overall life expectancy has increased, an increasing proportion of those extra years are in poor health.

Death rates from cancer, circulatory disease, accidents and suicides

Death rates – cancer, circulatory disease, accidents, suicides: 1970 to 2001



Change since:



1970



1990

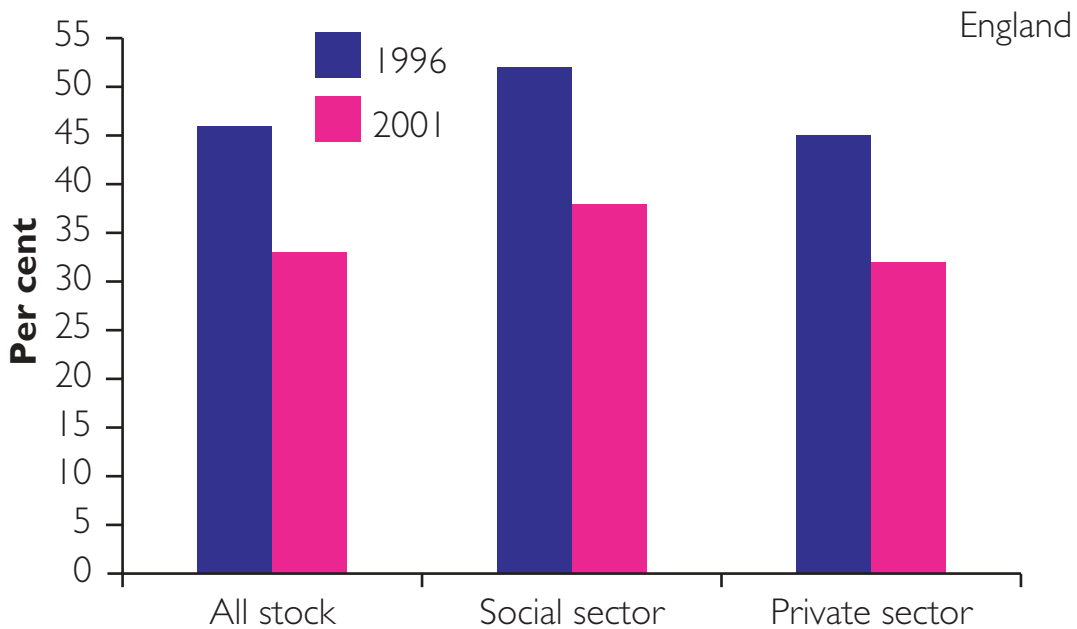


1996

- Death rates from circulatory diseases (people under 75) and accidents have halved since the 1970s and death rates from cancer and suicides have fallen during and since the 1990s.
- In 2001, death rates per 100,000 were 520 for circulatory diseases, 399 for cancer, 18 for accidents and 32 for suicides and undetermined deaths.

Housing – conditions

Percentage of households living in non-decent housing: 1996 to 2001



Source: ODPM

Change since:



1970



1990

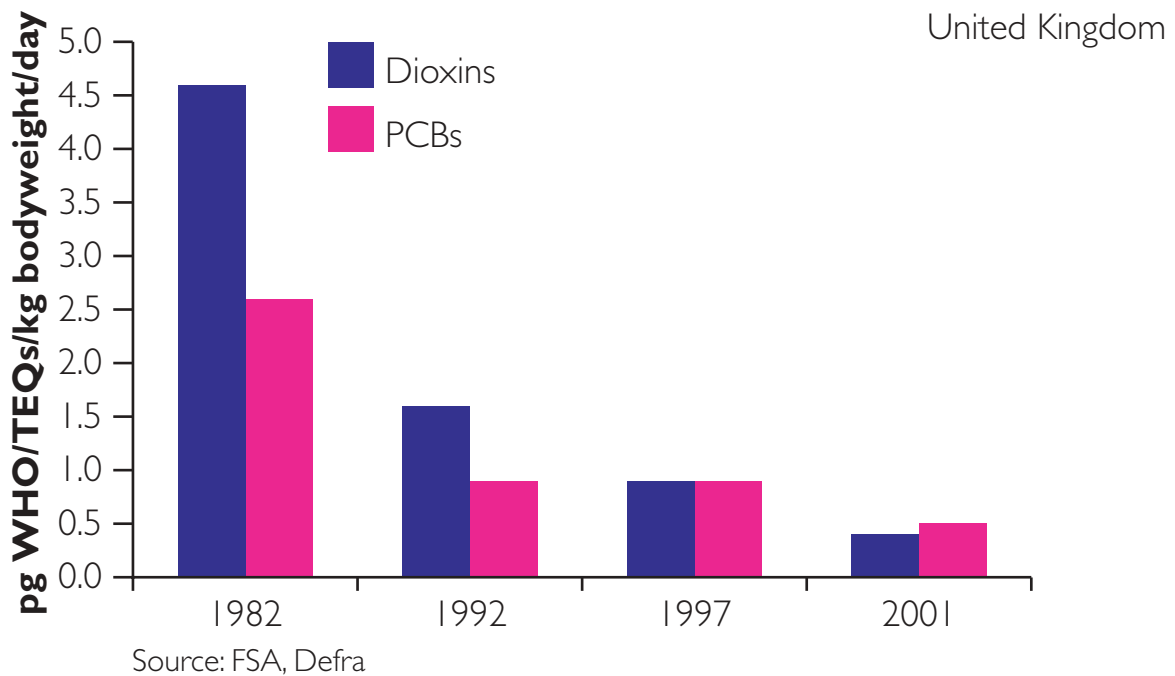


1996

- Between 1996 and 2001 there was an improvement in the overall condition of housing in England. 46 per cent of dwellings were non-decent in 1996, compared with 33 per cent in 2001.
- This improvement was seen in both the private and social sectors – 52 per cent of social housing was non-decent in 1996 compared with 38 per cent in 2001 and 32 per cent of private sector stock was non-decent in 2001, falling from 45 per cent in 1996.

Concentrations of persistent organic pollutants

Estimated dietary intakes of dioxins and PCBs by average adult UK consumers: 1982 to 2001



Change since:



1970



1990



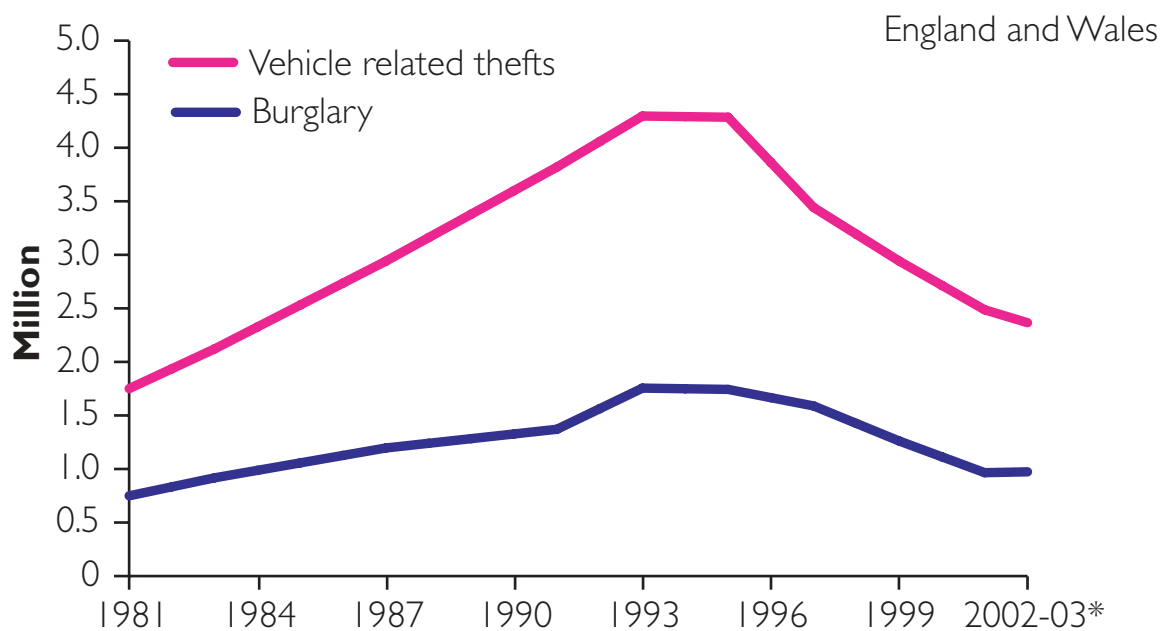
1997

- In 2001, estimated dietary intakes of dioxins and polychlorinated biphenyls (PCBs) were under one tenth and under one twentieth of their respective 1982 levels.
- Annual concentrations of dioxins in air (not shown) have decreased substantially since the early 1990s, while showing relatively little change since the late 1990s.
- From 1995 to 2002, annual average concentrations of PCBs in air (not shown) fell by between 40 and 90 per cent at the four available monitoring sites.

BUILDING SUSTAINABLE COMMUNITIES: CRIME AND SOCIAL COHESION

Crime

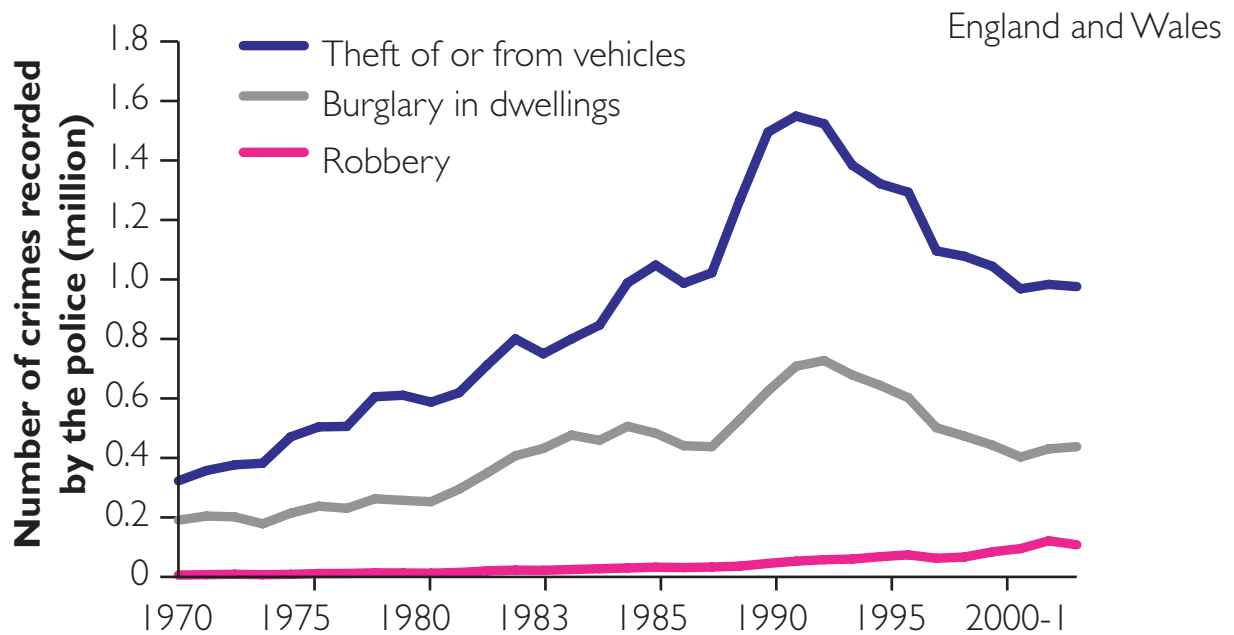
British Crime Survey trends in burglary and vehicle related theft: 1981 to 2002-3



Note: *2001-2 and 2002-3 data are interview-based.

Source: Home Office

Total numbers of crimes recorded by the police*: 1970 to 2002-3



Note: *1970 to 1998-9 data are for the number of crimes recorded in that financial year using the coverage and rules in use until 31st March 1998. After 1998-9, data are for the number of crimes recorded in that financial year using the expanded coverage and revised counting rules which came into effect on 1st April 1998.

Source: Home Office

Vehicles and burglary –

Change since:



1970



1990



1998-9

- British Crime Survey (BCS) data show that vehicle thefts fell by 38 per cent and burglary fell by 29 per cent between 1991 and 2002-3. Recorded vehicle crime fell by 23 per cent, and burglary in dwellings fell by 17 per cent between 1990 and 2002-3.
- Between 1999 and 2002-3 the BCS shows that vehicle thefts fell by 20 per cent and domestic burglary fell by 23 per cent. Over the same period recorded vehicle crime fell by 9 per cent and recorded domestic burglaries fell by 8 per cent.

