Assessment of progress against the headline indicators

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Sustainable Development Commission

Report to the sustainable development commission

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Introduction

1.1 The Sustainable Development Commission commissioned Levett-Therivel to produce an independent analysis of the UK's progress against the 15 'headline' indicators of sustainable development adopted in 1999. This is our report.

1.2 We had access to unpublished drafts of the 2004 annual update of these indicators, and also of the update of the 150-odd 'core' indicators which have mostly not been updated since 1999. We also carried out extensive internet searches for examples of different achievements and good practice from different parts of the UK and other countries. Owen White carried out the research and wrote much of the analysis; Roger Levett led the project and wrote the conclusions.

1.3 We chose seven other North European, highly 'developed' mature democracies in particular for comparison because their circumstances are closest to ours. They are Belgium, Finland, France, Germany, Italy, the Netherlands and Sweden; for brevity we will call these the 'comparator countries'. Comparisons are also made with other countries where appropriate.

1.4 It was emphasised in the brief, and again at the inception meeting, that the SDC wanted a study focused on progress on the headline indicators, and not a critique of the indicators or proposals for alternative ones. We have followed this requirement as much as possible, although (as was acknowledged at the inception meeting), judgements about what the headline indicators do and do not tell us about sustainability necessarily invoke, implicitly if not explicitly, yardsticks of sustainability, and therefore indicators of it, different from the Government set.

Summary

Progress on the individual headline indicators

We have adapted and extended the Government's 'traffic lights' presentation to give the following overview of progress on each headline from a sustainable development point of view.

The 'score' column gives an overall assessment (or, in many cases, range of assessments reflecting different aspects of the headline indicator and relevant contextual indicators). Green smiley faces ☺ are good, red gloomy faces ☹ bad, and amber inscrutable faces 😐 in between.

The 'comments' column summarises the good and bad news about each indicator from a sustainability viewpoint, using as a yardstick (though not explictly referring to) the SDC's principles. The green, amber and red are used to give an at-a-glance picture of good and bad points; however faces in the 'comments' do not necessarily 'add up' to those in the overview.

Indicator	Score	Comments
1 Economic growth	☺/😐/☹	☺ The UK is succeeding in the Government's aim of 'high and stable growth', outperforming comparators on growth and above European average for GDP. 😐 But the growth seems not to be making us any happier, and ☹ inequalities between rich and poor people, and between regions, are increasing.
2 Investment	☹	☹ UK investment is lower than that in the US, Italy, Germany or France, and the indicator shows no significant change up to 2000 (?☺ data is not available for the most recent years when the Government's policies may have changed this.) ☹ Evidence (outside the indicators) of crumbling infrastructure.
3 Employment	😐	😐 Overall employment is about the same as in 1970, though ☺/☹ spread much more evenly between men and women. ☺ Disabled and ethnic minority people get a slightly fairer share of jobs. ☹ We work longer hours, and with bigger income inequalities and gender-wage gaps, than any comparator countries. 😐 The indicator provides no indication of how content / fulfilled people are with their jobs.
4 Poverty	☺/☹	☺ Government policies have significantly reduced some kinds of poverty and exclusion, ☹ but the UK remains among the worst of developed countries on several measures. Continuing extreme income inequality (see H3) is a barrier to progress.
5 Education	☺/😐	☺ Goverment is making progress towards its target of better qualifications at age 19, and more employed people participate in training than in comparator countries. 😐 The indicator says nothing about the quality of post – 19 education, or education in any broader sense than preparation for employment.

Indicator	Score	Comments
6 Health	😐/☹	☺ Life expectancy continues to rise slowly, and healthy life expectancy more slowly. Regional differences are narrowing, but ☹ poorer people still die younger. ☹ Obesity is increasing alarmingly, and, along with bad diet, lack of exercise is probably a major contributor: the Dutch, who cycle much more, have stayed much thinner. ☹ Increasing numbers of people find access difficult to a doctor or hospital, even with a car; it's much worse without. 😐 The indicator focuses on sickness and sickness treatment services: it says nothing about positive health.
7 Housing	☺/☹	☺ Policy is succeeding in reducing the number of people having to live in non-decent housing. ☹ But in all but the most economically depressed regions, housing is getting much more expensive compared to incomes for the poorest quarter of the population.
8 Crime	😐/☹	😐 Recorded vehicle crime and burglary have reduced sharply since the early 1990s, though levels are still much higher than before 1980. ☹ Robbery and violent crime are still increasing. ☹ More affluent regions with and those experiencing highest levels of inequality generally have more crime, though there are exceptions.
9 Green-house gas emissions	😐/☹	😐 The Government claims to be on target to achieve its Kyoto target reductions. However the reductions already achieved are largely accidental byproducts of the 'dash for gas' and manufacturing decline, and the Government's assumptions about the impact of policy are questionable. ☹ Road transport emissions are increasing (unlike other sectors), but government has retreated from earlier commitments to manage demand. ☹ Air travel growth threatens to negate any gains made on the ground, but aircraft emissions are excluded from the indicators and targets, and Government policy is to accommodate predicted growth. ☹ In any case the Kyoto target of 12.5% reduction is nowhere near the 60% which the Government accepts is needed by 2050 to avert catastrophic climate change, let alone the 90% required for 'contraction and convergence'.
10 Air quality	☺	☺ Air quality is improving.
11 Road traffic	☹	☹ Traffic continues to grow inexorably, ☹ Britain has the most congested roads in Europe, ☹ we spend more time commuting than any other European nation, ☹ people without access to a car have more difficulty accessing amenities, but are also more exposed to danger and pollution from traffic. ☹ Rail services continue to worsen, and rail investment, despite ☺ increases, ☹ is mostly taken up putting previous problems right, to the exclusion of new schemes, while ☹ road investment is exceeding the highest levels under the previous government's 'roads to prosperity policies. ☹ In defiance of the commitments made in *Quality of Life Counts*, the government's response has been to fudge the indicators rather than improve the policies.
12 River water quality	☺/😐	☺ River water quality has generally been improving (though with some blips). 😐 Water resources are already under pressure in the south and east of England, and ☹ proposed massive housing development in the most stressed regions will worsen this.

Indicator	Score	Comments
13 Wildlife	😐	😐 Decline of woodland and farmland birds appears to have more or less levelled-off, though evidence of 'reversal' in line with stated objective is not yet apparent and populations are substantially lower than in 1970. However ☺ populations of all birds appear stable at higher than 1970 levels. ☹ Rapid climate change is likely to cause major losses of biodiversity, including extinctions, as species cannot move or adapt fast enough.
14 Land Use	😐	☺ Policy has increased the proportion of new homes built on previously developed land to above the Government's 60% target, through there are big regional variations. However ☹ this means that large amounts of greenfield land are still being developed. In any case, 😐 previously developed land can be more valuable for wildlife or amenity than farmland.
15 Waste	☹	Municipal waste is rising faster than GDP and faster than in most other European countries. ☺ Recycling rates are increasing, but not as fast as waste, and ☹ are among the lowest in Europe.

Overall picture

This study provided a reminder that the headline indicators are a collection of 'spotlights' on particular discrete variables which, while each individually important, are more or less satisfactory proxies or markers for broader sustainability topics, rather than a battery of floodlights which together illuminate the whole territory. There are limits to how far it is wise to try to deduce the shape of the whole terrain from these separate points of light. However with these caveats we would suggest the following patterns, grouped very roughly according to the Government's four objectives of economic growth, social progress, environmental protection and resource use:

(1) The UK's economy is more 'American' than those of the comparator countries, and becoming more so. GDP is high and growing faster than in any other European country, but this is achieved by (or at least accompanied by - whether the link is necessary or contingent is a moot point) much greater inequality in income, and a long hours, high pressure employment culture. There is no evidence that this pattern of economic development is making people happier; indeed such evidence as there is suggests the opposite.

(2) This high income inequality is reflected in high health inequalities, several measures of poverty, and perhaps in high crime rates. Government programmes have tackled these vigorously, and turned round several trends, though others are still worsening and the UK is at or near the bottom of the comparator countries on many important measures.

(3) 'Traditional' environmental issues generally show modest improvements (eg air and water quality) or at least stabilisation of decline (farm and woodland birds).

(4) However the UK has failed to get a grip on consumption of environmental resources. Air and road transport are growing out of control, threatening to undo the modest (and largely accidental) progress on greenhouse emissions. The Government has essentially abandoned demand management in favour of 'predict and provide'. Waste is growing faster than recycling, in which the UK is near the bottom of the European league table.

This picture would suggest that key focuses for sustainability policy for the next few years should include

- Redefining economic progress in ways that obviate the very obvious social and environmental penalties of the current economic growth model;
- Consumption;
- Eco-efficiency (of quality of life services, rather than GDP).

Some broader issues

Reviewing a draft of this report, the Commission asked us to discuss a few issues arising from the headline issues further. This chapter reports the results.

Have the indicators made a difference?

The national sustainable development strategy included the statement that ***'The Government's aim is for all the headline indicators to move in the right direction over time, or, where a satisfactory level has been reached, to prevent a reversal. Where a trend is unacceptable, the Government will adjust policies accordingly, and will look to others to join it in taking action'.*** This was quoted in Quality of Life Counts. This is one of the most 'hard edged' commitments in the strategy: that having crystallised its key sustainability aims in the indicators, Government would if necessary change its policies and activities to ensure that the UK moved towards, not away from, those aims. Whether this commitment has been honoured therefore provides a test not only of the effectiveness of the headline indicators but also of the Government's seriousness about the strategy.

About 9 of the 'headline' indicators are 'moving in the right direction' as the Government sees it. (There are rather fewer green 'traffic lights' in this report's assessment because we do not agree that all these signify a move towards sustainability, are concerned about broader anti-sustainable trends in several of the topics, and have given an amber rather than green score where change albeit in the right direction, fails to match up to the scale and urgency of a problem, for example climate change. But these points are not relevant to assessing the *Government's* commitment to achieving progress on the indicators.)

In several cases (notably health, education, decent housing and some components of crime) Government policies and actions have been vigorously and determinedly targeted on improving the indicator. This is of course good. But there is no evidence that the sustainable development strategy or indicators made any difference. They are never referred to in ministerial statements or press releases announcing initiatives or successes in areas such as health, education or crime.

(Housing is apparently an exception: the Government's 'flagship' policy is called the 'Sustainable Communities Plan' and includes numerous references to sustainable development. However this has been widely criticised as a somewhat disingenuous 'badging' of a policy which is anti-sustainable in allowing market pressures to dictate massive housing growth in those parts of the UK with the least environmental and infrastructure capacity for it, without setting even modestly ambitious resource consumption or transport demand management standards for it.)

The Government acts because it cares about health, education and crime, not because it thinks of them as components of sustainable development. The relevant headline indicators were departmental priorities before they were included in *Quality of Life Counts*: it should be remembered that the headline list was compiled through negotiations to find indicators which government departments could accept as reflecting their policy priorities and which DETR (then home of the Sustainable Development Unit) could also accept as related to sustainable development. Where it was not possible to find an indicator which the department supported *and* which had some plausible connection with sustainability (for example on agriculture) there is no headline indicator.

The Cabinet Office Strategy Unit's 2003 'Strategic Audit', a notably thorough and revealing 'state of the nation' compilation, uses some of the *Quality of Life Counts* 'headline' and 'core' sustainable development indicators. But they are not identified as such or differentiated from the large number of non *Quality of Life Counts* indicators also used: they are all referenced to Departmental or international agency (eg OECD, Eurostat) sources, and neither *Quality of Life Counts* nor *A Better Quality of Life* is mentioned.

Of course what matters is whether Government is working towards sustainable development in substance, not whether it uses the term. It wouldn't really matter if the sustainable development strategy and indicators were just a compilation of pre-existing departmental programmes and goals provided these adequately covered all aspects of sustainable development and were fully implemented.

The acid test of this commitment is: where a headline indicator is clearly moving in the 'wrong direction', does the Government change its policies in order to turn the indicator round? Two headline indicators are very clearly moving in the 'wrong direction': waste and traffic. On waste the Government is (belatedly, and arguably only because of EU pressure) giving more commitment to recycling and other options higher up the waste hierarchy than landfill. But waste policy has been consistently criticised for giving too much emphasis to better reclamation/ disposal methods and not enough to reducing or avoiding waste at source. The inconvenient message of indicator H15 - that growth in rubbish is outstripping increases in the amounts reclaimed - is simply ignored.

For traffic (indicator H11) the position is worse. Not only has the government abandoned its earlier commitments to reduce traffic, it is now seeking to discredit (and presumably drop) the indicator. There is no technical reason for this. Volume of motor traffic is straightforward to measure, easy to understand and widely agreed to matter. Indeed Phil Goodwin's work has shown that indicators of 'congestion', which the Department of Transport has sought to establish as the central measure in place of 'traffic' (presumably since it can appear to sanction massive road building) are technically much more problematic.

Of course it is the government's prerogative to change its aims and policies if it so wishes. But it should not claim that the sustainable development strategy and indicators are driving policy when - as this example clearly shows - they have had negligible leverage, and where government's response to an unsustainable trend has been to ignore or fudge the indicator rather than change policy.

Future use of the indicators

The main lesson we would suggest should be drawn from this is that the sustainable development community should not assume that getting indicators included in documents wins any battles about the direction of policy. Where there is the political will to act (for example on health or crime), sustainable development 'branding' of an indicator is not necessary; where the will is lacking (for example on transport or waste reduction) the branding is insufficient. The big struggle is still, as it always has been, to get government to take sustainability seriously as a policy objective. The last 5 years experience suggests that indicators are a very limited tool for doing so.

However where there *is* political will to achieve sustainable ends, the current 'audit culture' means that public sector performance measures are potentially a powerful tool. For example the government appears sincere in its greenhouse gas commitments, but action on the ground lags far behind the government's rhetoric. One possible response would be to require performance appraisal of all public sector policies and programmes to assess their effects, direct and indirect, on greenhouse gas emissions, and to have to seek special approval for any increase in net emissions. Such a requirement would secure a radical change in policies in areas such as transport and economic development (especially the activities of Regional Development Agencies.) The difficult aspect of this would not be the technicalities of measurement, but mustering the political will to make and enforce the requirement.