Robbery –

Change since:



1970



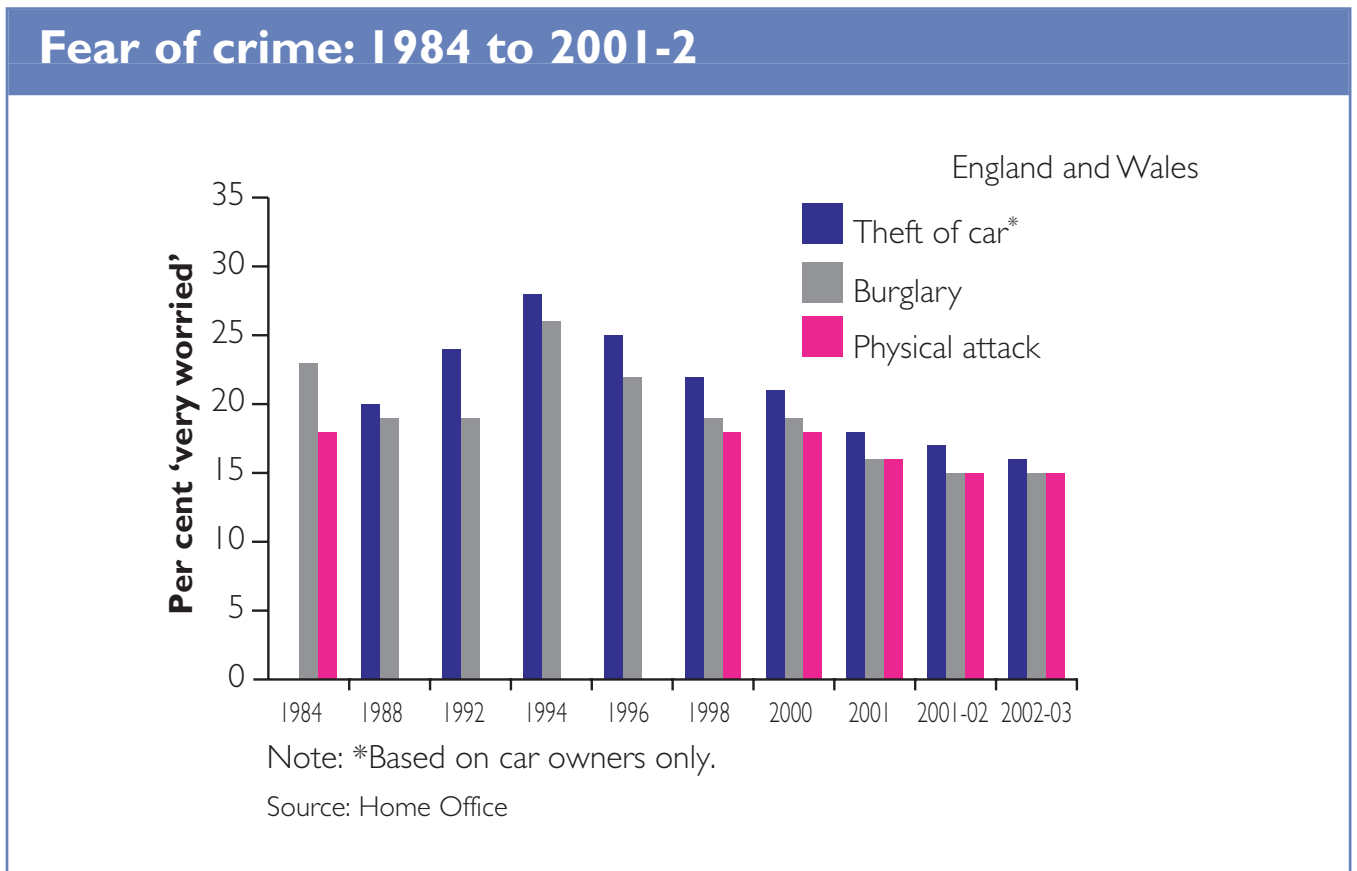
1990



1998-9

- The number of robberies recorded by the police increased from about 36,000 in 1990 to 67,000 in 1998-9 and 108,000 in 2002-3. However, 2002-3 represented a fall of 11 per cent from 2001-2 (equating to a 14 per cent fall once adjusted for the National Crime Recording Standard).

Fear of crime



Physical attack –

Change since:

⊙ 1970

⊙ 1990

⊙✓ 1998

Burglary/theft of car –

Change since:

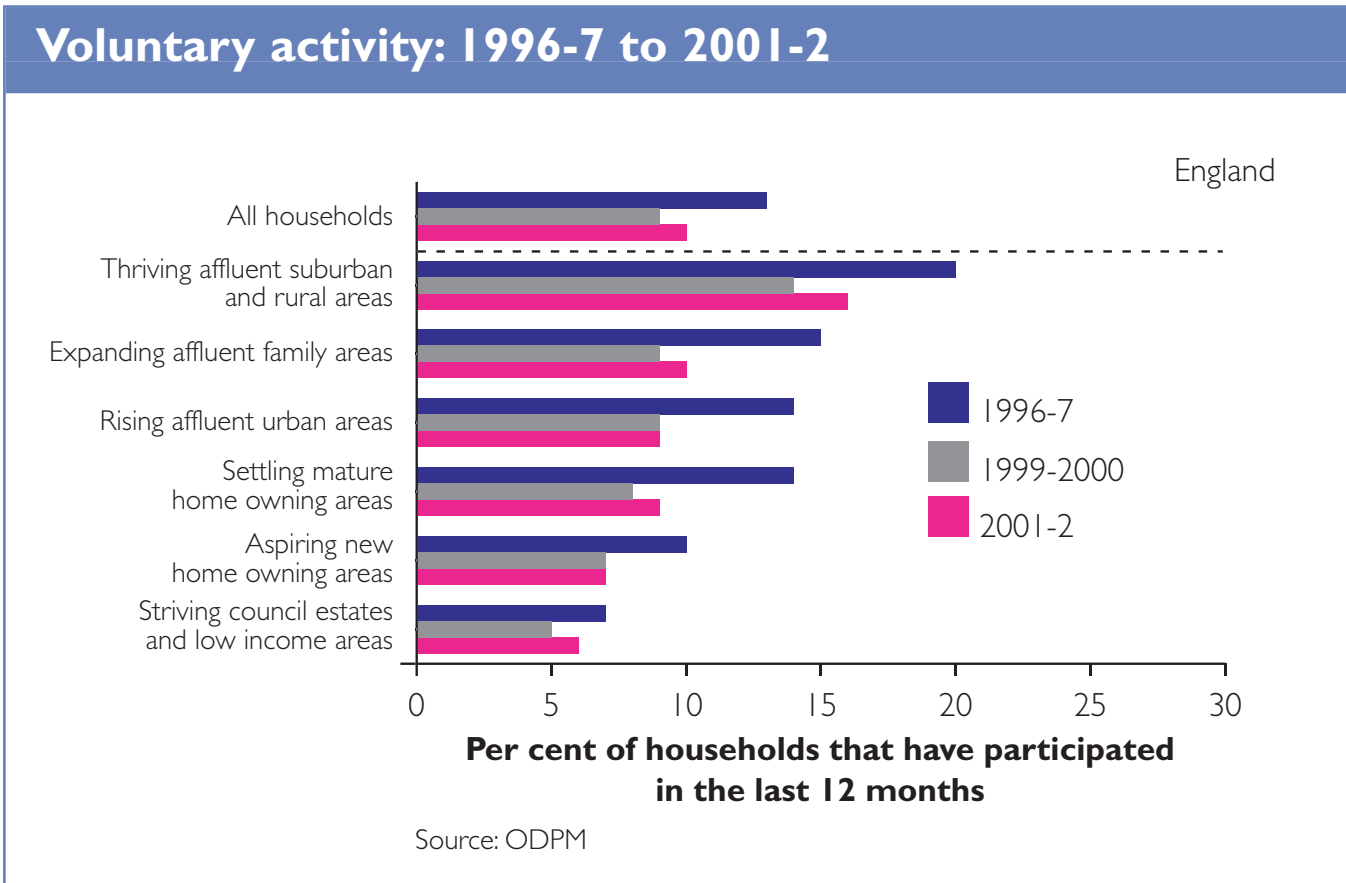
⊙ 1970

⊙✓ 1990

⊙✓ 1998

- In the 2002-3 British Crime Survey 15 per cent of people were very worried about physical attack, down from 18 per cent in 1998. 22 per cent of women said they were very worried; down from 27 per cent, but there was little change amongst men.
- The proportions of people very worried about car theft and burglary fell for both men and women, and have done so since the early 1990s.

Voluntary activity



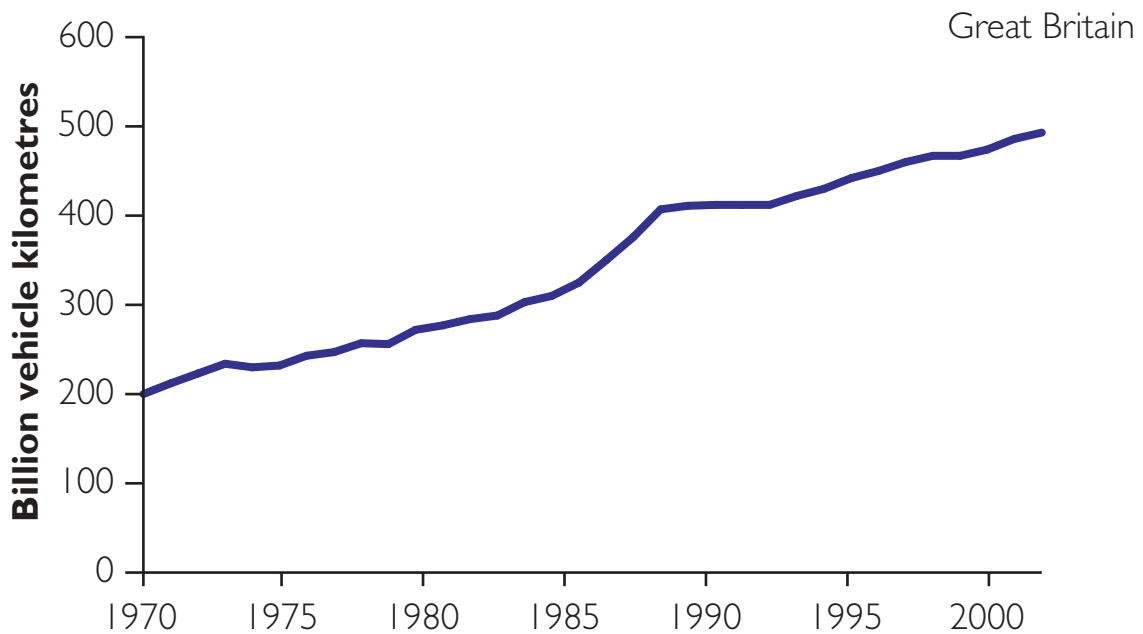
Change since: (⋯) 1970 (⋯) 1990 (X) 1996-7

- The percentage of households that had participated in voluntary activity in the last year decreased by a quarter between 1996-7 and 2001-2.
- Household participation rates tend to increase with an area's level of affluence. In 2001-2, 6 per cent of households in council estates and low-income areas participated in voluntary activity compared with 16 per cent of households in affluent suburban and rural areas.

BUILDING SUSTAINABLE COMMUNITIES: TRAVEL AND ACCESS

Road traffic volume

Total road traffic volume: 1970 to 2003*



Note: *2003 figure is provisional

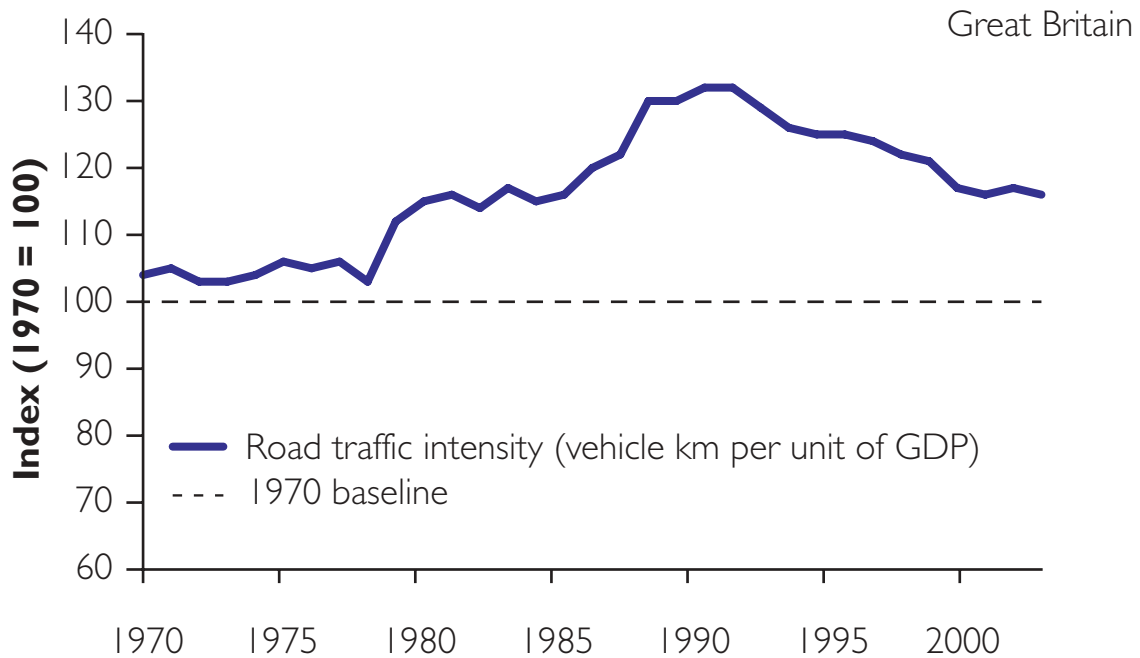
Source: DfT

Change since: **X** 1970 **X** 1990 **X** 1998

- Total road traffic in 2003 was provisionally estimated to be 20 per cent higher than in 1990, and 7 per cent higher than in 1998. It has more than doubled since 1970.

Road traffic intensity

Road traffic intensity (traffic volumes per unit of GDP): 1970 to 2003



Note: *2003 figure is provisional

Source: ONS, DfT

Change since:



1970



1990

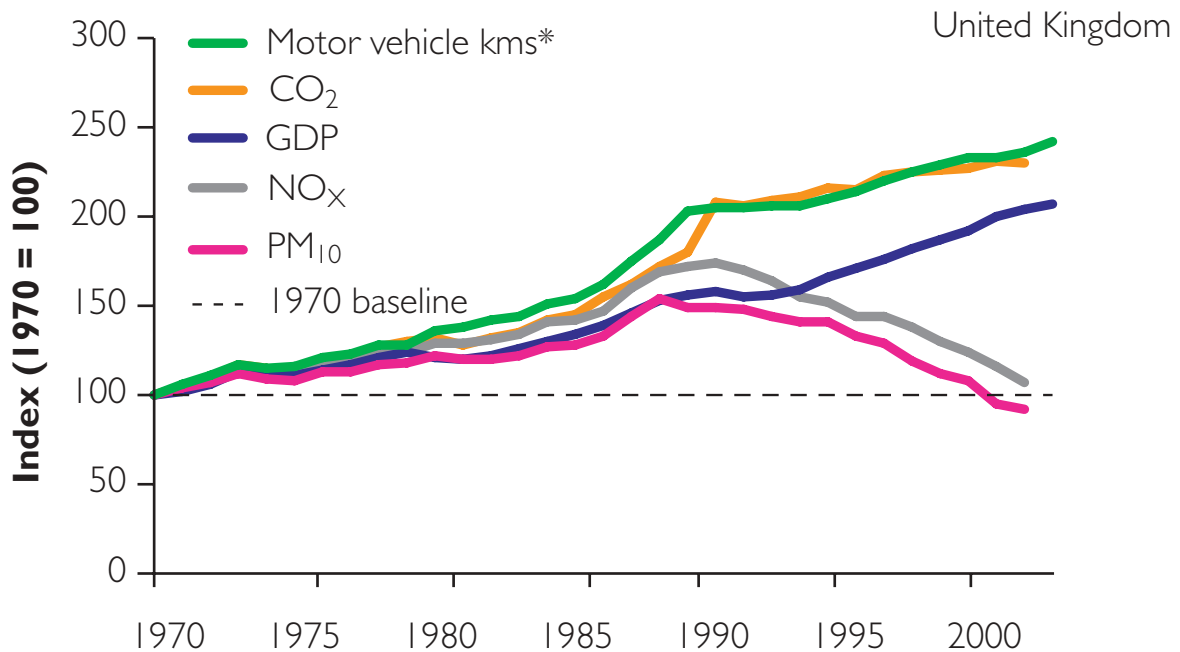


1998

- Road traffic intensity (vehicle kilometres per GDP), however, fell by 11 per cent between 1990 and 2003 and by 5 per cent between 1998 and 2003, therefore showing some 'decoupling' between road traffic and economic growth since 1990.

Road traffic, economic growth and environmental impacts

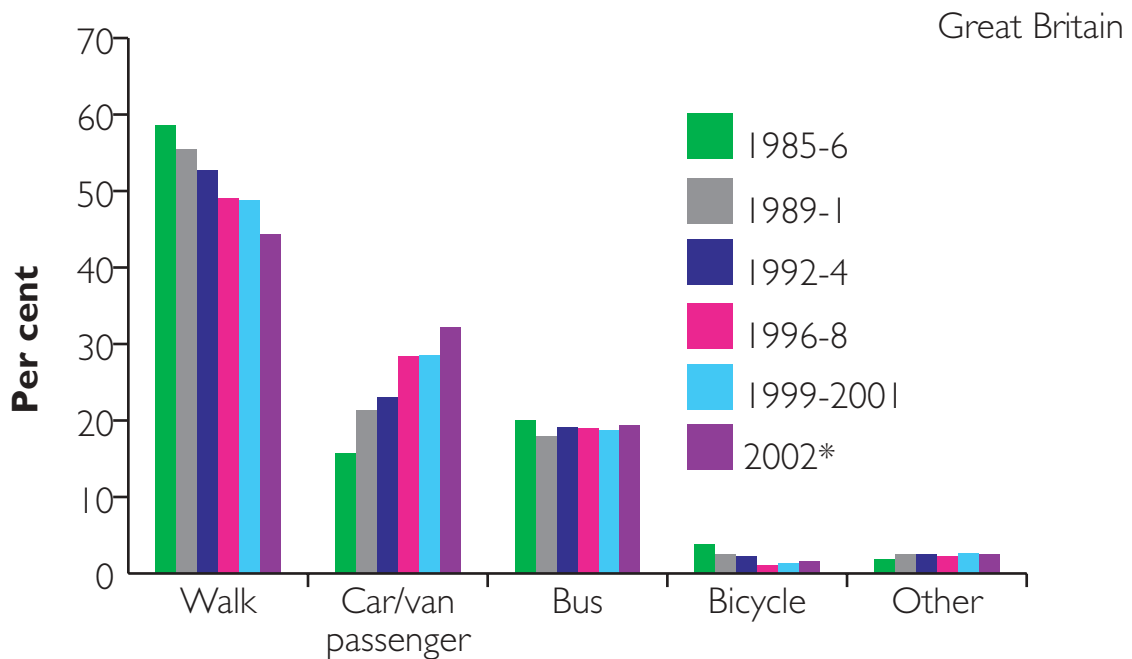
GDP, motor vehicle kilometres and selected gaseous emissions: 1970 to 2002



- Between 1970 and 2002, road traffic increased by 142 per cent and GDP by 107 per cent. Carbon dioxide emissions attributable to road transport had increased by 130 per cent by 2001.
- Both nitrogen oxides (NO_x) and particulate (PM₁₀) emissions attributable to road transport have decreased since the late 1980s. In 2001, NO_x emissions were still 7 per cent above their 1970 level but PM₁₀ emissions was 8 per cent below their 1970 level.

How children get to school

Mode of travel by children aged 5-16 years: 1985-6 to 2002*



Note: *Provisional data

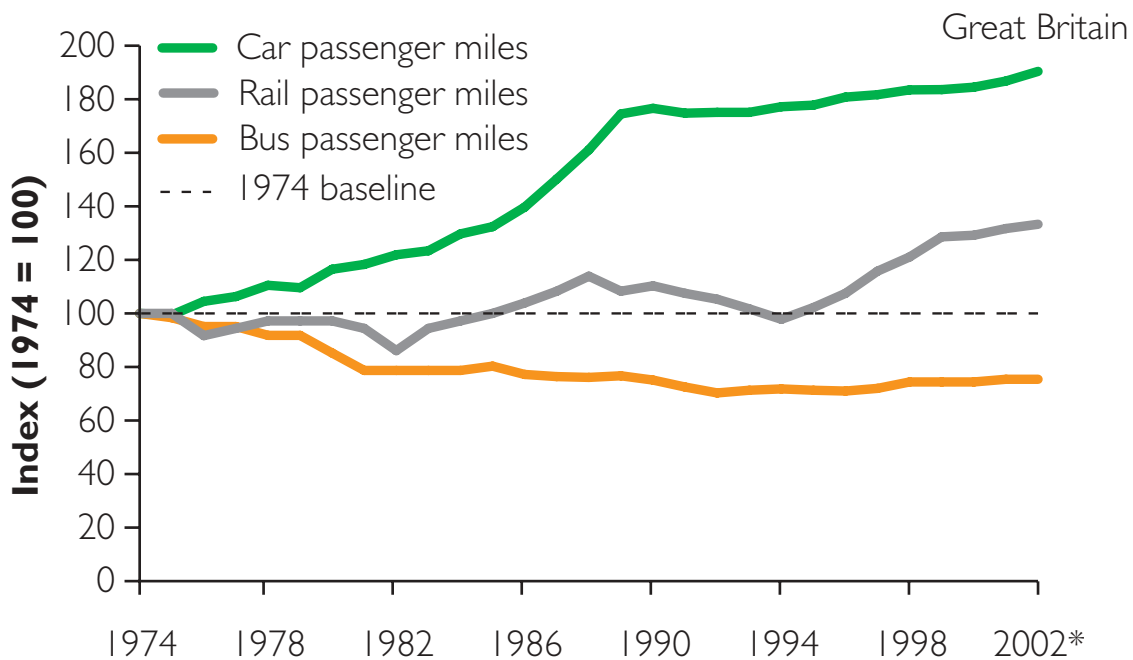
Source: DfT

Change since: **X** 1970 **X** 1990 **X** 1998

- Between 1985-6 and 2002, the percentage of children aged 5-16 travelling to school by car doubled from 16 to 32 per cent. The percentage walking or cycling fell commensurately.
- Walking is still the main way for children to get to school even though the percentage walking fell from 56 per cent in 1985-6 to 44 per cent in 2002.
- Between 1996-8 and 2002, the percentage of children walking to school decreased by 10 per cent while the percentage taken by car increased by 13 per cent.

Personal travel by mode

Car, rail and bus passenger kilometres: 1974 to 2002



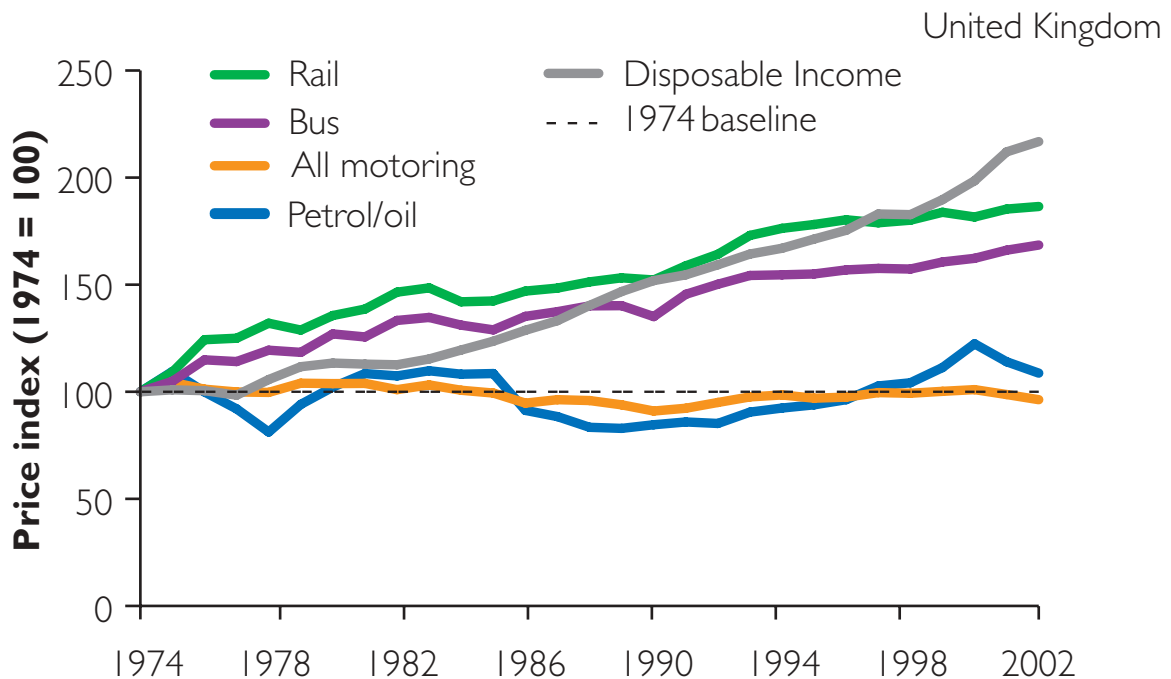
Note: *Bus figure for 2002 is provisional.

Source: DfT

- Since 1974, car passenger travel has almost doubled.
- Bus passenger travel declined between 1974 and 1992, since when there has been a modest increase. In 2002, bus passenger mileages were 25 per cent below the 1974 level, compared with 30 per cent below in 1992 and 26 per cent below in 1998.
- Rail passenger travel has increased by 33 per cent since 1974, and by 10 per cent since 1998.

Real changes in the cost of transport

Real changes in the cost of transport and disposable income: 1974 to 2002

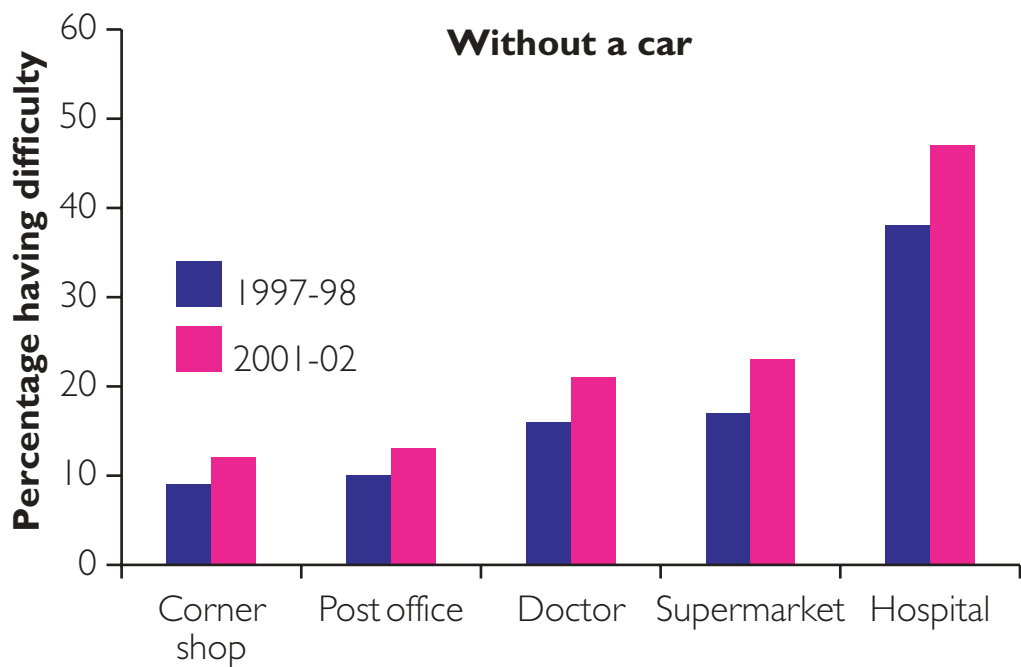
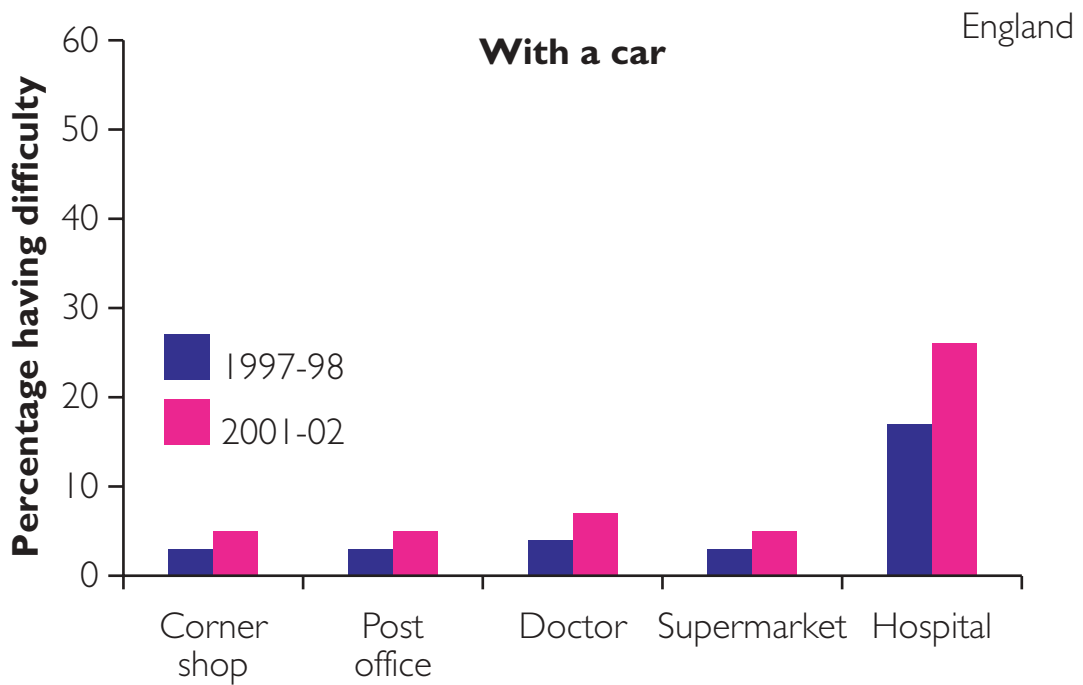


Change since: 1970 1990 1998

- Public transport fares rose by about 75 per cent in real terms between 1974 and 2002. In contrast, the real cost of motoring has remained virtually unchanged despite an increase in the real cost of fuel over the last decade.
- Between 1998 and 2002, rail and bus fares increased by 4 per cent and 7 per cent respectively, while motoring costs decreased by 3 per cent. In the same period disposable income rose by 19 per cent.