Traffic and mobility patterns

CfIT (2003) explains the problems very clearly:

'The combination of economic, social and quality of life issues have changed the manner in which we lead our lives over the last 30 to 50 years. Towns and cities have grown and dispersed over that period, and commuting distances have increased. As a result, UK residents now travel further to work than in any other European country, putting increased pressure on the countryside and on transport infrastructure. The recent Multi-Modal studies have identified the movement patterns within their areas, and the following description is typical.

Commuters represent a large proportion of motorway and trunk road users during the peak hours, typically travelling in cars with less than 1.2 occupants, and often travelling very long distances. Both origins and destinations of trips are widely dispersed, typically with less than 10% of car commuting trips ending in town or city centres. In consequence, the majority of car commuting trips would be unlikely to transfer to the public transport system, and it would be difficult to design a public transport network to serve them. In addition, much of the current rail system is overloaded in the peaks and could not accommodate many transfers from car commuting movements without capacity enhancements.

Dispersed land uses, increased travel distances and increased car dependency, have developed over the last three to five decades as a result of economic growth, and increased quality of life expectations, supported by:

- people exercising choice and opting for rural rather than urban surroundings, where housing is cheaper, and the average pricing of utilities and other services provides an effective subsidy to rural residents;
- reduced job security and more females in the workforce, discouraging house relocation to be nearer a job which may change in the near future, and increased likelihood of a household location serving more than one employment location; greater influence of other factors such as schooling;
- a decline in traditional manufacturing industries in inner city areas, and growth of employment in the service and light industrial sectors; the latter have tended to locate in business parks and out of town developments adjacent to the trunk road network, not well served by public transport;
- stable (and recent decline) in real car prices over a long period and falling real fuel prices, encouraging the growth in car ownership as a more affluent population seeks the mobility to serve an enhanced quality of life;

- a generally good motorway and trunk road system which despite congestion hotspots has increased accessibility by road.

Research by the Town and Country Planning Association for DETR, highlighted this self-reinforcing trend towards decentralised residential and employment locations, and suggested the need for demand restraint if it is to be reversed.

Government transport policy is confronting a long-term tide of economic and social trends towards greater dispersal and the flexibility that increased car ownership and use can deliver, all associated with achieving an improved quality of life. This is a long-term trend, which current forecasters expect to continue, as people continue to seek improved quality of life, with locational decisions based on the ease of use of the private car in rural areas. However, this raises the question of whether the collective effect of these individual quality of life decisions can be sustained in the long-term. Inevitably, the dispersal of residential and employment locations will fuel traffic growth, lead to increasing trip lengths and subsequent congestion. In these circumstances, short-term individual gain may lead to longer-term collective pain, in addition to the short-term reductions in the quality of life of those who are socially excluded.

It is evident that policy must be based on a move towards more sustainable communities, but if these are to be effective it will take long-term commitment to land use and pricing policy measures to accomplish the changes in behaviour on which they are dependent. In these circumstances, promises of short-term gain must be viewed with scepticism.
Events in the recent past have conspired to cast doubt on the achievement of the shift in emphasis. Uncertainty over future economic growth, for which the government is more optimistic than other commentators, and fuel prices which have been variously affected by weather, strikes and the war in Iraq, cast some doubts on the realism of the forecasts.
Our view is that the short term issues, serious though they have been, are mere fluctuations in terms of transport trends, it is the past direction of long term development of land-use and transport patterns which must be addressed. As we seek to demonstrate in the remainder of the report, this will require long term commitment to a fully integrated transport, land-use and economic policy.'

Several of the factors mentioned by CfIT relate to, and confirm the importance of, some Sustainable Development Commission policy concerns, including:

- the anti-sustainable consequences of economic growth, and the inadequacy of technical fixes to counteract them;
- the collective disbenefits caused by individual choice, and policies which place too much reliance on it;
- broader disbenefits of economic insecurity (in this case, people making long commuting journeys rather than moving to be nearer jobs which may not last);
- the inadequacy, and potential misleadingness, of aggregate measures of 'investment' for telling whether infrastructure is meeting needs or improving the quality of life;
- the need for conscious management of pricing (in this case costs of motoring relative to incomes and public transport costs) to give incentives for sustainable behaviour.

Spatial planning, rightly identified by CfIT as crucial, is however a topic the Sustainable Development Commission has not hitherto given much attention.

Gender inequalities in employment in Europe

The 2001 Belgian Presidency of the European Union produced a comprehensive report on 'indicators on gender pay equality' (EU 2001b). Some additional material from this has been added to the discussion of pay gaps under indicator H3 below. The report makes clear that the causes of gender inequality and of differences between countries are very complex and often contentious, so is difficult to draw reliable simple messages. However the following may be significant for the Commission:

- women are paid significantly less than men throughout Europe;
- the public sector is generally fairer than the private sector;
- progressive taxation tends to reduce the *net* income results of inequity in gross income;
- greater *overall* income range exacerbates *gender* inequality since women are concentrated in lower paid jobs and men in higher paid ones;
- career breaks and part time working because of family responsibilities are a main cause of lower pay for women.

These points would tend to underline the undesirable consequences of the UK's extreme income inequality and the value of progressive redistributive taxation and the public sector.

Eco-efficiency

None of the headline indicators directly measure eco-efficiency or resource productivity. However the ratio of H1 (GDP) to H9 (greenhouse gas emissions) is one of the Government's favourite measures. The latest figures confirm the same position we described in *A Better Choice of Choice*, commissioned by the SDC (Levett et al 2003):

'Current policies rest on the hope that by raising resource productivity - the amount of economic production or consumption we can get from each unit of environmental resources or damage - we can continue economic growth while also reducing its environmental impacts to sustainable levels. Resource productivity is politically attractive since what it requires - innovation, technology, investment, flexibility, competitiveness - chimes with the Government's broader economic aims, and avoids any whiff of eco-puritanism.

Aspects of resource productivity have improved substantially, even dramatically. But on energy use, greenhouse emissions, traffic and waste, resource productivity has barely kept pace with increases in consumption since 1970. We have been running to stand still. And even this has only been achieved thanks to two huge, unintended 'windfalls': the replacement of coal by gas in power generation (which caused extreme hardship in former mining communities and leaves us vulnerable to future geopolitical unrest as we become reliant on gas supplies from unstable regions), and the decline of manufacturing (which means we are importing, and chalking up to other countries' environmental accounts, goods we used to make.)

There is no reason to believe this will suddenly change. In particular there is no empirical evidence to support assertions that the 'new' or 'weightless' economy will bring a step change in resource productivity. 'Weightless' activity generally adds to traditional 'heavy' activity rather than replacing it, and can even *increase* demand for environmentally damaging consumption.

So we cannot achieve a more sustainable state just by consuming more cleverly: we must also consume *less*.'

This raises a challenging agenda for the Commission about the relationship of growth and choice to quality of life as well as environmental damage which is beyond the remit of this work. However it also raises a specific point about indicators. Redefining eco-efficiency in terms of the ratio of quality of life benefits to environmental resource consumption could liberate policy from the current straitjacket of using economic growth as a proxy for wellbeing. For example it would enable us to construe transport eco-efficiency not solely as a struggle to improve the fuel efficiency of vehicles faster than tastes for heavier, higher performance vehicles and demands for more and longer journeys increase consumption - a struggle we are currently losing! - but to see vehicle sharing, shorter distances to amenities, more opportunities to combine errands and to use less fuel-intense modes all as part of the 'package' to decouple *access to amenities* - rather than just movement of metal boxes - from environmental damage. We would urge the SDC to give high priority to promoting the concept of *quality of life eco*-efficiency in its engagement with the review of the *Quality of Life* Counts indicators.

Indicator assessments

1 Indicator H1: Economic Output

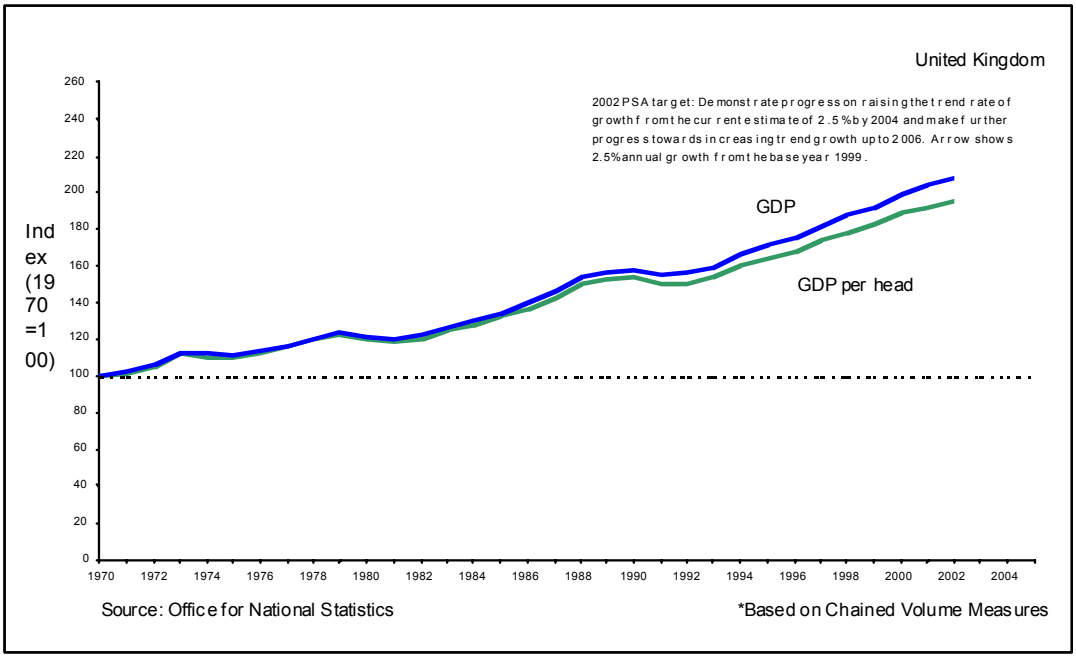


Figure 1: GDP and GDP per head UK

Objective: Our economy must continue to grow

Interpretation and context setting

1.1 Indicator H1 shows that GDP and GDP per capita have risen steadily since the 1970s. This means that aside occasional short term recessions the total value of output produced by the productive sectors of the economy (primary, manufacturing, construction and services) has historically increased, and continues in this trend.

Comparisons: how well is the UK doing?

Government's own goals

- To raise the trend of growth from current estimate of 2.5% and make further progress towards increasing trend growth up to 2006 (ODPM PSA)
- To close the productivity gap between UK and North America and Western Europe
- To make sustainable improvements in economic performance in all regions and reduce the gap in growth rates between regions (ODPM PSA)

1.2 The latest available data for indicator H1 (see Figure 1 above, and Table 2a and 2b) show that the UK is performing relatively well against the government agreed headline goal for this indicator. However the latest data for core indicator E1 (Table 1) show that regional variations in GDP have become more pronounced over the period 1996-1999.

Best practice within UK

1.3 The latest data provided for regional GDP per head as percentage above or below UK average show that the North East, North West and Merseyside, Yorkshire and the Humber, East Midlands, West Midlands, South West, Wales, Scotland and Northern Ireland have all in fact moved further below the national average in the last five years (Table 1). 'Best' is London - does this mean Londoners are happier, more contented, enjoy better quality of life? Should the rest of the UK try to become more like London?

Table 1: Latest core indicator E1 data

Regional GDP per head[1]: United Kingdom		
	% above or below UK average	
	1996	**1999**
North East	-15.3	-22.7
North West and Merseyside	-9.3	-13.1
Yorkshire and the Humber	-10.5	-12.1
East Midlands	-5.7	-6.4
West Midlands	-6.5	-8.3
East of England	-3.2	16.4
London	40.8	30
South East excl London	6.9	16.4
South West	-5.3	-9.2
Wales	-16.9	-19.4
Scotland	-0.9	-3.5
Northern Ireland	-18.8	-22.5

[1] GDP per head, defined as the income of those working in a region (incl commuters) divided by the resident population

www.statistics.gov.uk/statbase/Expodata/Spreadsheets/

1.4 These data show a dramatic change in East of England and are consistent with the latest headline and core indicator data made available to us at the outset of this project. We feel this seems unusually high and should perhaps be verified.

International comparison

1.5 Data for GDP per capita (Table 2a) show that UK GDP per capita is already higher than most EU countries and growing faster than any of them. Indicative GDP growth should be viewed in this wider context of actual GDP per capita.

1.6 For comparison Table 2b compares UK GDP per capita with UNDP figures from low income and middle income developing nations.