People finding access difficult

Percentage of people finding access to amenities difficult: 1997-8 to 2001-2



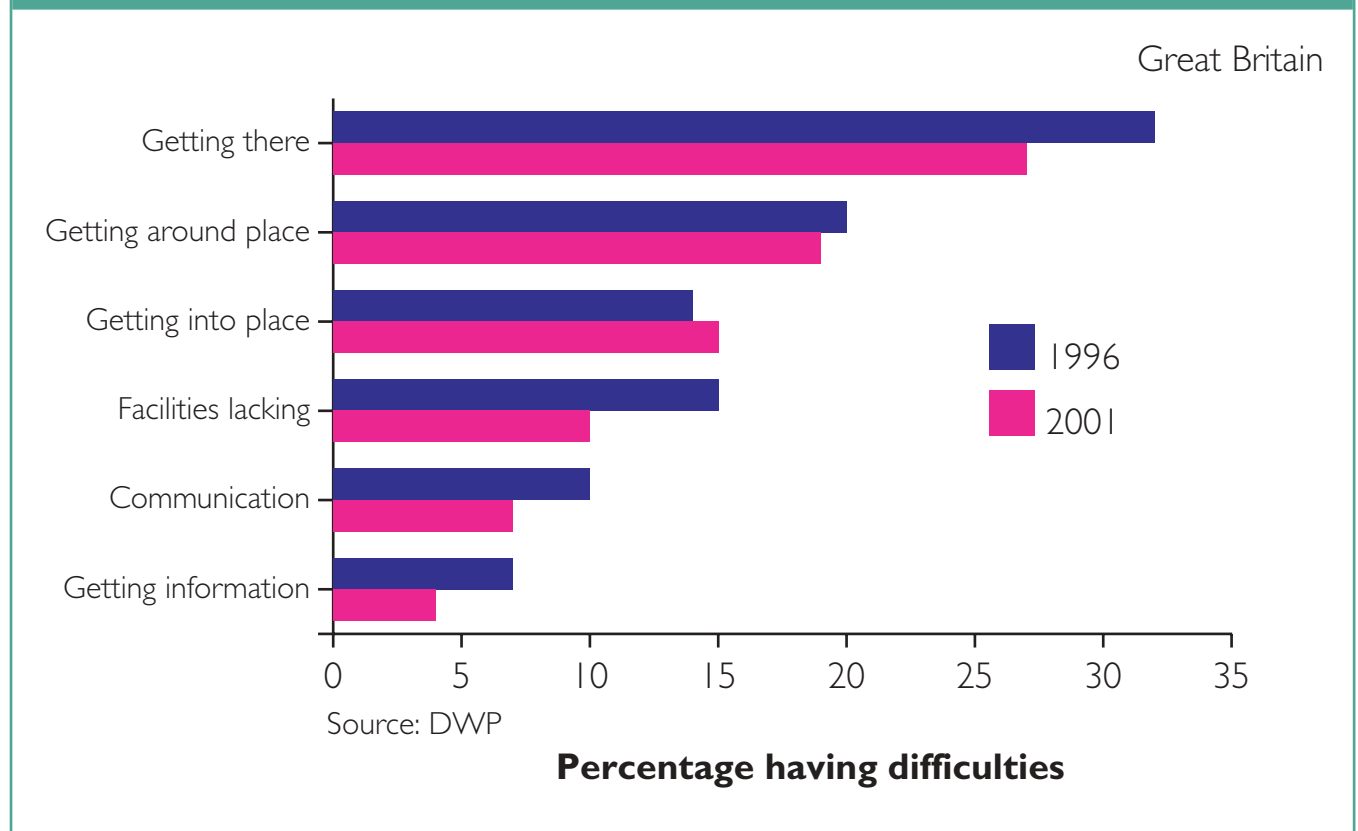
Source: ODPM

Change since: (⋯) 1970 (⋯) 1990 (X) 1998

- In a 2001-2 survey, more households without a car reported access difficulties to amenities than those who had a car – 47 per cent had difficulty getting to a hospital, compared with 26 per cent with a car.
- Compared with 1997-8, 9 per cent more households said that access to hospitals was difficult, with or without a car, and households with difficulties accessing supermarkets without a car increased from 17 to 23 per cent.
- Between 1991 and 2000, 4 per cent of rural parishes lost their post office (3 per cent since 1997); 2 per cent lost their GP (3 per cent since 1997, after a 1 per cent gain); 4 per cent lost a daily bus service (1 per cent since 1997).
- By 2000, 86 per cent of rural parishes had no GP based in the parish, 71 per cent had no general store, 46 per cent no post office and 76 per cent no daily bus service.

Access for disabled people

Percentage of disabled people having difficulties in accessing goods and services, by reason: 1996 and 2001

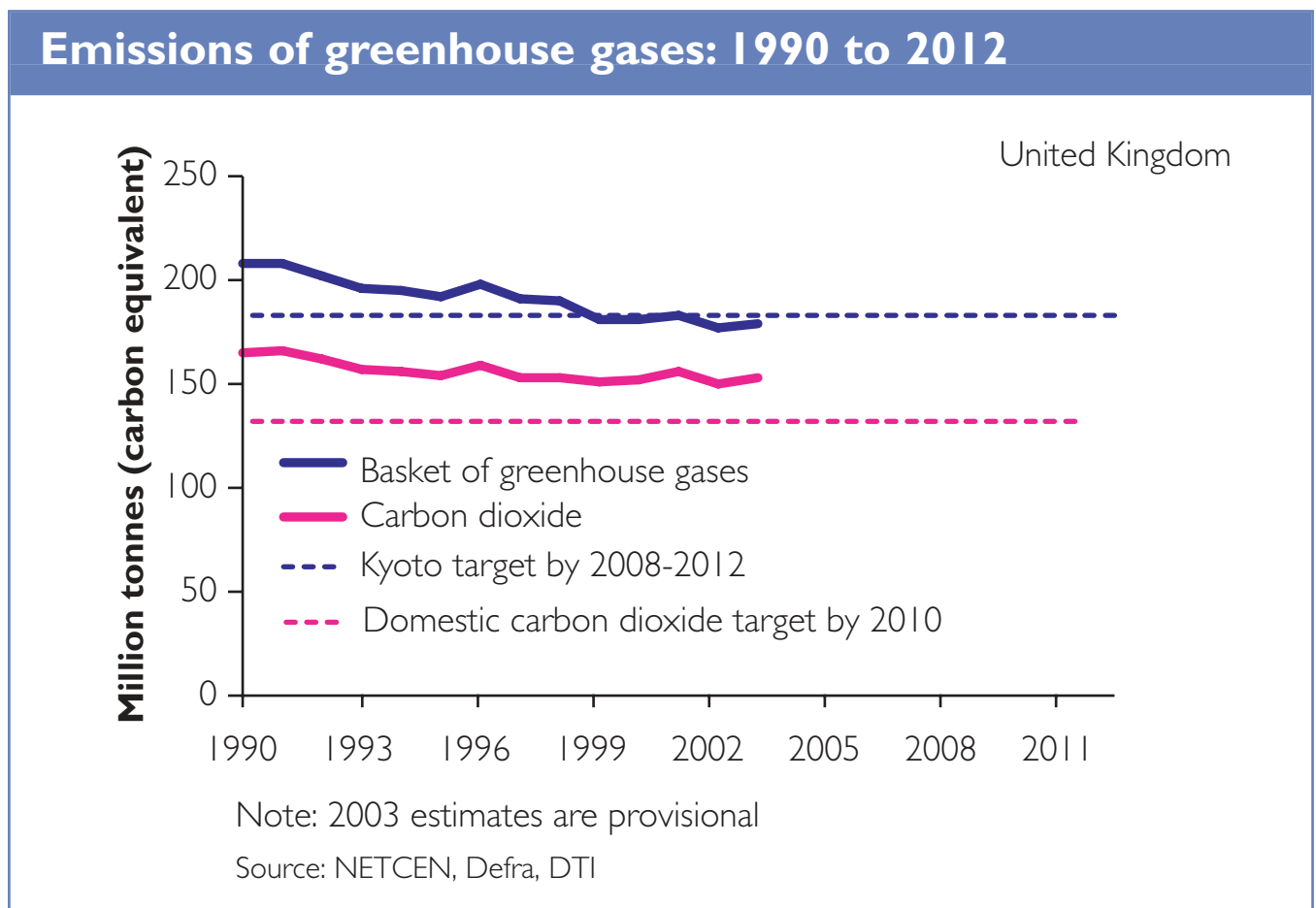


Change since: (⋯) 1970 (⋯) 1990 (✓) 1996

- In a 2001 survey about accessing goods and services, of those disabled people who had difficulties, 27 per cent said they had difficulties getting there (down 5 percentage points since 1996).
- 19 per cent had difficulties getting around the place and 15 per cent had difficulties getting into the place.
- There were improvements in facilities, communication and information compared with 1996.

MANAGING THE ENVIRONMENT AND RESOURCES: CLIMATE CHANGE AND ENERGY

Emissions of greenhouse gases

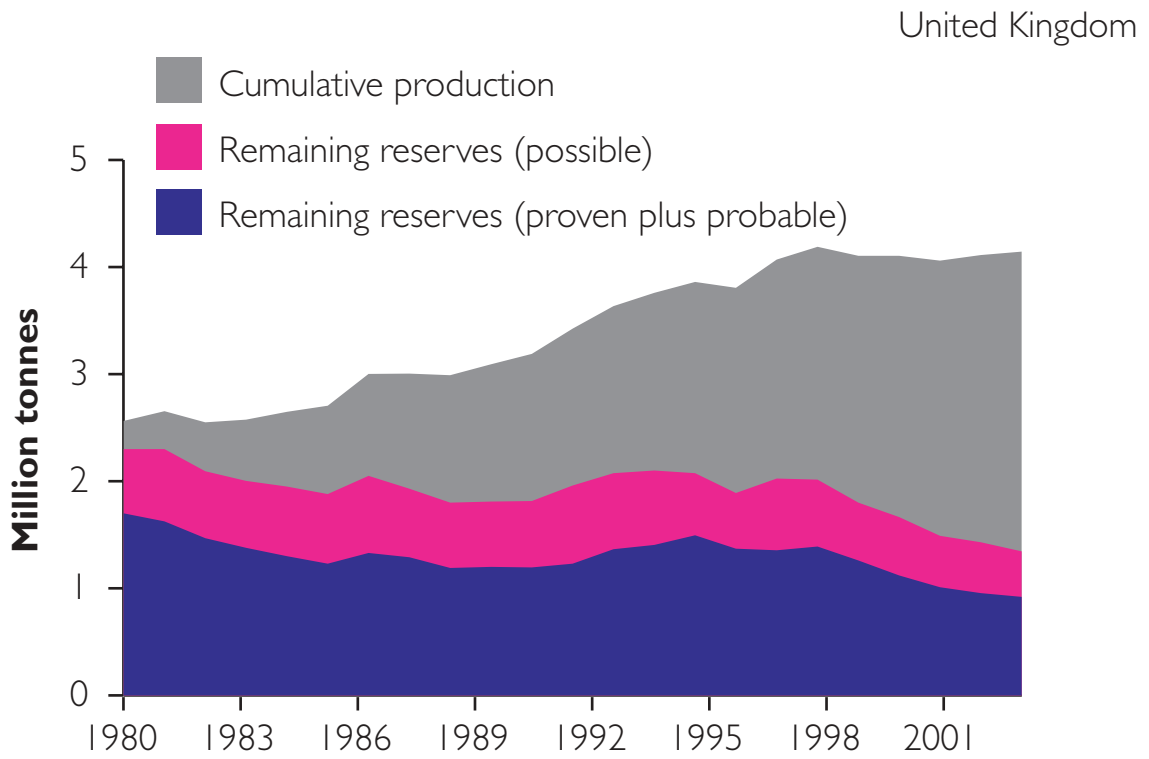


Change since: 1970 1990 1998

- Emissions of the 'basket' of six greenhouse gases are provisionally estimated to have fallen by 14 per cent between the 1990 baseline and 2003.
- Between 1997 and 2003, they are provisionally estimated to have fallen by about 6 per cent.
- Carbon dioxide emissions were about 7 per cent lower in 2003 than in 1990, following a rise of about 1.5 per cent between 2002 and 2003.

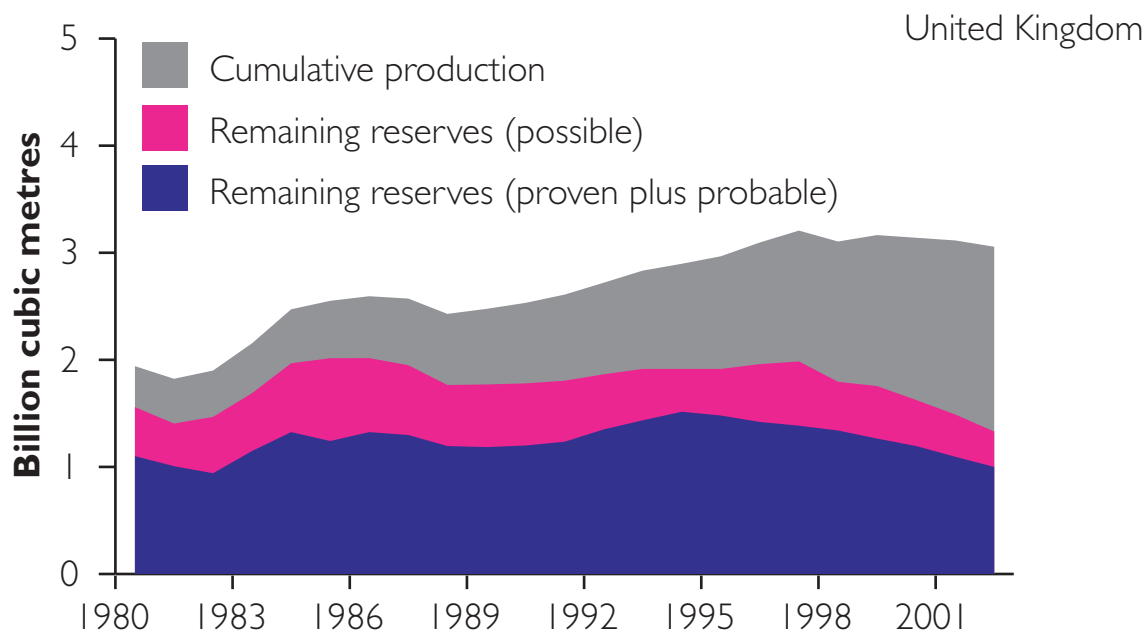
Depletion of fossil fuels

Discovered recoverable reserves and cumulative production. Oil: 1980 to 2002



Source: DTI

Discovered recoverable reserves and cumulative production. Gas: 1980 to 2002



Change since:



1970



1990

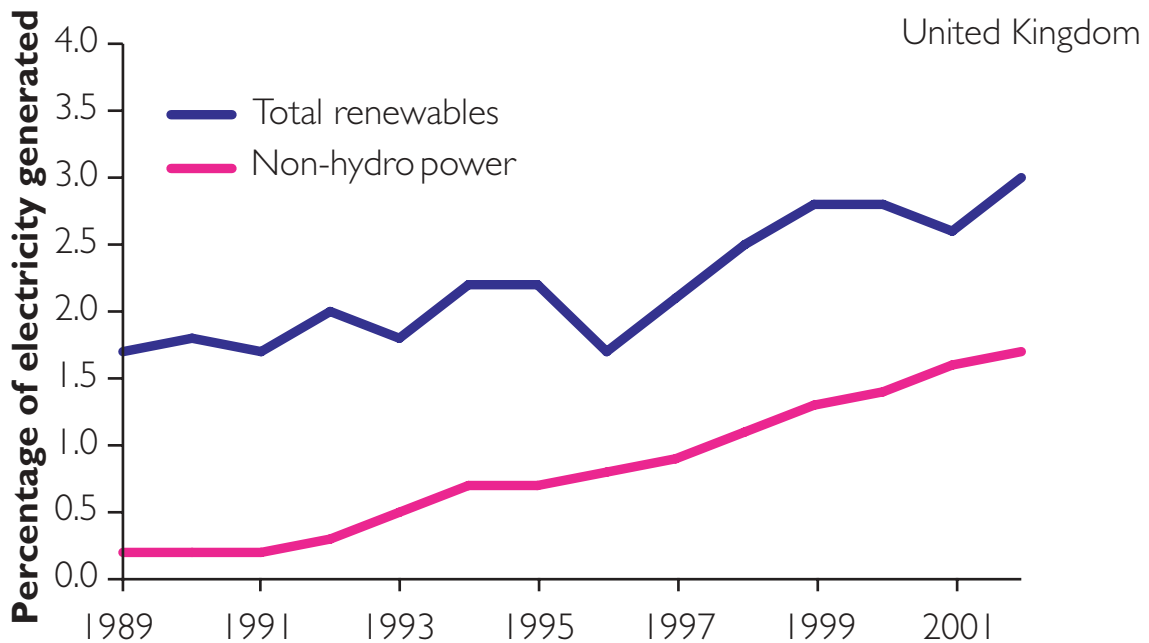


1998

- Estimated oil and gas reserves have both dropped by about one quarter since 1998.
- In earlier years, estimates of remaining reserves stayed at broadly similar levels despite the large increase in oil and gas extracted, due to new discoveries being made and new technology allowing exploitation of discoveries previously regarded as not viable.

Electricity from renewable resources

Percentage of electricity generated by renewable sources*: 1989 to 2002



Note: *The falls in generation in 1993, 1996 and 2001 were due to periods of drier than average weather which resulted in less power from hydro sources.

Source: DTI

Change since:



1970



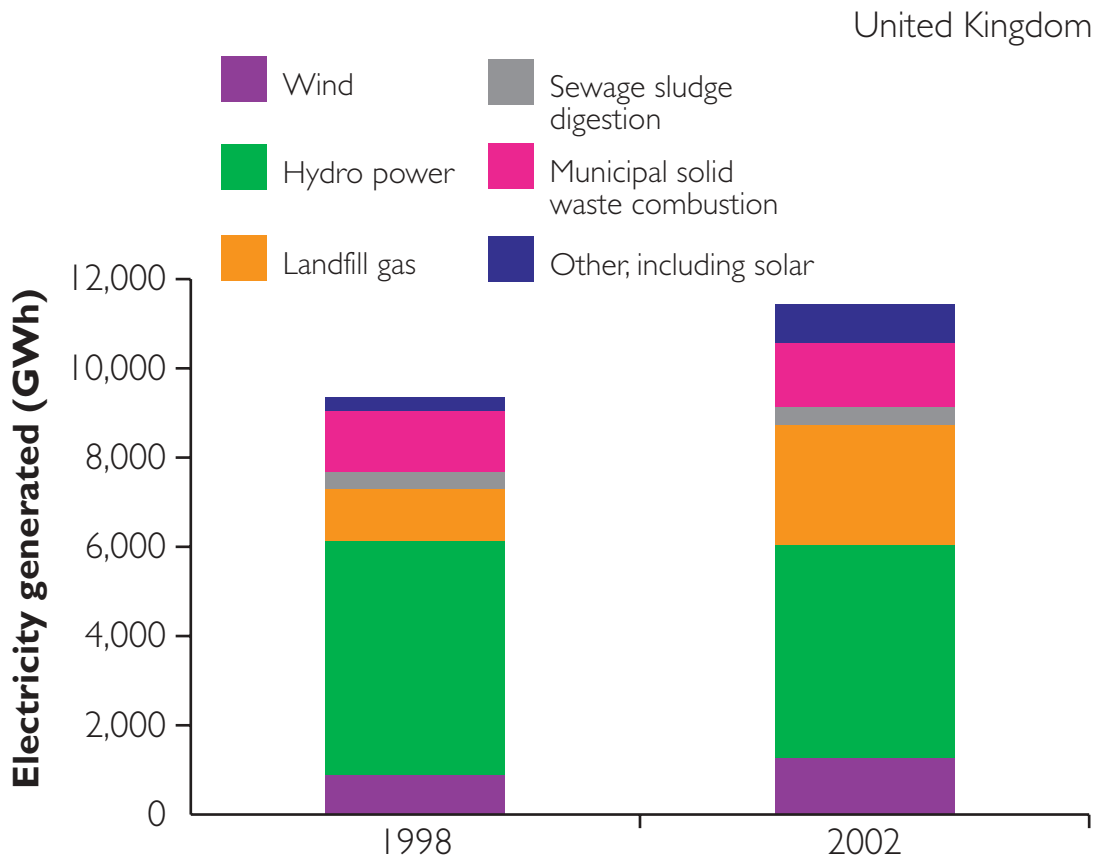
1990



1998

- Total electricity generated from renewable resources increased by about 60 per cent between 1990 and 2002, while that generated from non-hydro renewables increased eight-fold.
- In 2002, around 3.0 per cent of the electricity available in the UK was generated from renewable sources, compared with 2.5 per cent in 1998, and a UK target of 5 per cent in 2003.

Renewable sources: 1998, 2002

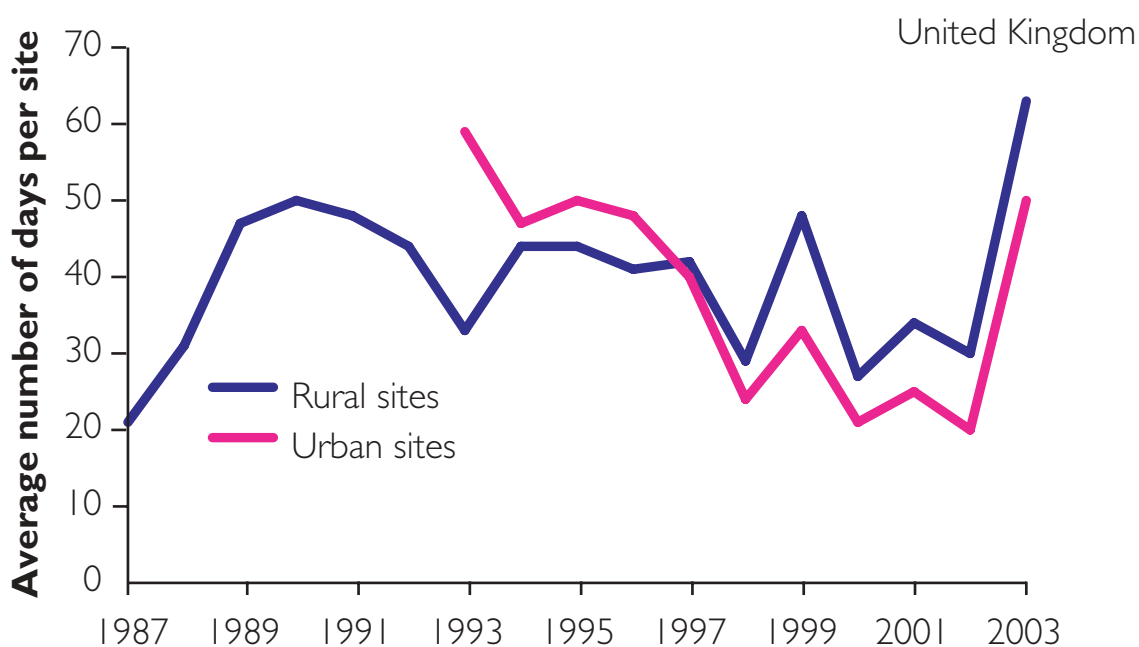


Source: DTI

MANAGING THE ENVIRONMENT AND RESOURCES: AIR, WATER & RADIOACTIVE WASTE

Air quality

Days when air pollution was moderate or higher: 1987 to 2003



Change since:



1970



1990

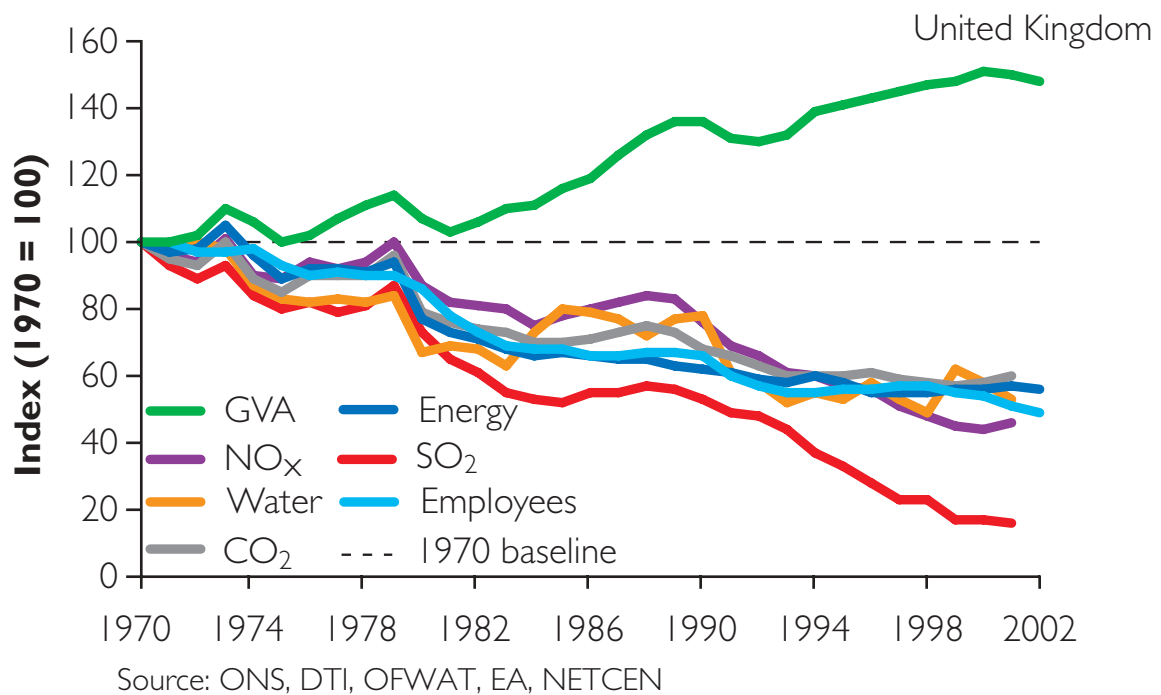


1998

- Urban air quality has generally improved significantly since 1993, while rural air pollution, caused largely by ozone, has shown no overall trend.
- Shorter-term trends can be masked by variation caused by the weather. The hot summer and other pollution episodes in 2003 led to an unusually high number of pollution days. The assessment reflects the high 2003 figures rather than being a conclusion about the underlying trend, which remains unclear.