Table 2a: GDP growth rate and GDP per capita for selected EU countries and US

	1a: Growth rate of GDP at constant prices (1995=100) - Percentage change on previous year		**1b: GDP per capita in Purchasing Power Standards (PPS), (EU-15=100)**	
Country	2002	2003	2002	2003
Belgium	0.7	0.8	107.6	107.6
Denmark	2.1	0.8	114.2	114.5
Germany	0.2	0.0	102.5	102.2
France	1.2	0.1	102.5	101.4
Netherlands	0.2	-0.9	112.4	110.4
Finland	2.2	1.5	103.1	102.3
Sweden	1.9	1.4	102.0	101.8
EU15 average	1.0	0.7	100	100
US	2.4	2.8	137.4	138.7
United Kingdom	**1.7**	**2.0**	**103.9**	**105.1**
Eurostat: http://europa.eu.int/comm/eurostat/Public/datashop				

Table 2b: GDP per capita for selected countries in low, middle and high Human Development Index levels (HDI as defined by UNDP)

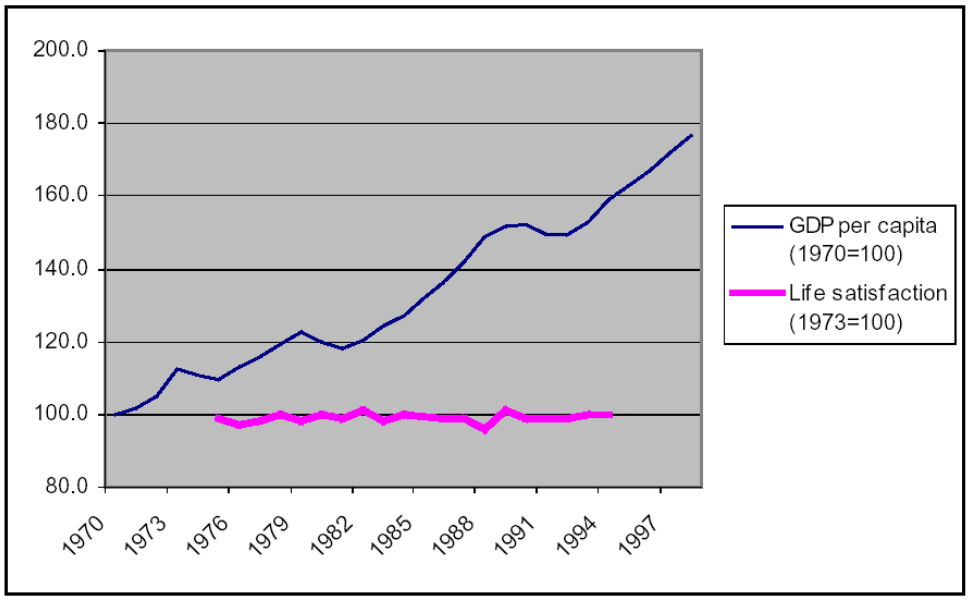
	GDP per capita 2001 (US$ PPS)	GDP per capita 2001 as fraction of UK figure
Country		
United Kingdom	24,160	1
Other High Human Development		
Poland	9,450	0.39
Chile	9,190	0.38
Medium Human Development		
Thailand	6,400	0.26
Sri Lanka	3,180	0.13
Low Human Development		
Pakistan	1,890	0.08
Senegal	1,500	0.06
UNDP Human Development Report 2003, http://www.undp.org/hdr2003/indicator/index.html		

True sustainability and progress summary

1.7 "…if we keep to the meaning of the words, then it is difficult to quarrel with the interpretation that *sustainable development comprises increases in real per capita well-being over time*. In other words, the very first indicator we require is one which measures that well-being." [Pearce, 1999] So what is the relationship between GDP and human 'well-being'?

1.8 In 2002 the Government Strategy Unit produced a report entitled *Life Satisfaction: the state of knowledge and implications for government* [Strategy Unit, 2002], which among many other factors explored how people assess and perceive their well being. The findings of this report included a brief analyses of other proposed alternative (to GDP) measures of development (such as the UK Index of Sustainable Economic Welfare [NEF, 1998] or the USA based Genuine Progress Indicator). These findings suggest that there is little evidence that GDP growth is in fact linked to well being.

Figure 2: UK life satisfaction and GDP per capita 1973-1997 *(Life Satisfaction: the state of knowledge and implications for government*, Strategy Unit, July 2002)

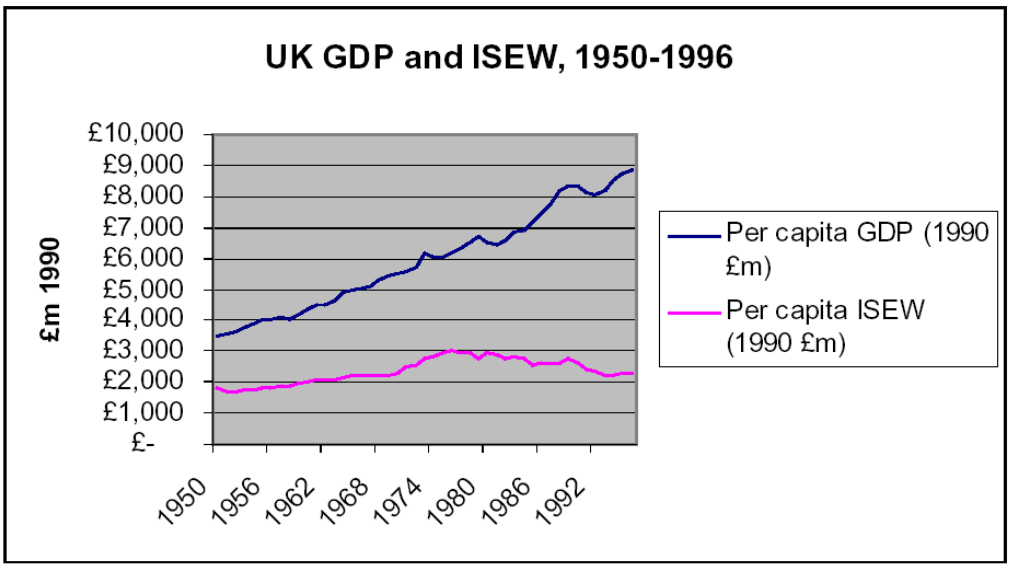


1.9 The Strategy Unit report shows that while initial GPD increases (at low levels of domestic GDP per capita) do have a positive effect on the level of life satisfaction, this correlation does not continue above certain wealth levels. Figure 2 shows that GDP per capita income in the UK has risen steadily since 1970 but that this has not been accompanied by any commensurate increase in life satisfaction. The report goes on to show that life satisfaction is related to social, community and quality of life factors such as regular attendance at local groups, walking regularly and playing sport.

1.10 The UK Index of Sustainable Economic Welfare (ISEW) (Figure 3) shows a similar pattern. The ISEW measures consumer expenditure, but is then adjusted for income inequality, unpaid domestic labour, environmental degradation, depletion of natural resources, long term environmental damage, changes in the (conventional) capital stock and defensive expenditures.

1.11 The US Genuine Progress Indicator [Cobb et al, 2001] which seeks to measure a number of economic, environmental and social aspects not included in standard GDP calculations also shows a stark divergence from, and below GDP as a measure of progress. Costs such as crime, noise pollution or commuting, and benefits such as the value of housework and parenting or volunteer work are included to create a fuller picture of the health of the economy and wellbeing of the population.

Figure 3: UK Index of Sustainable Economic Welfare and GDP per capita 1950-1996 *(Life Satisfaction: the state of knowledge and implications for government*, Strategy Unit, July 2002)



1.12 All these alternative measures raise theoretical and practical problems of their own. This is not the place to discuss them. But together they suggest that GDP is not an indicator of human quality of life, and that no conclusions about the UK's progress towards sustainable development (as understood in the Pearce quote above) can be drawn from either the apparent 'successes' reported above (the UK's high current GDP and high rate of growth compared to other European countries) or the apparent 'failure', the increase in regional disparities.

2 Indicator H2: Investment

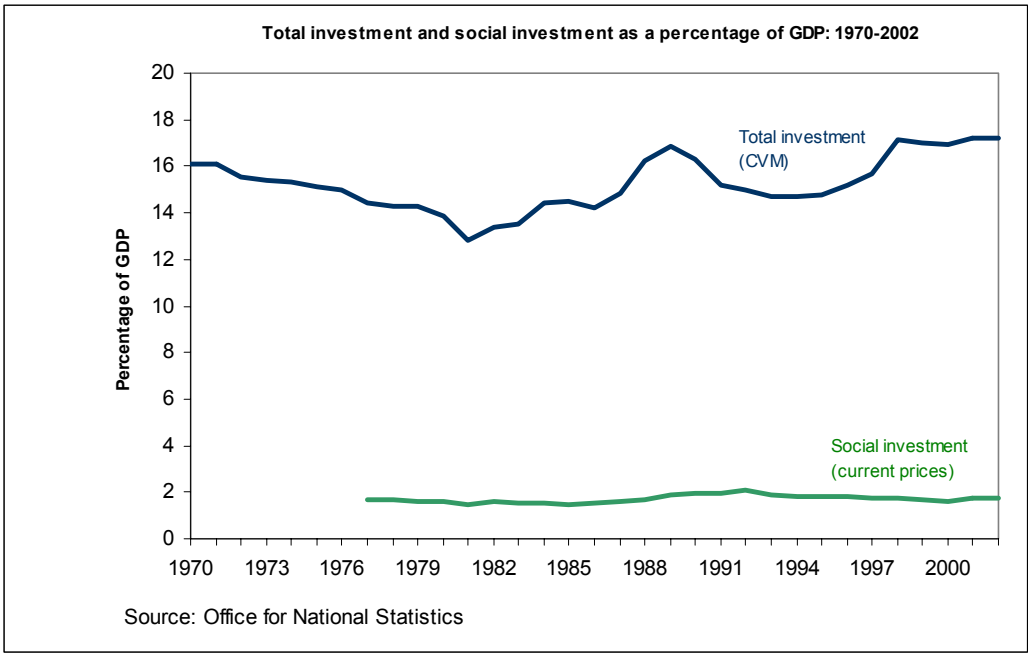


Figure 3: Total investment and social investment as a percentage of GDP

Objective: Investment (in modern plant and machinery as well as research and development) is vital to our future prosperity

Interpretation and context setting

2.1 Indicator H2 shows that since the 1970s there have been fluctuations, but no discernible trend change, in total investment, and that social investment has remained almost static as a percentage of GDP. 'Total investment' is a European accountancy standard measure of gross fixed capital formation; 'social investment' a UK definition covering investment in water, sewage and refuse disposal, rail transport, buses and coaches, roads, education, health and social work.

Comparisons: how well is the UK doing?

Government's own goals

- This indicator has no specific target or goal though the objective implies growth is desirable
- The supporting text in *Quality of Life Counts* [DETR, 1999] states that public sector net expenditure was planned to double over the life of the then Parliament.
- Maintain the UK as prime location of Foreign Direct Investment (joint FCO-FDI aim)

2.2 As the latest data for core Indicator B5, which provides a breakdown in social expenditure is for 1992, progress is unknown.

International comparisons

2.3 Progress against these objectives is poor. Table 3 and Table 4 provide European data which suggest that the UK lags behind comparator countries.

Table 3: Investment as a share of GDP (%) UK compared to selected EU countries and US

	Italy	Germany	France	US	**UK**
1980-1997					
Gross fixed capital formation (GFCF)	19.9	20.8	19.9	17.8	**16.9**
GFCF excluding residential construction	14.3	14.6	14.5	13.6	**13.4**
GFCF Machinery and Equipment	9.5	8.5	8.6	7.9	**7.9**
Source: Bond, 2000					

Table 4: Public social expenditure as a percentage of GDP

Year	1996	1997	1998
Country			
Belgium	25.53	24.21	24.54
Denmark	31.69	30.66	29.81
Germany	28.06	27.74	27.29
France	29.31	29.27	28.82
Netherlands	25.29	24.88	23.90
Finland	30.97	28.72	26.54
Sweden	32.99	32.26	30.98
United Kingdom	**25.79**	**25.33**	**24.70**
		Average	27.07

OECD: http://www.oecd.org/statsportal

Note: OECD measures public social expenditure as including spending on a number of social and welfare related sectors. It does not include infrastructure, waste or water expenditures.

True sustainability and progress summary

2.4 Issues surrounding such broad indicators are complex and this indicator is difficult to assess from a sustainability perspective. It contains a spectrum of elements which could have contradictory effects. For example social investment includes both road and public transport (including rail) expenditures.

2.5 As with GDP (H1), it is difficult to relate this indicator to the Commission's working principles. Increasing social investment in name, should be a contributing element to 'fair shares to all' and 'putting sustainability at the centre.' However the indicator is such that it is hard to relate its progress to a meaningful judgement of sustainability.

2.6 A business community which does not maintain investment will in theory lag behind competitors in areas of technology and research innovations. A society which cannot provide for the needs of the young and old, provide appropriate health provision, educate coming generations and build infrastructure which serves real needs for transport and amenities, is likely to be less sustainable.

3 Indicator H3: Employment

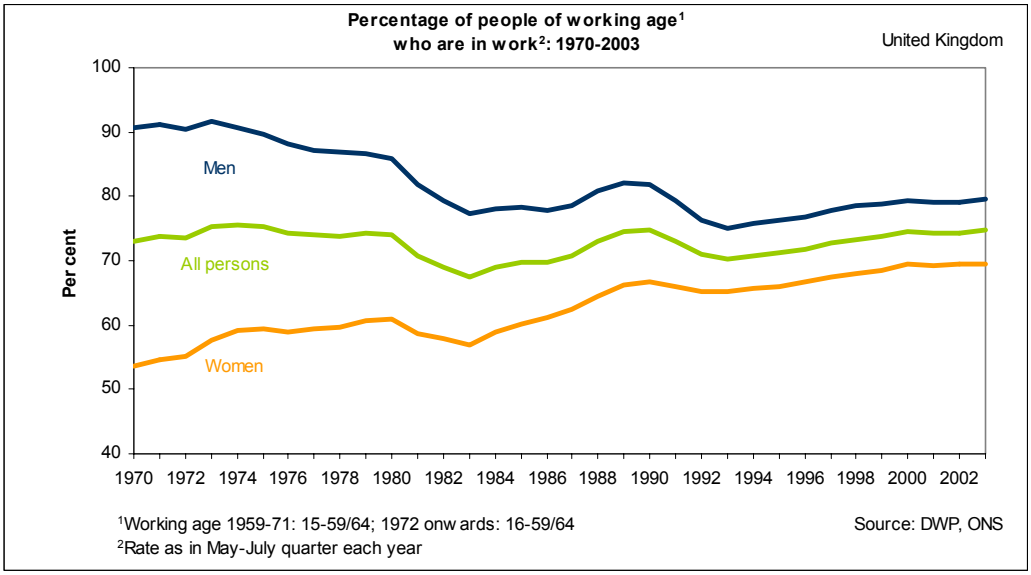


Figure 5: People of working age who are in work (%)

Objective: Maintain high and stable levels of employment so everyone can share in greater job opportunities

Interpretation and context setting

3.1 Indicator H3 shows that the total percentage of people of working age who have a job has fluctuated but is now at roughly the same level as in 1970. However the difference between men and women has greatly reduced: a much higher percentage of women are now in work than in 1970, but a much lower percentage of men. This may signify better employment *opportunities* for women - good - or more *pressure* on them to work (eg to maintain living standards, or to substitute for men unable to get work) - bad - and / or a decline of traditionally male dominated employment sectors such as manufacturing and mining. The latest data show that there has been almost no change in absolute employment levels since 2000.

3.2 The indicator does not provide any information on job satisfaction, security, pay and conditions, or the cost or hassle involved in getting and keeping a job (eg commuting). All these will influence the contribution employment makes to quality of life. Increased or stable absolute levels of employment may hide changing patterns which themselves are detrimental to quality of life for those employed.

Comparisons: how well is the UK doing?

Government's own goals

- Demonstrate progress by spring 2006 in increasing employment and reducing unemployment over the economic cycle (Department of Work and Pensions (DWP) and HM Treasury (HMT)).

- By spring 2006 increase employment rates of disadvantaged areas and groups: lone parents, ethnic minorities, people aged 50+, those with lowest qualifications, and the 30 local authority districts with the poorest initial labour market position.

3.3 Progress against core government goal of increased employment is uncertain, though latest data shows a modest increase in absolute employment. However core indicator data suggests that opportunities while improving are still lacking for the most needy. For example indicator C7 (Table 5) which measures economically active lone parents and disabled people shows that these groups have made only gradual progress in the workforce with proportions static since the 2000 though increased slightly since the mid 90s. Equally indicator E5 (Table 6) measuring ethnic minority employment shows little sign of progress.

Table 5: Economically active lone parents and disabled people

Proportion of lone parents and disabled people who are economically active: 1984-2002			
Great Britain			
activity rate (%)			
	overall rate for GB	lone parents	people with disabilities
1996	78	53	47
1997	79	53	44
1998	78	54	49
1999	79	56	51
2000	79	-	52
2001	78	-	52
2002	79	-	52
2003	79	-	-
Source: ONS Labour Force Survey			

Table 6: Ethnic minority employment

Ethnic minority employment and unemployment				
Employment and unemployment rates - overall population and ethnic minorities: 1984-2002 (GB, %)				
	employment		unemployment	
	overall population	ethnic minorities	overall population	ethnic minorities
1984	69	54	9	15
1986	70	53	9	14
1988	73	60	7	9
1990	75	61	5	8
1992	71	55	8	12
1993	70	53	8	14
1994	71	51	8	14
1995	71	53	7	12
1996	72	54	6	11
1997	73	57	6	10
1998	73	57	5	9
1999	74	56	5	8
2000	75	57	6	12
2001	75	57	5	11
2002	75	58	5	11
2003	77	59	5	13
Source: ONS Labour Force Survey, http://www.statistics.gov.uk/downloads/theme_labour/LFSQS_1003.pdf				

Best practice within UK

3.4 Latest available data for *regional quality of life counts* [ONS 2002a] shows that regional variations in employment have reduced between 1992 and 2001 but that there remains a significant gap in employment between those areas with highest levels and those with lowest, and latest data fails to show that this gap is being closed [Table 7].

Table 7: Working age people in work by region

Percentage of working age people in work (May-July): 1992–2001			
	1992	**2001**	**Change (% points)**
North East	65.6	68.5	2.9
North West	69.2	76.1	6.9
Yorkshire and the Humber	71.4	73.1	1.7
East Midlands	73.2	76.4	3.2
West Midlands	69.3	74.3	5.0
East of England	75.4	79.2	3.8
London	67.8	70.8	3.0
South East	75.5	79.6	4.1
South West	73.7	79.2	5.5
England	**71.5**	**75.1**	**3.3**
Source: *regional quality of life counts 2002* [ONS, 2002]			

International comparison

- Government committed to EU Lisbon Strategy with the goal of the EU becoming the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion.
- Target to raise the overall EU employment rate to 70% and to increase the number of women in employment from an average to more than 60% by 2010.

3.5 The UK employment figures are above these EU targets. The UK has employment rates higher than many European economies except Denmark, the Netherlands and Sweden (Table 8).

3.6 More detailed analysis of available European data is revealing:

- Data for sex disaggregated earnings in EU countries suggest a perhaps a more sinister reason for the changed proportions of male and female employment rates in the UK (Table 9) in that on average hourly earnings for women are around 20% less than men's. Businesses in the UK may be substituting lower paid female staff for male staff without increasing overall employment numbers.
- The employed in the UK work longer hours than in all comparable European countries (Table 10)
- Income inequalities (latest available data 1999) in the UK are among the highest in Europe (Table 11)

3.7 Research by the EU shows that a large number of factors influence gender wage inequalities. The EU Magazine of the Gender Equality Programme [EU, 2001] stresses the role of education, sectors of work, value of work done, number of hours worked, pay structure, career breaks and opportunities, senior jobs, tax and benefits, collective agreements and minimum wage levels.

3.8 Further research conducted under the Belgian EU presidency suggests that as age increases so gender wage differentials increase too. Interestingly the UK has some of the highest levels of inequity among older age groups, though among the 18-25 age group the inequity is less marked (Gender Table 1). The UK also has the highest proportion of women in work compared to comparator countries. [EU, 2001]

Gender Table 1: Gross gender pay gaps by age (private sector)

	Total	Relative wage - 20	Relative wage 20-24	Relative wage 25-29	Relative wage 30-44	Relative wage 45-54	Relative wage 55 and older
Belgium	84,30%	78,08%	84,87%	90,60%	88,00%	86,54%	83,28%
Denmark	84,66%	102,72%	89,07%	91,30%	85,43%	81,47%	82,14%
Greece	72,88%	87,84%	88,62%	90,39%	79,59%	65,42%	61,06%
Spain	75,49%	89,58%	84,92%	86,13%	81,04%	78,95%	75,52%
France	80,05%	104,51%	99,18%	92,06%	80,68%	74,80%	75,10%
Ireland	70,18%	91,57%	86,15%	81,55%	73,67%	64,92%	67,87%
Italy	78,95%	95,90%	91,63%	87,43%	82,28%	77,56%	80,71%
Luxembourg	84,18%	103,63%	94,72%	98,73%	87,86%	75,95%	75,64%
Netherlands	69,04%	88,34%	85,48%	85,19%	80,99%	66,29%	67,89%
Austria	72,94%	84,78%	75,24%	81,53%	75,32%	71,60%	67,37%
Portugal	70,79%	91,64%	86,48%	79,47%	73,48%	72,17%	67,42%
Finland	78,35%	87,60%	83,87%	83,98%	79,03%	74,60%	72,50%
Sweden	84,48%	na	90,70%	90,33%	86,24%	81,48%	82,01%
United Kingdom	**69,80%**	**87,83%**	**81,06%**	**83,00%**	**72,93%**	**60,16%**	**65,34%**
Source: EU, 2001							

3.9 The UK is achieving relatively high employment levels, however evidence would seem to suggest that progress towards equitable opportunities for all remains limited.

Table 8: Total employment rates for comparator countries

	Total employment rate - Employed persons aged 15-64 as a share of the total population of the same age group	
Country	2001	2002
Belgium	59.9	59.9
Denmark	76.2	75.9
Germany	65.8	65.3
France	62.8	63
Netherlands	74.1	74.4
Finland	68.1	68.1
Sweden	74	73.6
EU15 average	64.1	64.3
United Kingdom	**71.7**	**71.7**
Eurostat: http://europa.eu.int/comm/eurostat/Public/datashop		

Table 9: Gender pay gap for comparator countries

Gender pay gap in unadjusted form - Difference between men's and women's average gross hourly earnings as a percentage of men's average gross hourly earnings		
Country	2001	2002
Belgium	11	12
Denmark	14	15
Germany	19	21
France	12	13
Netherlands	21	21
Finland	19	17
Sweden	17	18
EU15 average	15	16
United Kingdom	**22**	**21**
Eurostat: http://europa.eu.int/comm/eurostat/Public/datashop		

Table 10: Average weekly hours worked for comparator countries

Average weekly number of hours usually worked per week defined as the sum of hours worked by full-time employees divided by the number of full-time employees		
Country	2001	2002
Belgium	39.2	39.3
Denmark	39.9	39.9
Germany	41.1	41.0
France	38.3	37.7
Netherlands	39.0	38.9
Finland	39.3	39.2
Sweden	39.9	39.9
EU15 average	40.1	40.0
United Kingdom	**43.5**	**43.3**
Source: Labour Force Survey, Eurostat http://europa.eu.int/comm/employment_social/employment_strategy		

Table 11: Income inequality in selected EU countries

Inequality of income distribution (income quintile share ratio) - The ratio of total income received by the 20% of the population with the highest income (top quintile) to that received by the 20% of the population with the lowest income (lowest quintile). Income must be understood as equivalised disposable income.	
Country	1999
Belgium	4.2
Denmark	3.2
Germany	3.6
France	4.4
Netherlands	3.7
Finland	3.4
Sweden	3.2
EU15 average	4.6
United Kingdom	**5.2**
Eurostat: http://europa.eu.int/comm/eurostat/Public/datashop	

True sustainability and progress summary

3.10 Sustainability would mean everyone having access to a fulfilling occupation and sufficient livelihood. The headline indicator says nothing about the quality of the jobs or the satisfaction employees are getting from them. However broader social research suggests that work related stress, frustration and unhappiness are increasing.

3.11 A recent report by the Health and Safety Executive states that while trend data is limited, approximate comparisons limiting analyses to England and Wales and attempting to align stress figures to a similar basis suggests an approximate doubling of the prevalence rate of self-reported stress from 1990 to 1999 [HSE, 2003].

3.12 The comparisons show we work longer and have more gender and income inequalities than comparable countries in Europe. This all tends to suggest that the good 'headline' performance cannot be assumed to improve quality of life, and may well undermine it.

4 Indicator H4: Poverty and Social Exclusion

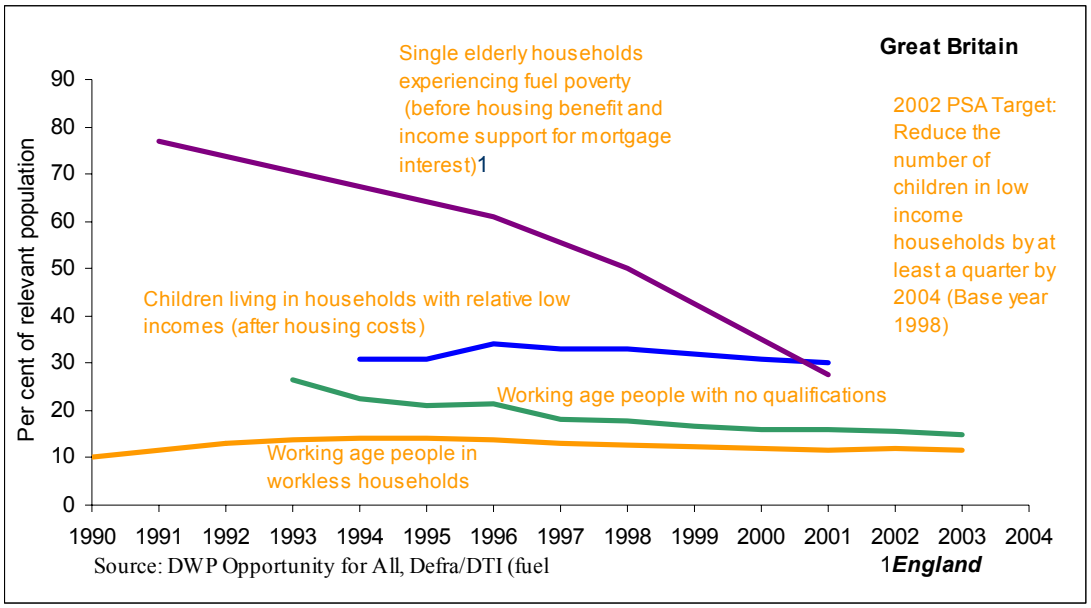


Figure 6: Percentage of working age people without qualifications or in workless households and percentage of children living in families with relative low incomes: 1990-2003

Objective: Tackle poverty and social exclusion

Interpretation and context setting

4.1 Poverty and social exclusion covers a broad area of government activities and the selection of four indicators for H4 reflects this.

4.2 The data shows that there has been a dramatic reduction in the number of elderly households experiencing fuel poverty since the early 1990s and a significant reduction in the number of working age people with no qualifications. The proportion of children living in households with relative low incomes, and of working age people in workless households, have fallen slightly since 1996, but the improvements have only brought them back to roughly the levels they were at in the early 1990s.

Comparisons: how well is the UK doing?

Governments own goals

- Reduce the number of children in low-income households by at least a quarter by 2004, halve child poverty by 2010, eradicate it by 2020 (joint target DWP-HMT)
- Reduce proportion of children in households with no-one in work by 6.5% by Spring 2006 (DWP)
- Promote better policy integration nationally (PSA for the ODPM)
- Improve basic skills of 1.5 million adults between 2001-2007 with 750,000 milestone by 2004 (Department for Education and Skills (DfES))
- Reduce fuel poverty among vulnerable households by improving energy efficiency of 600,000 homes by 2004 (Defra)

- Reduce the proportion of children in households with no one in work over the 3 years from Spring 2003 to Spring 2006 by 61/2%. (DWP)
- Increase voluntary and community sector activity, including increasing community participation, by 5% by 2006 (Home Office)
- Government also has adopted a UK anti-poverty strategy which reiterates all other targets and advocates 'joined up' and long-term planning and policy (DWP)

4.3 These indicators do provide a good measure of social problems related to quality of life and show that Government social and poverty related policies are possibly starting to make a difference. Fuel poverty among elderly households has fallen dramatically, though this may be due to price and subsidies rather than meeting the Defra target of improving energy efficiency of homes. Progress has also been made to meet targets relating to child poverty and those without qualifications. Analysis of the core indicators relating to poverty, exclusion and education do suggest that there have been improvements in many areas, though as discussed in the Employment (H3) section above, limited progress has been made in providing opportunities for lone parents, disabled people or ethnic minorities.