Industrial sector output, employees, energy consumption and environmental impacts

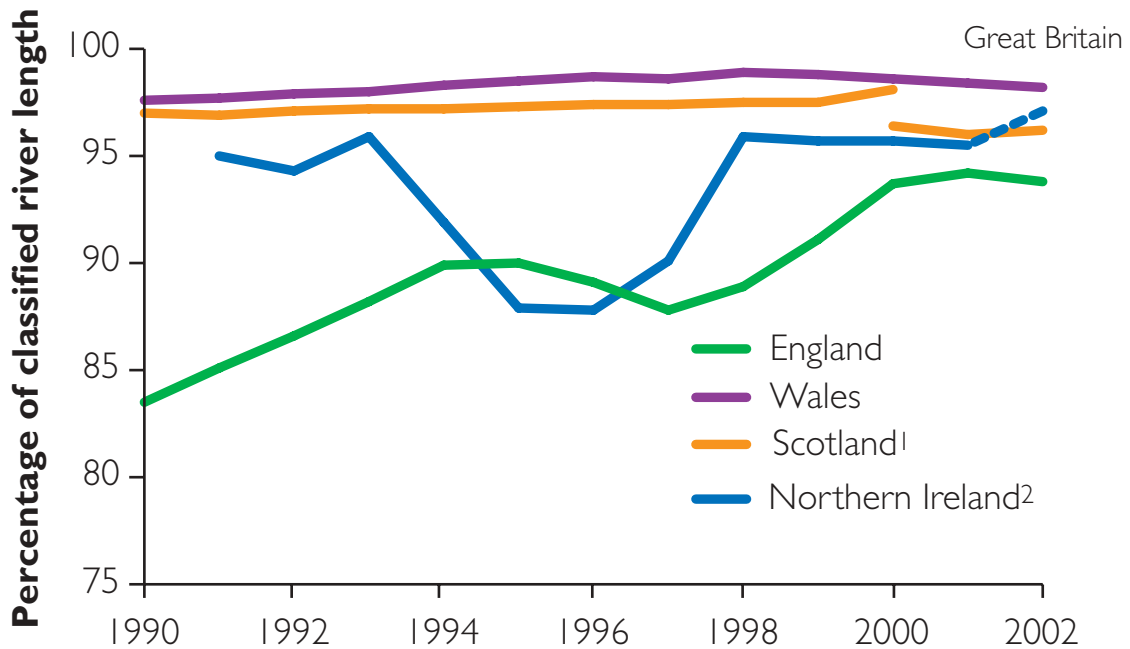
Gross Value Added, employee numbers, energy consumption, water usage and selected gaseous emissions: 1970 to 2002



- Since 1970, output (GVA) from the industrial sector has risen by almost 50 per cent, while its energy use, water use, CO₂ emissions and NO_x emissions have all fallen by between 40 and 55 per cent and its SO₂ emissions have fallen by 85 per cent. Employment in the sector fell by about 50 per cent.
- Since 1998, the number of employees in the industrial sector has fallen by 14 per cent while output has increased by about 1 per cent.

River water quality

Rivers of good or fair chemical quality: 1990 to 2002



Note: 1. Scottish river classification network changed in 2000
 2. Northern Irish network expanded significantly in 2002

Source: EA, SEPA, EHS

Change since:



1970



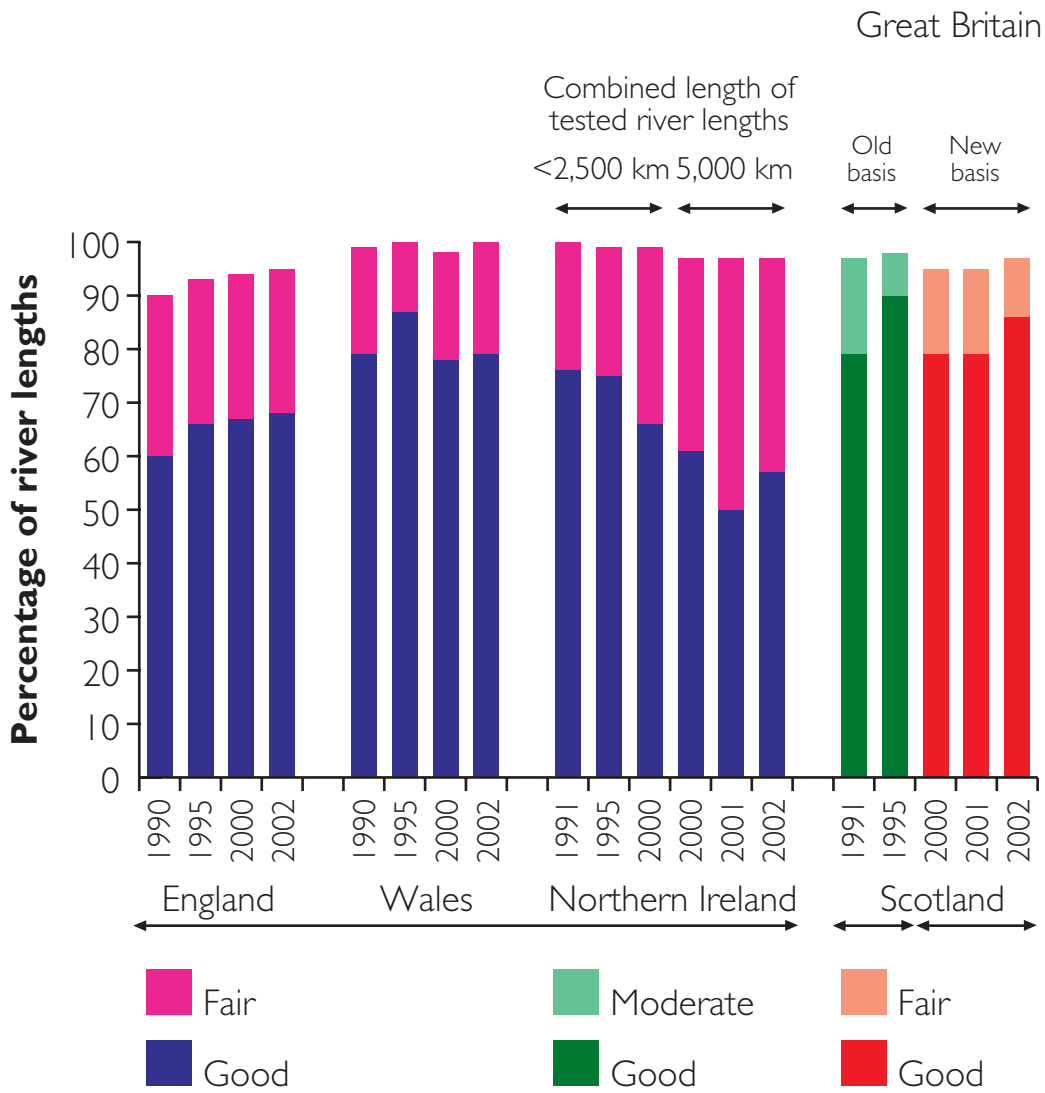
1990



1998

- The biggest improvements in both chemical and biological river quality since 1990 have been in English rivers, bringing more of them up to the quality seen in the rest of the UK.
- In 2002, 94 per cent of English rivers were of good or fair chemical quality compared with 89 per cent in 1997-8. The chemical quality of rivers in Wales, Scotland and Northern Ireland have been maintained at high levels over this period.

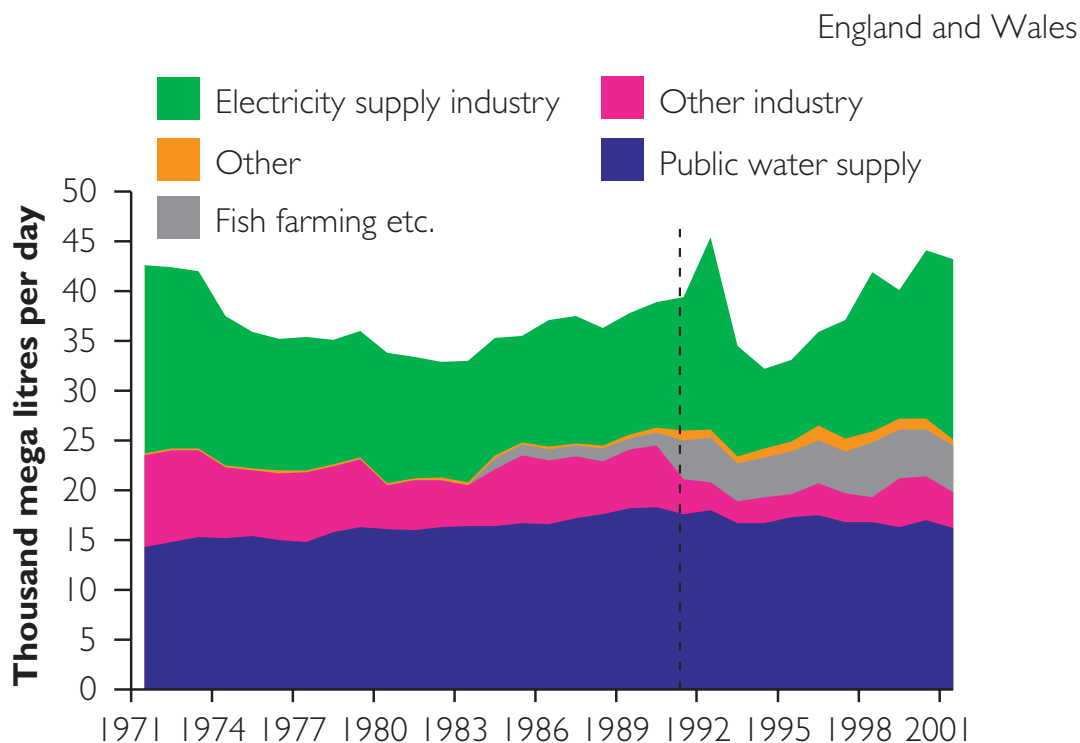
Biological river quality: 1990 to 2002



Source: EA, SEPA, EHS

Abstractions by purpose

Actual abstractions from non-tidal surface water and groundwater by use: 1971 to 2001



Note: Data collected before 1991 are not strictly comparable with those for later years

Source: Defra

Public water supply –

Change since:

✗ 1970

✓ 1990

✓ 1997

Other –

Change since:

≈ 1970

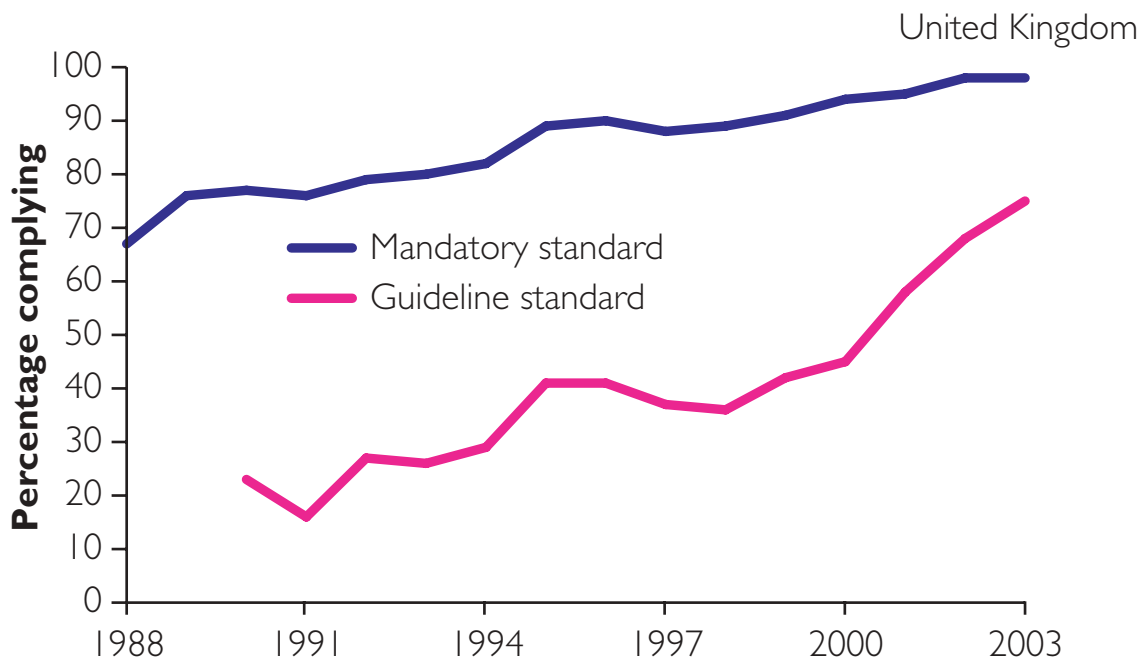
✗ 1990

✗ 1997

- In 2001, abstractions for public water supply were 13 per cent higher than in 1971 but 8 per cent lower than in 1991.
- Electricity supply industry abstractions have varied greatly since 1990, but recently seem to have been increasing, and in 2001 were very similar to the 1971 level.
- Total abstractions for all other purposes decreased during the 1970s, but have since increased again.