Best practice within UK

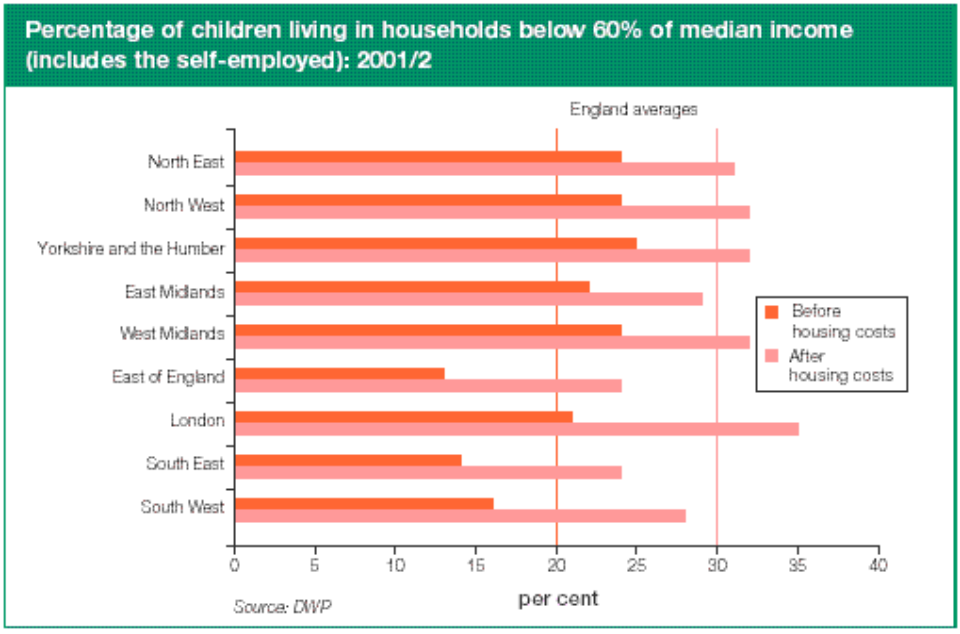
4.4 Regional disparities in employment and GDP have already been shown in Table 1 under indicator H1 above. The latest regional fuel poverty data (Table 12) show the biggest improvements in the regions that were worst to start with: policy here seems to be succeeding in reducing regional disparities.

4.5 Social exclusion data and a recent study by the Social Exclusion Unit (SEU, 2001) indicate the same pattern. However, Table 12, and Figure 7, show that notable regional disparities still exist, particularly in relation to children in low-income households. Accounting for housing costs in these data shows the impact paying for housing has on low-income families, with the percentages almost doubling in some regions when these costs are included (Figure 7).

Table 12: Percentage of all households experiencing fuel poverty by region, 1996-2001

Region	**1996**	**2001**	**% Change**
North East	31.0	10.2	-20.8
North West	24.5	10.1	-14.4
Yorkshire and the Humber	29.1	11.4	-17.7
East Midlands	22.6	9.2	-13.4
West Midlands	26.9	11.0	-15.9
East of England	16.8	6.4	-10.4
London	17.2	5.1	-12.1
South East	14.8	6.9	-7.9
South West	22.7	10.0	-12.7
England	21.8	8.6	-13.2
UK Regional Quality of Life Counts, 2002 update, online http://www.sustainable-development.gov.uk/indicators/regional/index.htm			

Figure 7: Percentage of children living in households below 60% of median income by region



Source: *UK Regional Quality of Life Counts*, 2002 update, online http://www.sustainable-development.gov.uk/indicators/regional/index.htm

International comparisons

4.6 European data suggests that in spite of the improvements seen in the UK it remains behind all comparator countries in terms of relative levels of poverty and social exclusion (Table 13).

Table 13: Population at risk of poverty rate and population in jobless households for comparator countries

	The share of persons with an equivalised disposable income, before social transfers, below the risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income (after social transfers). Retirement and survivor's pensions are counted as income before transfers and not as social transfers		**Persons living in households with no member in employment as a share of total population (excluding persons in households where all members are aged less then 18 years, or 18-24 years and in education, or 65 years and more and not working)**	
Country	1999	2000	2000	2001
Belgium	25	24	16.5	16.3
Denmark	24	23	-	-
Germany	21	20	13.8	14.2
France	24	24	13	13.1
Netherlands	21	21	9.7	9.5
Finland	21	19	-	-
Sweden	28	27	-	-
EU15 average	24	23	12.2	12.2
United Kingdom	**30**	**29**	**14.2**	**14.3**
Source: Eurostat http://europa.eu.int/comm/eurostat/Public/datashop				

4.7 Similar comparisons for fuel poverty are not available. This problem is relatively unknown in other western countries because they tend to have much better insulated housing.

4.8 The 2003 UN Human Development Report [UN, 2003] contains a revealing indicator, the Human Poverty Index, which for developed countries creates a ranking based according to their national levels of poverty, illiteracy, unemployment and life-expectancy (Table 14). With the UK ranked 15 out of 17 countries, inequality and relative poverty remain critical issues.

Table 14: UNDP Human Poverty Index Ranking for high-income countries

Country	**UNDP Human Poverty Index Ranking**
Sweden	1
Norway	2
Finland	3
Netherlands	4
Denmark	5
Germany	6
Luxembourg	7
France	8
Spain	9
Japan	10
Italy	11
Canada	12
Belgium	13
Australia	14
United Kingdom	**15**
Ireland	16
United States	17
Source: UNDP http://www.undp.org/hdr2003	

True sustainability and progress summary

4.9 Reducing income inequalities, providing education and employment opportunities for all, including children, and providing warm safe housing to the elderly are sound sustainability targets and have a clear link to quality of life. Latest data does show that the government's efforts are making some impact particularly on fuel poverty.

4.10 However, despite modest improvements the UK is still at or near the bottom of the list of Western European countries for important measures of poverty including inequality, lack of opportunity and workless households.

5 Indicator H5: Education

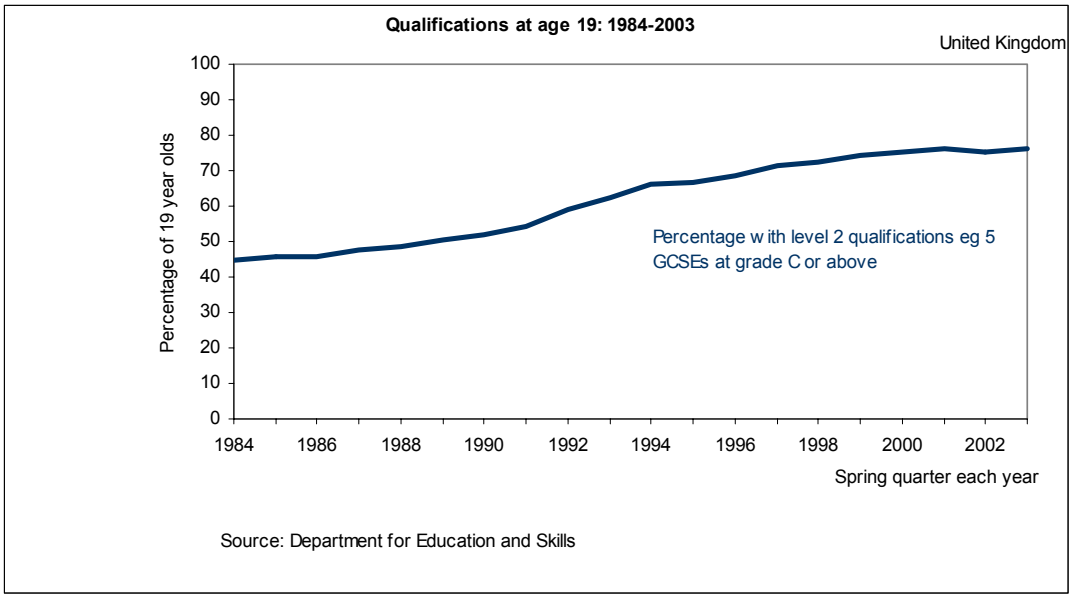


Figure 8: Percentage in UK with grade 2 qualifications (5 GCSEs with grade C or above)

Objective: Equip people with the skills to fulfil their potential

Interpretation and context setting

5.1 This indicator focuses on education achievement of those of school age, up to 19. Latest data shows that while the percentage of school leavers with at least grade 2 qualifications rose steadily between 1990 and 2000 it has remained largely unchanged since 2000 with a rate of around 75%.

5.2 This indicator does not provide any information on learning / training opportunities for adults or ongoing development of skills. This is measured to some extent in core indicator C3, discussed below.

Comparisons: how well is the UK doing?

Governments own goals

- Target from *quality of life counts*: increase number of 19 year olds achieving level 2 qualifications to 85% in England and 75% in Wales (original target by 2002), 85% in NI by 2001
- Raise the proportion by 3% between 2002-2004, and a further 3 percentage points by 2006 (DfES)
- Improve life chances for children by improving the level of education, training and employment outcomes for care leavers to at least 75% of the average of same area, and that at least 15% of children in care attain 5 GCSEs by 2004 (DOH)
- Increase significantly take up of sporting and cultural sporting opportunities by new users aged 20 and above from priority groups (department for culture media and sport - DCMS)

5.3 The government did not attain the original target for England or Wales (NI and Scotland data not available). Data for England from *regional quality of life counts 2002* show an average level of attainment in England of approximately 75% [ONS, 2002] 10% below the target achievement level. In Wales while 85% of pupils attained 5 GCSEs or equivalent grades A-G, the figure for the Government target of grades A-C was at 50% for 2001/2002, well below the target level of 75% [National Assembly for Wales, 2002].

5.4 Data on opportunities and education for care leavers also shows the government target has not been achieved. Latest available data show that for England 49% of young people aged 19 in 2002-03 who were looked after by councils in their 17th year were engaged in education, training or employment at the age of 19 which represents 57% of the level for all children aged 19 [DOH, 2003].

5.5 As already mentioned, the headline indicator only measures attainment at age 19, but core indicator (C3) says more. This shows that the percentage of people doing no learning in the past three years has fallen very slightly since 1999, but that the unemployed and older age groups have substantially lower learning levels than those already in employment. In 2002 13% of those in employment were involved in no education in the last three years suggesting that personal training and development is strong in the workplace. But this figure rises to 32% of the unemployed, suggesting that opportunities to retrain or gain new skills are less accessible to those already unemployed.

Best practice within UK

5.6 Regional inequalities have diminished between 1996 and 2002 (Table 15).

Table 15: Percentage of people at age 19 with level 2 qualifications: 1996–2002

	1996	2002	% Change
Region			
North East	71	73	2
North West	66	72	6
Yorkshire and the Humber	69	71	2
East Midlands	62	78	16
West Midlands	65	70	5
East of England	65	72	7
London	72	76	4
South East	67	80	13
South West	77	79	2
% difference highest-lowest	**15**	**9**	
England	**68**	**74.6**	**7**
Source: *regional quality of life counts 2002* [ONS, 2002]			

International comparisons

5.7 The UK invests less in education as a percentage of GDP than any of our comparison countries or the EU average (Table 16) even when corrected for GDP differences.

Table 16: Public expenditure on Education for selected European countries

Spending on Human Resources (public expenditure on education) as a percentage of GDP				
Country	1999	2000	Total spending corrected for GDP / Capita (GDP 2000)	
			GDP Index (EU=100)	Corrected %
Belgium	-	5.21	106.4	5.54
Denmark	8.14	8.38	115.5	9.68
Germany	4.58	4.53	102.0	4.62
France	5.93	5.83	103.8	6.05
Netherlands	4.77	4.87	110.7	5.39
Finland	6.22	5.99	104.1	6.24
Sweden	7.46	7.39	109.1	8.06
EU15 average	5.00	4.94	100	4.94
United Kingdom	**4.41**	**4.41**	103.9	**4.58**
Eurostat: http://europa.eu.int/comm/eurostat/Public/datashop				

Table 17: Population participating in education and training for selected European countries

Life-long learning - total - Percentage of the population aged 25-64 participating in education and training over the four weeks prior to the survey		
Country	2000	2001
Belgium	7.3	6.5
Denmark	17.8	18.4
Germany	5.2	5.8
France	2.7	2.7
Netherlands	16.3	16.4
Finland	19.3	18.9
Sweden	17.5	18.4
EU15 average	8.4	8.5
United Kingdom	**21.7**	**22.3**
Eurostat: http://europa.eu.int/comm/eurostat/Public/datashop		

5.8 Table 17 shows the UK to have a higher proportion of adults in training and education than any comparable EU country, but does not indicate the type, duration or efficacy of ongoing education. Moreover the conspicuously low figure for Germany, a country which is generally believed to be obsessed with vocational training and qualifications to the extent of ridicule, suggests that the figures may not be on a consistent basis.

True sustainability and progress summary

5.9 The headline indicator, and all the discussion so far, treat education solely as a means of preparing people for work. Even on this narrow criterion the indicators show at best mixed news. Qualifications at age 19 are improving, though short of government targets; more people of working age participated in education or training in the month before a survey than for any of the comparison countries, though the survey said nothing about the quality of training, and unemployed people participated much less than employed ones, and the UK spends a lower proportion of national income on education than any of the comparator countries.

5.10 The indicators do not say anything about how well education is ensuring society has the range of skills needed to support quality of life. Shortages of teachers and doctors, and anecdotal complaints about the difficulty of finding skilled plumbers, builders etc suggest the possibility of deficiencies in education though none of the indicators cover this.

5.11 The indicators say nothing about education as means of personal development and fulfilment. Increased proportions of school leavers entering higher education might suggest this is getting better, although its increased costs to students and their families might mean that people from lower income backgrounds are less, rather than more, able to participate.