Compliance with Bathing Water Directive

Percentage of coastal bathing waters meeting EC Bathing Water Directive mandatory and guideline standards: 1988 to 2003



Source: Environment Agency, SEPA, EHS

Change since:



1970



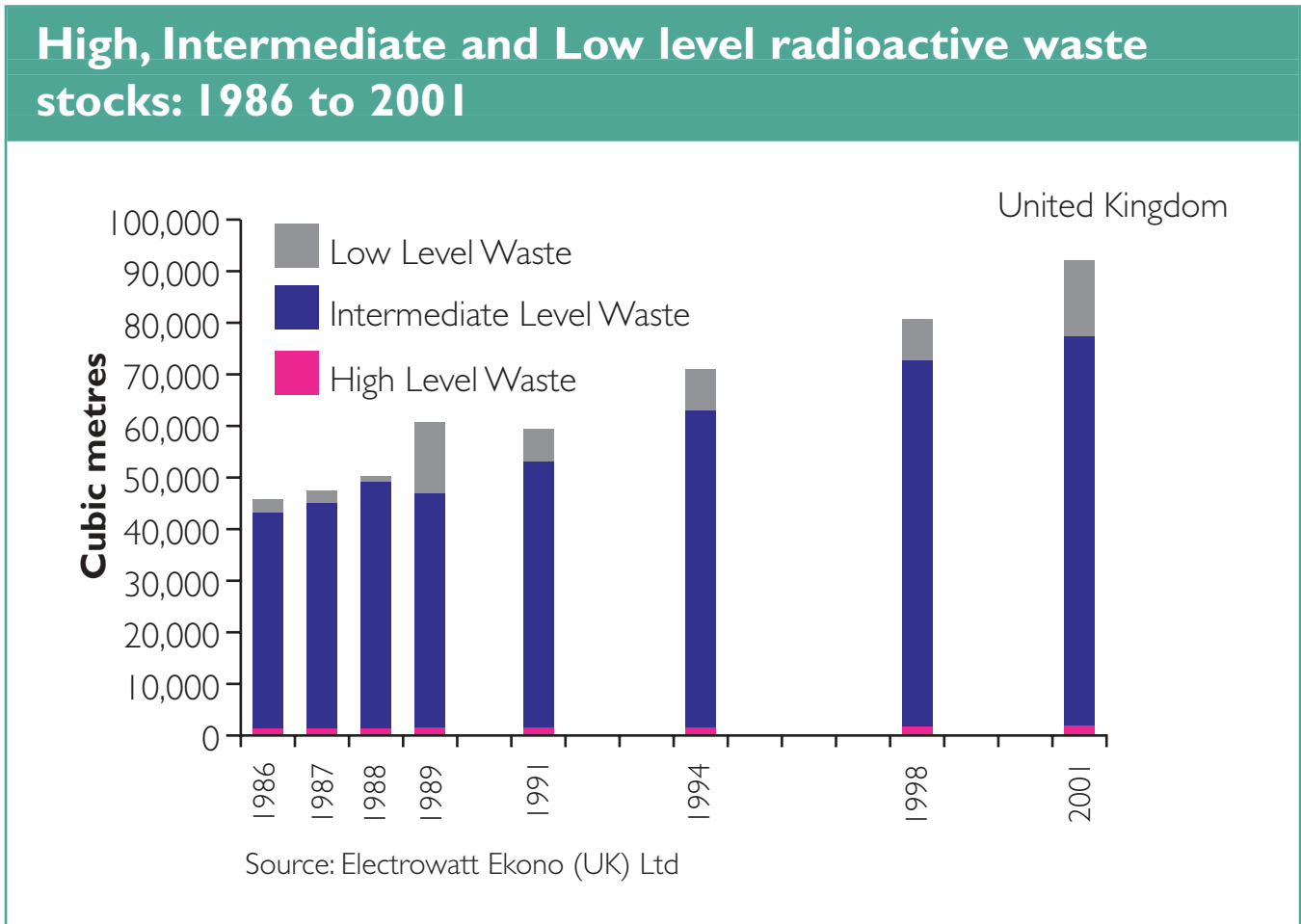
1990



1999

- Compliance with the mandatory coliform standards of the European Bathing Water Directive at coastal waters in the UK was 98 per cent in 2003 compared with 77 per cent in 1990 and 91 per cent in 1999.
- The Directive's tougher, non-mandatory, guideline standards were met at 75 per cent of UK coastal bathing beaches in 2003 compared with 23 per cent in 1990 and 42 per cent in 1999.

Radioactive waste stocks



High Level

Change since:

⋯ 1970

✗ 1990

✗ 1998

Intermediate Level

Change since:

⋯ 1970

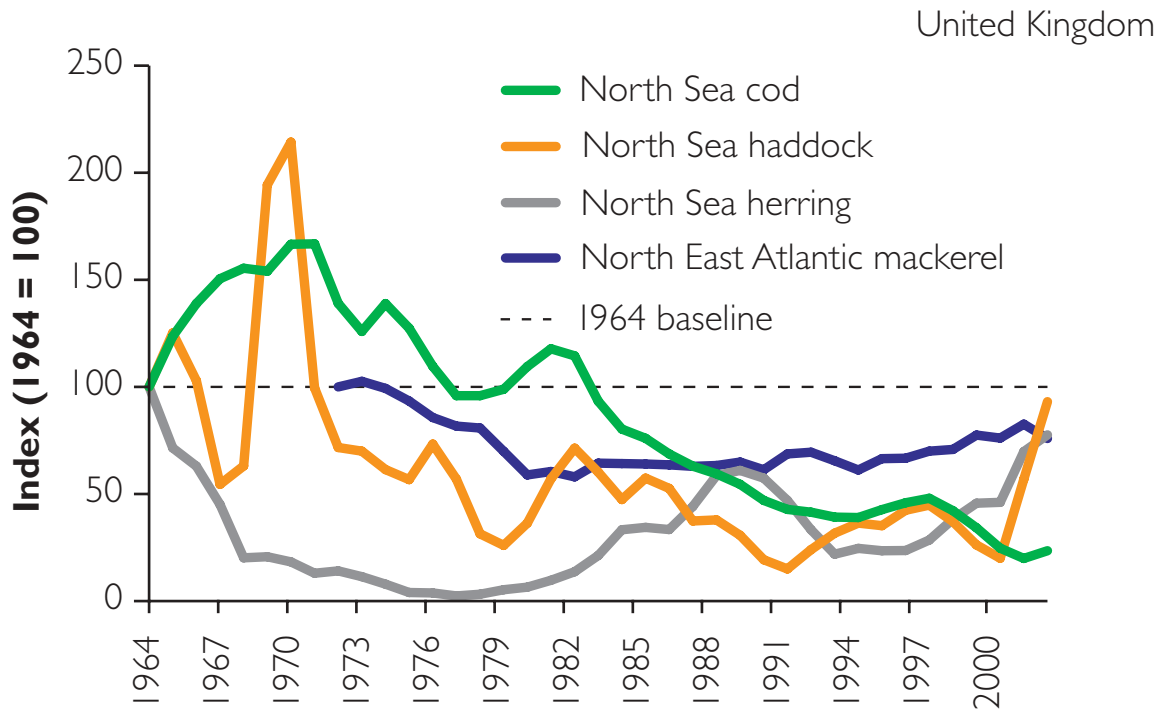
✗ 1990

✗ 1998

- In 2001, UK stocks of high level radioactive waste were 9 per cent higher than in 1998 and 16 per cent higher than in 1991.
- Stocks of intermediate level waste were 6 per cent higher than in 1998 and 46 per cent higher than in 1991.

Fish stocks

North Sea fish stocks and stocks of North East Atlantic mackerel: 1964 to 2002



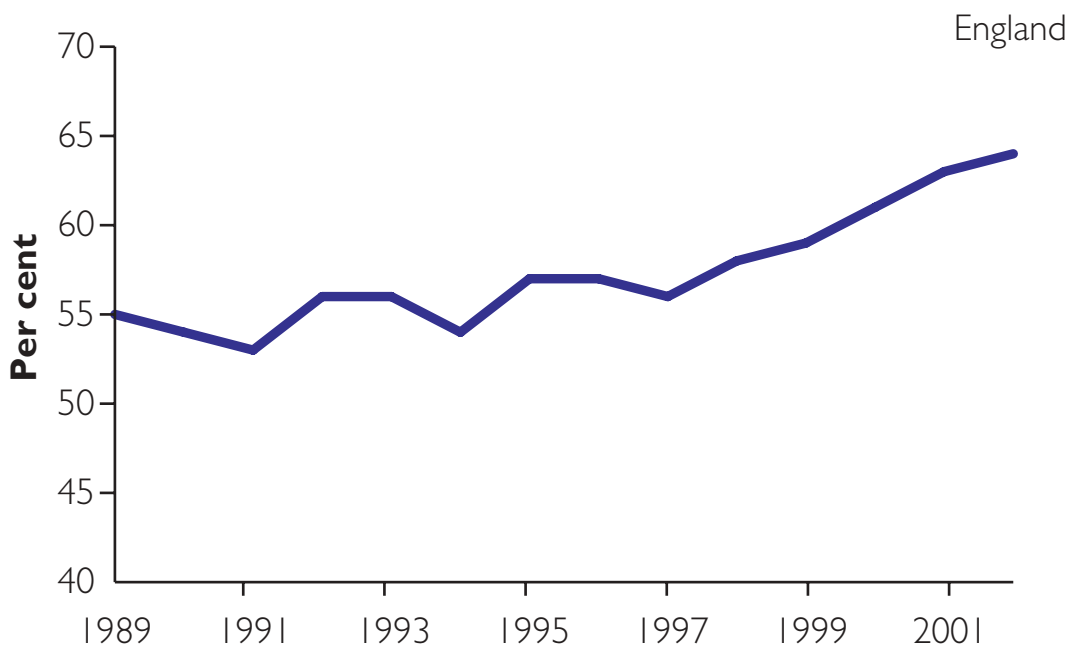
Source: IFES, CEFAS

- Trends in fish stocks vary from species to species and can fluctuate substantially over relatively short periods.
- Most stocks are over-exploited and some stocks are at historically low levels, especially North Sea cod.
- The North Sea herring population was seriously affected by over-fishing in the 1970s and the fishery was closed between 1978 and 1982, allowing stocks to recover.
- North East Atlantic mackerel, the other major pelagic fish stock, is also increasing.

MANAGING THE ENVIRONMENT AND RESOURCES: LANDSCAPE AND WILDLIFE

Land use

Percentage of new dwellings built on previously developed land: 1989 to 2002



Note: Includes conversions which are estimated to add 3 percentage points

Source: ODPM

Change since:



1970



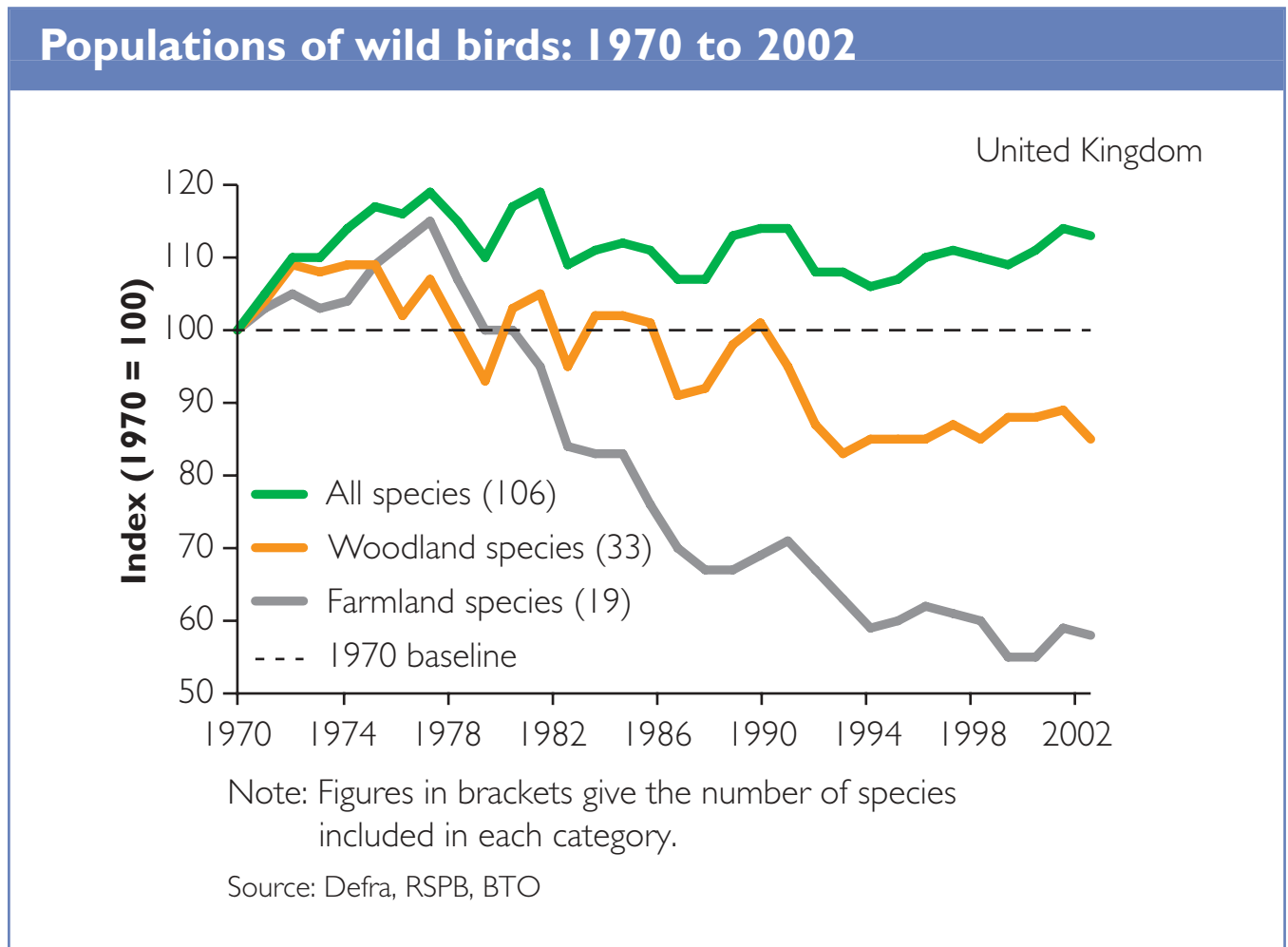
1990



1997

- The percentage of new dwellings built on previously developed land or through conversion of existing buildings increased from 54 per cent in 1990 to 64 per cent in 2002.