6 Indicator H6: Health

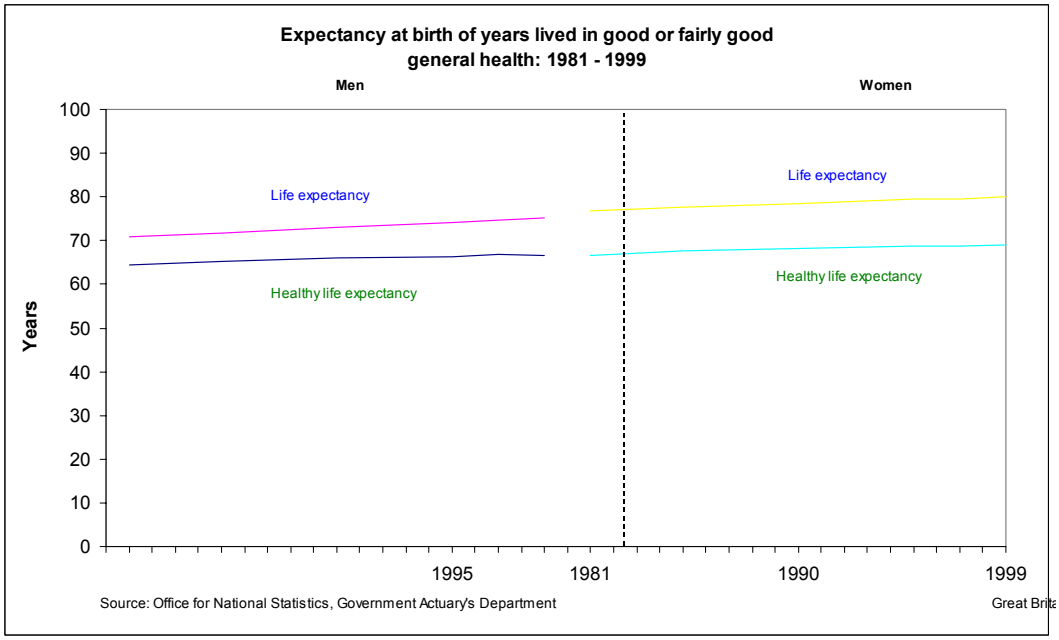


Figure 9: Expectancy at birth of years lived in good or fairly good health

Objective: Improve health of the population overall

Interpretation and context setting

6.1 The latest data for this indicator show that overall life expectancy has continued to increase as has healthy life expectancy. However the rate of increase in healthy life expectancy has been somewhat slower. We, as a nation are living longer, but can expect more of our years to be spent in a state of ill-health.

Comparisons: how well is the UK doing?

Government's own goals:

- *Quality of life counts* contained no explicit target for indicator H6 other than to increase healthy life expectancy at age 65
- Reduce deaths by 2010 for under 75s: from heart disease by at least 40%; from cancer by at least 20% (DoH)
- Selected air-quality targets (Defra and Department for Transport - Air Quality Strategy)
- Enhance take up of sporting opportunities by 5-16 year olds by increasing school children doing at least 2 hours sport / PE from 24% to 75% (DCMS)
- Improve the health of the population as a whole by increasing the length of people's lives and the number of years people spend free from illness; and to improve the health of the worst off in society and to narrow the health gap (2000 NHS Plan)

- Improve the health of the population as a whole by increasing the length of people's lives and the number of years people spend free from illness and improve the health of the worst off in society and to narrow the health gap (Health White Paper, 1999)
- Transform the health and social care system so that it produces faster, fairer services that deliver better health and tackle health inequalities (DoH PSA)

6.2 In terms of the headline target of increasing healthy life expectancy, while life expectancy for both men and women has increased over the last ten years, the gap between number of years lived, and years of good or fair health has widened. Latest available data show that this trend is continuing.

6.3 Furthermore, core indicator F3 which measures life expectancy according to occupation shows that the gap between professionals and those in unskilled work has also widened. For men in 1972 the difference was 6 years, which has grown now to over 8 years, and for women from 4 years in 1972 to 5 years in 1999. However, the latest data do show that life expectancy for the lowest skill groups of men have risen notably between 1996 and 1999, though the same is not true for women.

6.4 The Health White Paper and NHS Plan of 1999 and 2000 recognise that health is more than sickness treatment. Research (such as various findings of the ESRC Health Variations Programme, http://www.esrc.ac.uk/esrccontent/ourresearch/health_variations.asp) suggest that among others diet, social class and status (and perceived status), work related stress, access to amenities, transport and housing all affect health inequalities, life expectancy and crucially, quality of life.

6.5 In 1996, 61 % of men and 52 % of women were overweight or obese. In 2001 these figures had risen to 68 % of men and 56 % of women [ONS, 2001]. Policy assertions and strategy do not yet appear to be having an effect on the nations health from a broad and quality of life perspective.

6.6 Core indicator data also suggests that access to health facilities is a major issue. Latest data for core indicator J1 show that access to doctors and hospitals has become increasing difficult, especially for those without access to a car (Table 18).

Table 18: Percentage of people finding access difficult to a doctor or hospital

Amenity	**With access to a car**		**Without access to a car**	
	1997/98	2001/2002	1997/98	2001/2002
corner shop	3	5	9	12
post office	3	5	10	13
doctor	**4**	**7**	**16**	**21**
supermarket	3	5	17	23
hospital	**17**	**26**	**38**	**47**
Source: ODPM / Latest core indicator data as released by SDC				

6.7 Contributory factors might include centralisation of hospitals and relocation to non-public transport accessible sites.

Best practice within UK

6.8 Latest life expectancy data from *regional quality of life counts* show the same pattern as national level statistics. Life expectancy has risen in all regions while healthy life expectancy has risen but at a much slower rate. More revealing is regional divergence between total life expectancy and that in good health. In 1999-2001 regional difference between total life expectancy is 2.8 years for men and 2.5 years for women. In 1995-1998 healthy life expectancy difference was to 4.9 years for men and 3.7 for women (Table 19a and 19b).

6.9 There are still big differences between regions, though less than in the early 1990s.

Table 19a: Life expectancy at birth by region

Life Expectancy at birth in years						
	1991-1993		**1999-2001**		**Change (years)**	
	Males	**Females**	**Males**	**Females**	**Males**	**Females**
North East	72.0	77.4	74.2	79.0	2.2	1.6
North West	72.4	77.9	74.1	79.1	1.7	1.2
Yorkshire and the Humber	73.1	78.6	75.1	80.0	2.0	1.4
East Midlands	73.7	79.0	75.7	80.3	2.0	1.3
West Midlands	73.2	78.7	75.1	80.0	1.9	1.3
East of England	75.0	80.1	76.8	81.2	1.8	1.1
London	73.3	79.3	75.4	80.5	2.1	1.2
South East	74.9	80.1	76.9	81.3	2.0	1.2
South West	74.9	80.3	76.9	81.5	2.0	1.2
England	**73.7**	**79.1**	**75.7**	**80.4**	**2.0**	**1.3**
Regional difference (highest – lowest)	**3.0**	**2.9**	**2.8**	**2.5**		

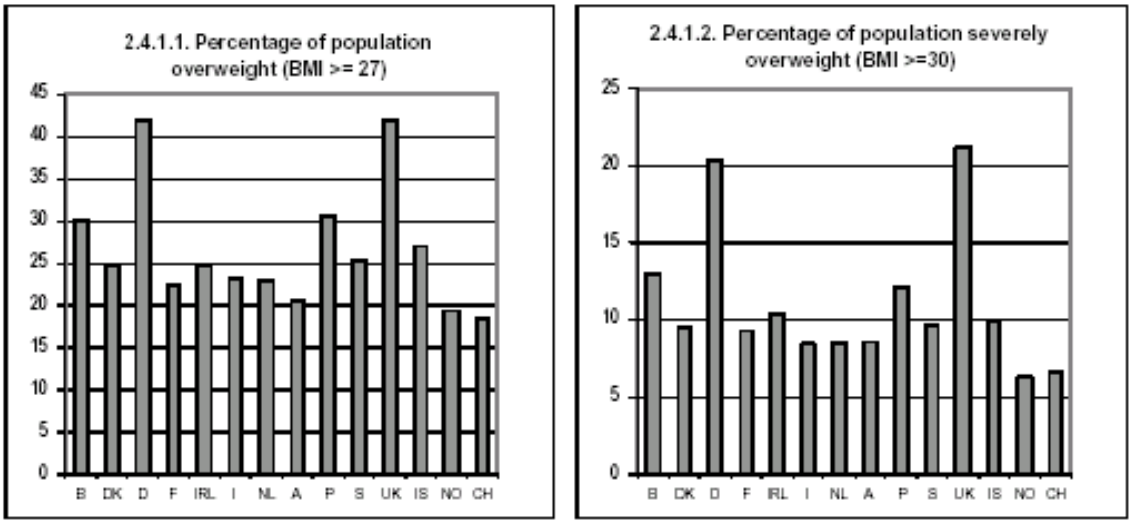
Table 19b: Healthy life expectancy at birth by region

Healthy life expectancy, at birth, by NHS Executive Regional Office, as defined at 1st April 1999						
	1992-1995		**1995-1998**		**Change (years)**	
NHS Executive Regional Office	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**
Northern & Yorkshire	64.8	66.7	65.2	66.8	0.4	0.1
Trent	65.8	68.0	66.6	68.8	0.8	0.8
Eastern	69.2	71.2	69.3	71.2	0.1	0.0
London	66.3	69.5	67.6	69.6	1.3	0.1
South East	69.6	70.9	70.3	71.5	0.7	0.6
South West	68.2	72.3	69.3	71.3	1.1	-1.0
West Midlands	66.0	68.0	66.3	68.5	0.3	0.5
North West	63.6	66.6	64.4	67.3	0.8	0.7
England	**66.7**	**69.1**	**67.1**	**69.2**	**0.4**	**0.1**
Regional difference (highest – lowest)	**6.0**	**5.7**	**4.9**	**3.7**		

International comparisons

6.10 "Two countries stand out for their high percentage of persons overweight and severely overweight: Germany and the UK. Indeed, time series for the UK during the past two decades display a remarkable and steady increase in percentage of the population overweight, catching up (together with Australia) with the USA, which used to stand as "a class of its own"." [EC, 2003].

Figure 10: Obesity statistics, European comparison.
Source: Graphs from *Health in Europe* [EC, 2003]



6.11 The Netherlands have fewer obese people, and less increase over the last two decades, than elsewhere in Europe; this may be because the Dutch walk and cycle more [Haines, 2000]. The UK has one of the lowest figures for walking and cycling as a share of urban transport at only 16%, while the Netherlands has the highest at 46% (Table 20).

Table 20: Walking and cycling as a percentage of urban travel in selected European countries

	Walking and bicycling shares of urban travel		
Country	Bicycle	Walking	Total
Netherlands	28%	18%	46%
Denmark	20%	21%	41%
Sweden	10%	29%	39%
Austria	9%	28%	37%
Germany	12%	22%	34%
Switzerland	12%	24%	36%
Italy	4%	24%	28%
France	4%	24%	28%
England and Wales	**4%**	**12%**	**16%**
Source: Pucher, 2003			

True sustainability and progress summary

6.12 Health is a vital element of quality of life and means far more than freedom from sickness. Likewise, health policy should be more than provision of sickness treatment services. The Netherlands data shows that providing an environment in cities which encourages cycling and walking and makes them practical means of travel can have a marked effect on obesity, a critical health issue.

6.13 The headline and core health indicators say nothing about such questions. All they show is that we now live longer than previous generations but we can expect more of our lives to be spent in ill health.

7 Indicator H7: Housing conditions

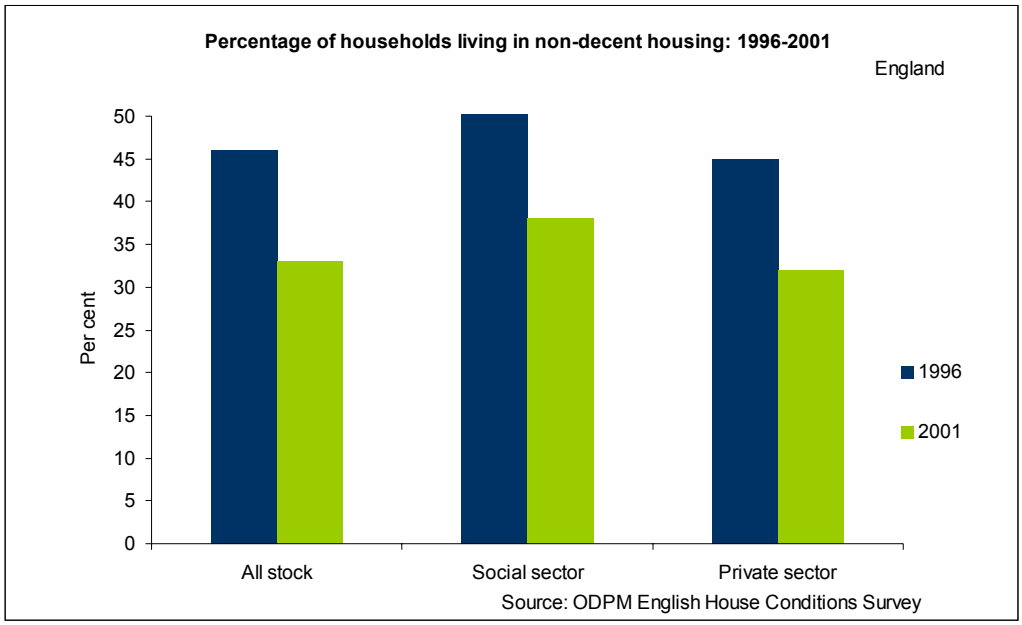


Figure 11: Households living in non-decent housing 1996-2001

Objective: Improve the condition of housing stock

Interpretation and context setting

7.1 Indicator H7 shows that the percentage of households living in non-decent housing has fallen by 13% between 1996 and 2001. The 2003 *quality of life barometer* gives this indicator a green light. However the data show that more than one in three households are still living in housing considered to be non-decent (38% of households in the social sector and 32% in the private sector).

7.2 According to government definition a decent home is one that meets all of the following criteria:

- Is above the current statutory minimum standard for housing. At present this is the fitness standard: dwellings below the standard are those defined as unfit under current legislation. The Government plans to move to a statutory standard based on the new Housing Health and Safety Rating System – but this requires primary legislation. [DLTR, 2001]
- Is in a reasonable state of repair
- Has reasonably modern facilities and services. Dwellings failing on this point are those that lack three or more of the following: a reasonably modern kitchen (20 years old or less); a kitchen with adequate space and layout; a reasonably modern bathroom (30 years old or less); an appropriately located bathroom and WC; adequate noise insulation (where external noise/neighbourhood noise is a problem); adequate size and layout of common areas for blocks of flats. [DLTR, 2001]
- Provides a reasonable degree of thermal comfort

7.3 This indicator does not provide information on affordability, access to local facilities, amenities, work or decent public transport, distance from work or connectivity to public transport. Increasing levels of decent housing though a positive achievement may hide unsustainable development patterns (ie location and access) as well as elements of social exclusion and isolation.

7.4 Simply measuring the quantity of decent housing does not contain information on sustainability from a social or environmental perspective.

Comparisons: how well is the UK doing?

Governments own goals

- *Quality of life counts* contains no specific target for this indicator. Aim is to improve condition of housing stock.
- By 2010, all social housing in decent condition especially in deprived areas and accessible to vulnerable groups (ODPM)
- Achieve a better balance between housing availability and the demand for housing in all English regions while protecting valuable countryside around our towns, cities and in the greenbelt - and the sustainability of existing towns and cities (ODPM PSA)

7.5 Latest data do show that the condition of the housing stock has improved based on the government criteria, as such progress has been made towards the headline indicator. Progress to achieving target of all social housing in a decent condition by 2010 is unclear as it will depend on spending priorities and decisions in forthcoming years however data does show that in 2002 only 10% of new housing was built as social housing [HM Treasury, 2003].

7.6 Regional housing data is currently unavailable or so fragmented that compiling it is beyond the scope of this work. Progress towards balancing availability and demand while protecting countryside is uncertain.

7.7 Evidence from European comparison (below) showing that UK house price inflation is one of the highest in Europe and has been notably high in the last 7 years could indicate that supply remains insufficient and that access to affordable housing remains an issue for many.

Best practice within the UK

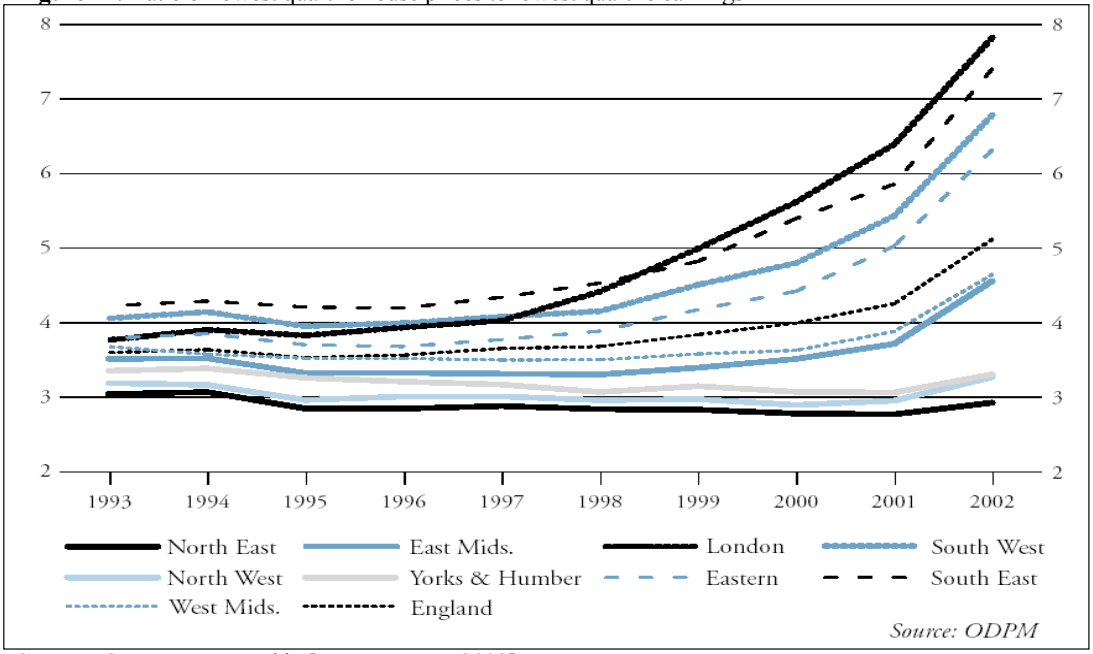
7.8 As stated regional data on housing conditions are not available in an accessible format. However housing price and income data are available. Figure 12 shows that from 1993 to 1996, people in the lowest quartile of incomes would have to pay between three and four times their annual earnings for a house, but from 1996 to 2002 the ratio rose dramatically in the more prosperous regions - to over 7 times earnings in London and the South East, and over 6 times in the South West and the East of England. The ratio only stayed at 3 in the North East, North West and Yorkshire and the Humber.

7.9 Regional price differences far exceed regional income variations (Table 21 and 22)

7.10 From a sustainability perspective such data would suggest that more people are likely to

require social or affordable housing in the future and that progress in improving the quality of the existing housing stock as measured by H7 shows little of the overall sustainability of the housing sector.

Figure 12: Ratio of lowest quartile house prices to lowest quartile earnings



Source: ODPM, presented in [HM Treasury, 2003]

Table 21: Comparison of regional variations in average property prices and average GDP

Regional property prices and regional GDP (% above and below average)				
Region	**Av Price £ (for all dwellings)**	**Av Price % above and below average (2003)**	**Region**	**Regional GDP % above or below UK average GDP (1999)**
East Anglia	153873	+4.3	East of England	+16.4
East Midlands	128428	-13.0	East Midlands	-6.4
Greater London	262043	+77.6	London	+30
North	99718	-32.4	North East	-22.7
North West	105988	-28.2	North West and Merseyside	-13.1
South East	204453	+38.6	South East	+16.4
South West	175127	+18.7	South West	-9.2
Wales	105381	-28.6	Wales	-19.4
West Midlands	133538	-9.5	West Midlands	-8.3
Yorks and Humberside	106838	-27.6	Yorkshire and the Humber	-12.1
Average	147538.7			

Source: House prices, Land Registry http://www.landreg.gov.uk and GDP, ONS www.statistics.gov.uk/statbase/Expodata/Spreadsheets/D4691.xls
Note: As these data are from different sources and for different years this comparison is intended for indicative use only

Table 22: Property prices by region, 2003

Land Registry property prices July – September 2003					
	Detached	**Semi-Detached**	**Terraced**	**Flat/Maisonette**	**Overall**
Region/Area					
	Av Price £	**Av Price £**	**Av Price £**	**Av Price £**	**Av Price £**
East Anglia	213036	133922	112827	100957	**153873**
East Midlands	192583	107299	86809	93456	**128428**
Greater London	534840	299818	266594	220275	**262043**
North	183263	96625	67094	83300	**99718**
North West	211840	109655	63056	100459	**105988**
South East	333954	191566	155801	127602	**204453**
South West	261588	155281	134099	125797	**175127**
Wales	163198	93221	73764	92963	**105381**
West Midlands	226346	118488	92348	96848	**133538**
Yorks and Humberside	188952	101639	70767	98519	**106838**
Source: Land Registry http://www.landreg.gov.uk					

International comparisons

7.11 "If our homes and the neighbourhoods in which they are set are to be sustainable for the long term, they must continue to be places where people want and choose to live." [CECODHAS, 2003]

7.12 CECODHAS (among many others), the European Liaison Committee for social housing has conducted a number of case studies into sustainable housing for communities based on meeting needs, and providing environments which people want to live because they offer high quality of life, safety, accessibility and affordability.

7.13 Some common elements to these case studies are:

- Getting it right takes time, and requires public funding as well as cross sector co-operation
- Ensuring social inclusion from outset by actively involving communities in decisions
- Accessible, open and safe spaces for leisure and children's play free from intrusion of motorised transport
- Access to employment opportunities including space for small businesses providing for local needs
- Local social amenities and shops
- Active programmes and infrastructure to enhance and encourage social cohesion and involvement

True sustainability and progress summary

7.14 The correlation between regional prosperity and higher house price rises relative to bottom-quartile incomes in shows that the UK's pattern of economic growth is deepening exclusion for the less well off.

8 Indicator H8: Crime

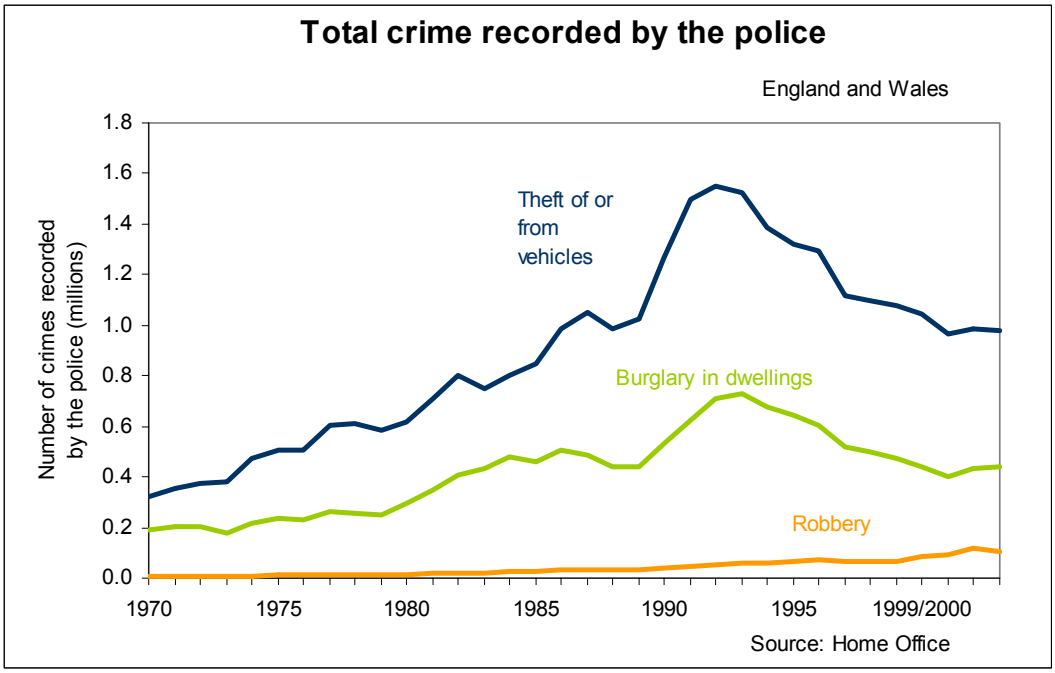


Figure 13: Total crime recorded by the Police, England and Wales

Objective: Reduce both crime and fear of crime

Interpretation and context setting

8.1 Indicator H8 shows that theft of or from vehicles and burglary from dwellings both reached record levels in 1992-1993 but have fallen since with a slight rise recorded in 2000-2001. Robbery levels have steadily increased since 1980. Levels of all the kinds of crime reported in the indicator are much higher than they were in 1980, and these were higher than in 1970.

8.2 Core indicator K9 records fear of crime (Table 23) and shows that these levels have also declined in recent years. There are notable gender differentials and fear of physical attack has the smallest relative decline.

Table 23: Fear of crime by gender, England and Wales

Fear of crime: by gender: 1998-2001/2			
Gender / Year	**Theft of Car**	**Burglary**	**Physical Attack**
Men			
1998	20	15	8
2000	19	16	9
2001	17	14	8
2001/2	16	13	7
2002/03	15	12	7
Women			
1998	23	23	27
2000	22	22	27
2001	18	19	25
2001/2	18	18	23
2002/3	17	17	22
Source: British Crime Survey from latest core indicator data K9			

Comparisons: how well is the UK doing?

Government's own goals

- Target from *Quality of life counts*: reduce theft from vehicles and burglary by 30% by March 2004 in England and Wales
- *Quality of life counts* also contained a target to reduce growth in violent relative to its long run rate in England and Wales. This indicator is no longer being reported, and no reason is given.
- Reduce vehicle crime by 30% from 1998/9 level by 2004 and reduce burglary by 25% from 1998/9 level by 2005, reduce robbery in 10 Street Crime Initiative areas by 14% from 1999-2000 levels by 2005 (Home Office PSA)
- Delivery of justice – increase number of crimes for which an offender is brought to justice to 1.2 million by 2005/6 (HO, Crown Prosecution Service, Department for Constitutional Affairs)
- Reduce re-offending by 5% (HO)
- Improve life chances for children by narrowing the gap between proportion of children in care and their peers who are cautioned or convicted (Department of Health)

8.3 Latest data shows that the government achieved its headline target of reducing vehicle crime by 30%, although stabilisation of the downward trend and slight rise was recorded over 2000-2001. Burglary fell by about 25% between 1995 and 2000 though rose 2000-2001. Vehicle crime figures may indicate increased in-built vehicle security than explicit government / police action.

8.4 Time series for re-offending and delivery of justice data have not been identified so progress cannot be assessed.

8.5 We noted the change to indicator H8 from *Quality of life counts* as published which measured incidences of violent crime as opposed to robbery. Latest available data show that the incidence of violent crime has continued to rise from the data given in *Quality of life counts* which showed the incidence in England and Wales at 636 per 100,000 population in 1998/1999 and latest ONS data which puts this figure at 650 per 100,000 population in 2000/2001.

Best practice within the UK

8.6 Regional crime variations are notable in the UK (Table 24). While there appears to be little correlation with regional differences in GDP, indicator H3 and particularly the percentage of children living below 60% of median income (Figure 7) seems to have some correlation with crime.

8.7 This tends to support the idea that the UK's pattern of economic development and the inequalities discussed under indicator H1 are socially divisive. The particularly high crime figures for London may result from a number of factors, though it is likely that large income disparities and areas of social exclusion are among them.