Wildlife – populations of wild birds



Farmland birds –

Change since:



1970



1990



1998

Woodland birds –

Change since:



1970



1990

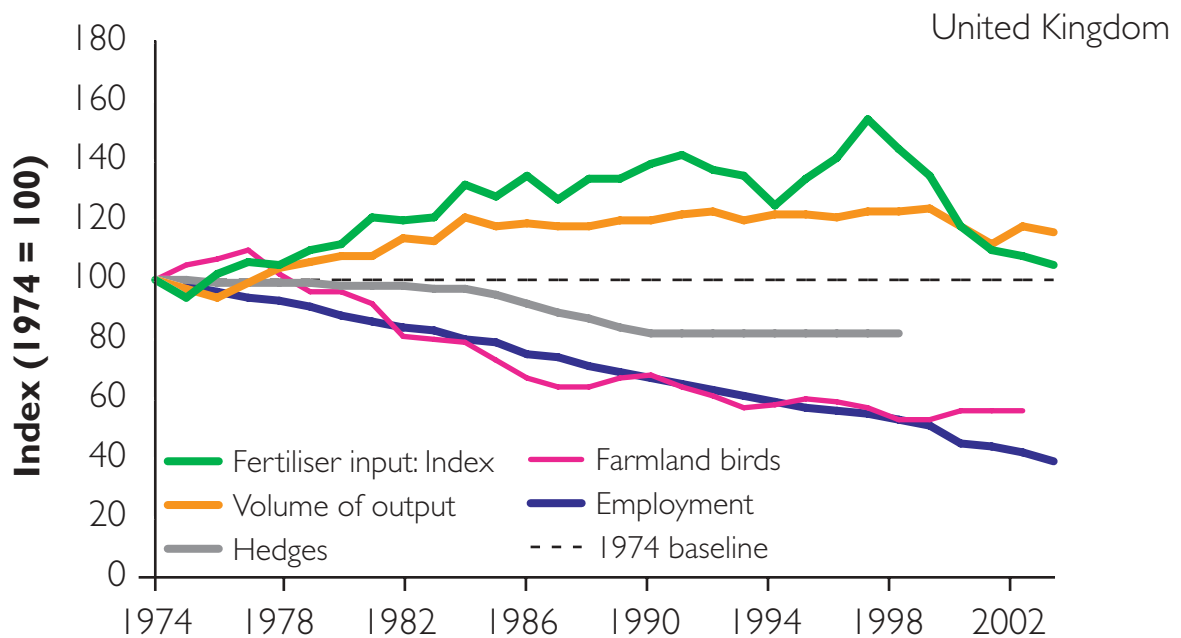


1998

- The overall population of British breeding birds has increased since 1970, but farmland and woodland birds have declined significantly.
- Farmland bird populations fell by 42 per cent between 1970 and 2002, and woodland bird populations by 15 per cent.
- Farmland bird populations increased by 5 per cent between 1998 and 2002. Woodland birds decreased by 3 per cent over the same period.

Agricultural output, employment, inputs of fertilisers and environmental impacts

Agriculture: output volume, employment, inputs of fertilisers and environmental impacts: 1974 to 2003

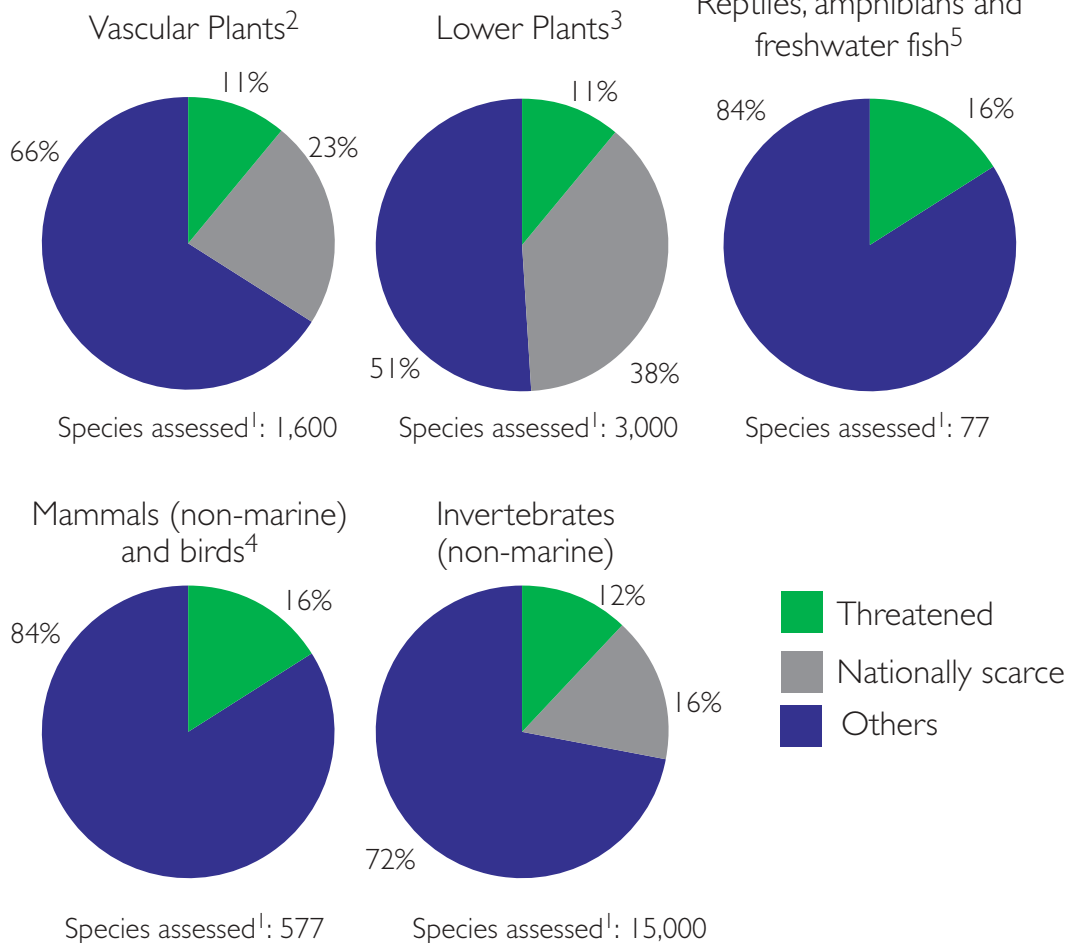


- Farmland bird populations fell by 50 per cent between 1974 and 1998, while output rose by 23 per cent and fertiliser use by 44 per cent.
- Fertiliser use, volume output and employment have fallen since the mid 1990s, while hedgerow loss has been halted and farmland bird populations have stabilised.

Native species at risk

Native species at risk: 2003

Great Britain



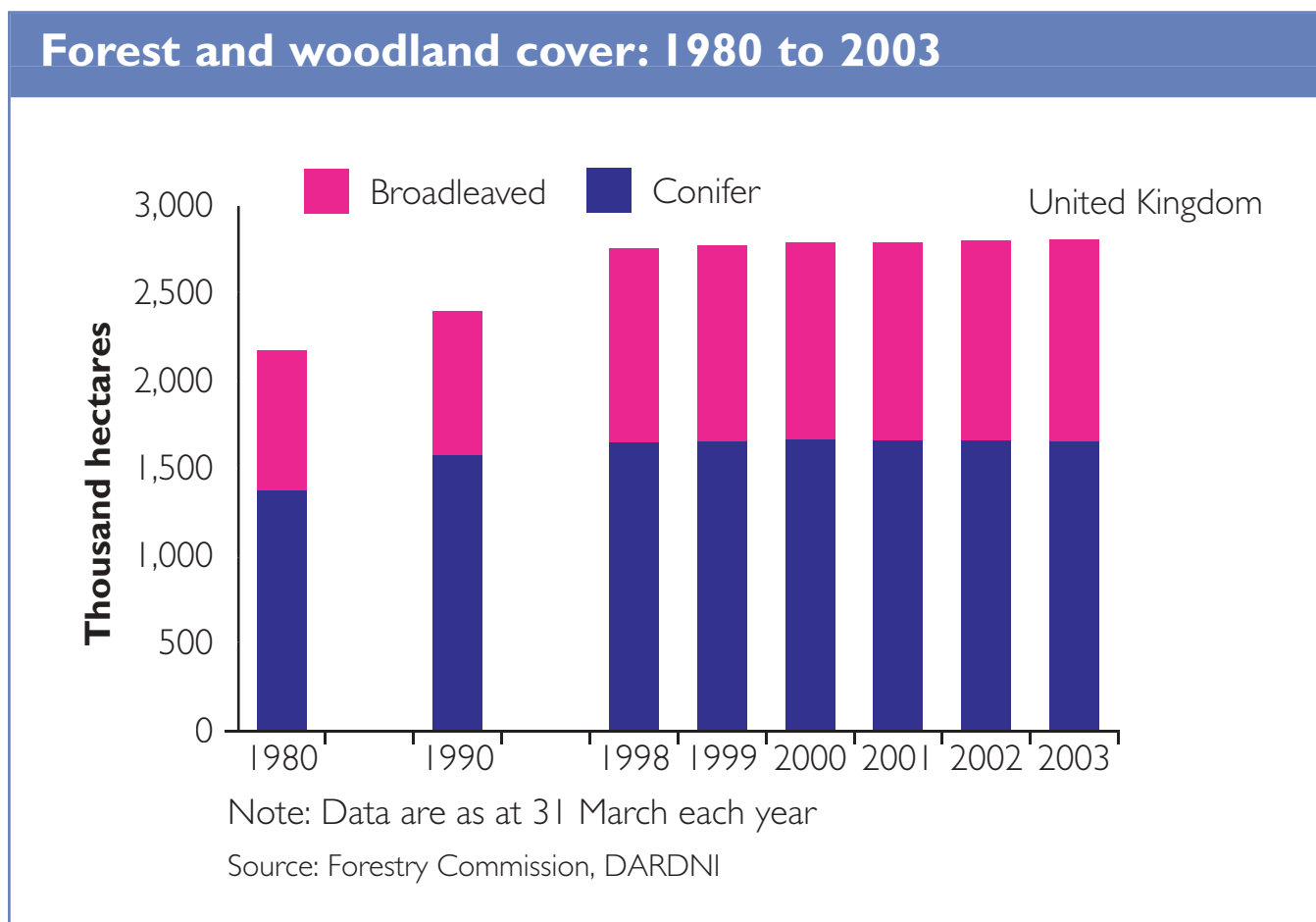
Note: 1. Numbers are estimated for Invertebrates, Vascular plants and Lower plants
 2. Nationally scarce includes nationally threatened and nationally rare
 3. Mosses, liverworts, lichens and stoneworts
 4. Mammals and birds have not been formally assessed against IUCN criteria
 5. Reptiles and amphibians have not been formally assessed against IUCN criteria

Source: JNCC

- In Great Britain in 2003, 16 per cent of mammals and birds, and 16 per cent of reptiles, amphibians and freshwater fish, were assessed as 'threatened'.

- Nearly half of lower plants, and a third of vascular plants were assessed as threatened or nationally scarce in 2003.
- Since 1999, the number of Sites of Special Scientific Interest (SSSIs) in the UK has increased by 2 per cent, from 6,625 to 6,782 in 2003.
- The total area of land designated as SSSIs has risen from 2,263 thousand hectares in 1999 to 2,427 thousand hectares in 2003, an increase of 7 per cent.
- Based on information available as at March 2003, just over half of English SSSIs were assessed as being in a “favourable/recovering” condition.

Forest and woodland cover



- Approximately 12 per cent of the UK is covered by forest and woodland. The area covered by forest and woodland has increased by around 29 per cent since 1980.
- There was an increase in the area of broadleaved species of around 44 per cent between 1980 and 2003. Over 12 thousand hectares of new woodland were created in Great Britain in 2002-3, the majority of it broadleaved. There has been little change in conifer forest cover in recent years with a decline in new planting.

TAKING IT ON: THE CONSULTATION TO DEVELOP NEW UK SUSTAINABLE DEVELOPMENT STRATEGY

The Government has launched a consultation on new strategy for sustainable development in UK.

The consultation includes questions on indicators and how they are used.

The questions related to indicators are as follows:

Q38 What are the strengths and weaknesses of the current sustainable development indicators, and how they are used?

- In general
- More specifically indicators used:
 - in the UK Government's headline set;
 - in the wider UK core set in *Quality of life counts*;
 - in Scotland, Wales and Northern Ireland;
 - in the English regions;
 - in local authorities; and
 - elsewhere (for example sectoral indicators).

Q39 What needs to be monitored and measured UK-wide?

Q40 Who are the audiences for indicators and how could we better meet their needs?

Q41 Should any set of indicators supporting the new strategy

- concentrate on just the main priorities in the strategic framework? or
- be wider and more comprehensive?

Q42 Should important high-level sustainable development indicators focus on monitoring

- general progress towards final outcomes?
- specific delivery actions and targets?
- both?

The consultation process to develop new UK sustainable development strategy began on 21 April, and will last just over three months to 31 July 2004.

You can give your views on any or all of the questions raised in the consultation document by either:

- taking part online through the UK Government's sustainable development website at **www.sustainable-development.gov.uk**; or
- sending your views on the questions (available on line) by post or e-mail. Contact details are below. You can also ask for a printed version of the consultation document and questionnaire.

Paul Rainey
Sustainable Development Unit
Defra
9 Millbank
c/o 17 Smith Square
London
SW1P 3JR
e-mail: Sdsconsultation@defra.gsi.gov.uk
tel: 020 7238 5811

ENQUIRIES ABOUT INDICATORS OR THIS PUBLICATION

This publication has been produced by Environment Protection Statistics and Information Management (EPSIM) Division, Defra.

If you have comments or questions specifically about this publication or the indicators within in it, please e-mail enviro.statistics@defra.gsi.gov.uk or telephone 020 7082 8621.

Website addresses:

Indicators of sustainable development

www.sustainable-development.gov.uk/indicators/index.htm

e-Digest of Environmental Statistics:

www.defra.gov.uk/environment/statistics/index.htm