Table 24: Regional rates of recorded crime

Recorded crime rates per 100,000 population: 1990–2001/2						
	Theft of and from a vehicle		Burglary in a dwelling		Robbery	
	1990	**2001/2**	**1990**	**2001/2**	**1990**	**2001/2**
North East	3,886	1,642	1,667	912	33	114
North West	2,799	2,085	1,416	1,068	67	238
Yorkshire and the Humber	2,823	2,444	1,162	1,317	41	180
East Midlands	2,485	1,884	782	839	40	144
West Midlands	2,490	1,925	962	908	68	287
East of England	1,936	1,418	591	458	29	72
London	2,911	2,375	1,593	1,003	251	727
South East	1,916	1,416	752	485	27	81
South West	2,020	1,639	722	644	33	130
England	**2,517**	**1,881**	**1,073**	**836**	**75**	**241**
Source: *Regional quality of life counts,* online http://www.sustainable-development.gov.uk/indicators/regional/2002/h8.htm						

International comparisons

8.8 Crime rate comparisons with Europe show the UK to have among the highest increases in recent years in incidences of violent crime and robbery.

- **Violent crime** for the period 1997 - 2001, the average rise was 22% in the EU for violent crime with the highest rises in France (50%), Spain (49%), the Netherlands (35%), Portugal (29%) and England & Wales (26%). In 2000 - 2001, the average rise was 5% in the EU with the highest rises in Northern Ireland (22%), France (15%) and England & Wales and the Netherlands (both 11%).
- **Robbery** for the period 1997 - 2001, the average rise was 24% in the EU for robbery with the highest rises in England & Wales (92%), France (67%), the Netherlands (48%), Austria (42%), Portugal (34%), Sweden (29%) and Denmark (27%). In 2000 - 2001, the average rise was 5% in the EU with the highest rises in England & Wales (28%), Northern Ireland (26%) and France (22%).
- **Domestic burglary** Over the period 1997 - 2001, there was an average fall of 10% in the EU for domestic burglary. The highest falls were in Greece (28%), Germany (27%), England & Wales (26%), Finland (24%), Scotland (18%) and Sweden (17%). In 2000 - 2001, there was no change in the EU but rises in France (13%), Spain (10%), Northern Ireland (8%) and England & Wales (7%). [Barclay, 2003]

True sustainability and progress summary

8.9 Crime data for the UK suggests that it continues to have a social and community environment which is leading to high levels of criminal activity in spite of high GDP per capita in relation to comparable countries (perhaps because of).

8.10 The UK has reduced theft from vehicles and burglary, but the increases in violent crime and robbery are dismaying.

9 Indicator H9: Climate Change

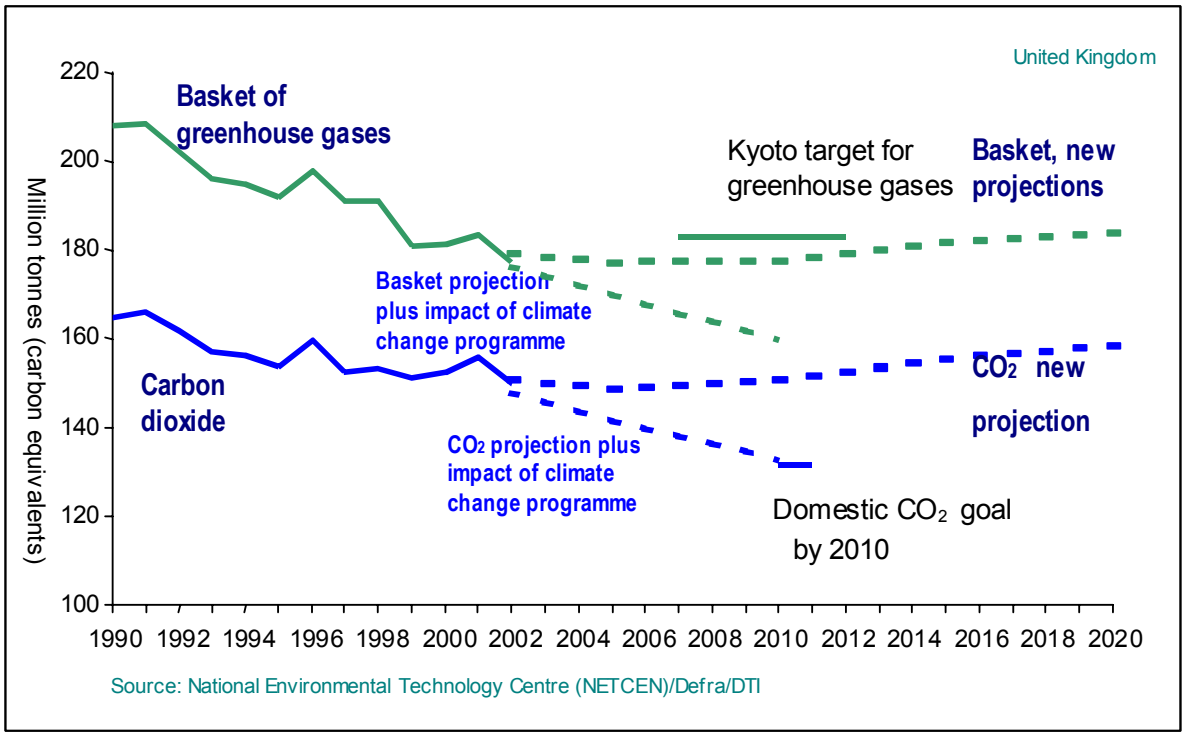


Figure 14: Greenhouse gas emissions and projections UK 1990-2020

Objective: continue to reduce our emissions of greenhouse gases now, and plan for greater reductions in the longer term

Interpretation and context setting

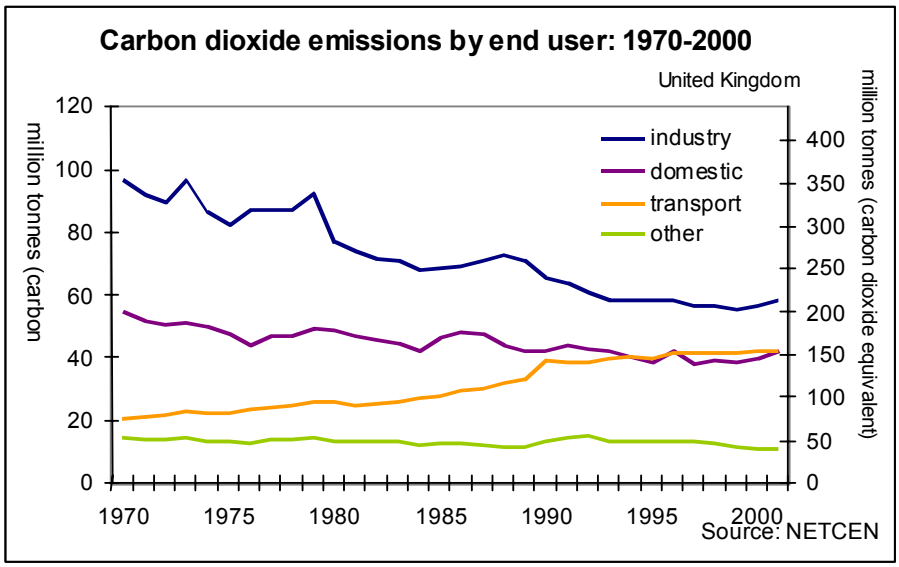
9.1 Indicator H9 shows that emissions of the agreed basket of greenhouse gases and CO_2 have both declined since 1990, with short term increased outputs in 1996 and again in 2001. Trend predictions based on historic data would suggest that these levels are likely to continue to fall. However, as emissions at any specific time are the result of present activity, future emissions depend on trends in other areas (transport, domestic and commercial energy use etc).

Comparisons: how well is the UK doing?

Government's own goals

- Improve the environment and the sustainable use of natural resources, including through the use of energy saving technologies, to help reduce greenhouse gas emissions by 12.5% from 1990 levels and moving towards a 20% reduction in carbon dioxide emissions by 2010.
- The DTI Energy White Paper – Our Energy Future, accepted the Royal Commission on Environmental Pollution's (RCEP's) recommendation that the UK should put itself on a path towards a reduction in carbon dioxide emissions of some 60% from current levels by about 2050. [DTI 2003]

Figure 15: CO_2 emissions by end user



Best practice within the UK

9.2 Regional emissions figures (Table 25) show huge differences, possibly due to concentration of heavy industry in some regions. This suggests that changes in levels of manufacturing could make a significant difference to emissions - and perhaps that the UK's apparently good performance is at least partly due to our importing more goods which used to be manufactured in the UK.

Table 25: Emissions of CO_2 by region

	Emissions of carbon dioxide: 2000	
Region	**Total emissions (million tonnes carbon)**	**Emissions per head (kg carbon)**
North East	17	6,800
North West	16	2,400
Yorkshire and the Humber	23	4,700
East Midlands	15	3,500
West Midlands	8	1,600
East of England	13	2,300
London	8	1,100
South East	19	2,400
South West	7	1,500
England	**127**	**2,600**
Source: *regional quality of life counts 2002* [ONS, 2002]		

International comparisons

9.3 In terms of actual greenhouse gas figures UK has performed relatively well (Table 26), but:

9.4 The reduction of greenhouse gas emissions in the United Kingdom was partly a result of the liberalisation of the energy market and subsequent changes in the choice of fuel used in electricity production from oil and coal to gas, and partly due to significant reductions in emissions of non-carbon dioxide greenhouse gas emissions, including implementation of nitrous oxide abatement measures in the chemical industry. These circumstances account for about half of the emission reductions for all six greenhouse gases, whilst specific policies and measures account for the remaining half. [EEA, 2002]

9.5 The European Union and many of its Member States will fail to meet their Kyoto Protocol targets for limiting greenhouse gas emissions on the basis of the domestic policies and measures implemented or planned so far, The main reason is a runaway increase in emissions from transport, especially road transport. [EEA 2002] The UK has met its targets so far in spite of increased emissions from transport.

Table 26: Greenhouse gas emissions and targets for comparison countries

Total greenhouse gases emissions; percentage change since base year and targets according to Kyoto Protocol/EU Council Decision for 2008-2012 - Index base year=100, based on CO2 equivalents			
Country	2000	2001	Target
Belgium	106.2	106	92.5
Denmark	98.5	100	79
Germany	81	82	79
France	99.5	100	100
Netherlands	103.2	105	94
Finland	97.6	105	100
Sweden	94.8	97	104
EU15 average	97	98	92
United Kingdom	**87.2**	**88**	**87.5**
Eurostat: http://europa.eu.int/comm/eurostat/Public/datashop			

9.6 Table 27 summarises policies and measures in EU countries relating to energy supply and use. This reiterates the fact that the UK has reached its targets perhaps in spite of rather than because of policy. The UK has concentrated on the use of fiscal and regulatory controls, while many other European countries have tackled these issues much more broadly.

Table 27: Types of policies and measures, for EU countries, for energy supply and use (excludes transport)
Source: EEA,2002

	Economic		Fiscal		Voluntary/ negotiated		Regulatory		Information		Education		Research		Other	
	Imp	Add	Imp	Add	Imp	Add	Imp	Add	Imp	Add	Imp	Add	Imp	Add	Imp	Add
Austria	✓✓	✓	✓		✓	✓✓	✓✓	✓	✓✓✓	✓✓	✓					
Belgium	✓✓✓	✓✓	✓✓✓	✓	✓✓✓	✓✓	✓✓	✓✓✓	✓		✓✓✓					
Denmark	✓✓✓		✓✓		✓		✓✓✓		✓				✓		✓	
Finland	✓✓	✓	✓✓	✓✓	✓		✓✓	✓	✓✓	✓✓	✓✓	✓✓			✓	✓
France	✓✓✓	✓	✓	✓	✓	✓✓	✓✓	✓			✓	✓			✓	✓
Germany	✓	✓	✓✓✓	✓	✓✓✓		✓✓✓	✓	✓		✓				✓✓	
Greece			✓				✓						✓			
Ireland		✓		✓		✓		✓								✓✓✓
Italy	✓	✓		✓		✓✓✓	✓	✓		✓		✓				✓✓✓
Luxembourg		✓	✓✓✓	✓✓	✓	✓	✓✓	✓								
Netherlands	✓✓		✓✓✓		✓✓✓		✓✓✓								✓✓	
Portugal	✓✓✓		✓				✓✓✓						✓			
Spain	✓✓✓	✓	✓✓✓				✓✓✓	✓				✓			✓✓✓	✓✓✓
Sweden	✓✓✓		✓✓✓			✓	✓	✓	✓✓				✓		✓	
UK		✓	✓	✓✓✓		✓	✓✓✓	✓✓✓								

Notes: Imp = implemented (existing); Add = additional.

True sustainability and progress summary

9.7 In his October 2000 'green speech' the Prime Minister accepted the IPCC's proposal for a 60% reduction in global greenhouse gas emissions as the best available estimate of the scale of change needed. In response to questions he did not demur from the suggestion that a fair share out would require even greater reductions in the UK, of the order of 90%. But the Government has as yet made no commitment to any target higher than a 20% reduction in CO_2. Moreover some recent policy decisions, notably the retreat from traffic reduction and cuts in vehicle fuel tax, forego potentially very big opportunities to achieve more. The Government has declined to build explicit standards and targets for greenhouse gas reductions into areas such as planning guidance and criteria for economic development support where they could make a big difference. [CAG 2001]

9.8 An important factor in the improvement of the energy intensity of industry was the collapse of heavy manufacturing in the UK. If this meant that Britain's needs were being satisfied by lower-energy lighter industry, this would be good news. But in fact Britain is now importing many 'heavy industrial' products which used to be manufactured in the UK. *"We are presently transferring our greenhouse gases to the developing world and not reducing them." [Ted Cantle]* QOLC does not make any attempt to quantify this effect [CAG 2001]

9.9 "…there are already policies that address the short and medium term, but they lack an overall framework for shaping future policies. For example, the Kyoto objective to reduce CO_2 emissions by 8% by 2008-2012, when compared with the 1990 level, has to be related to the long-term objective to stabilise CO_2 concentrations in the atmosphere, which may require a reduction of more than 50%. The Fifth EAP even mentioned a "long term target of 70% cut"." [EC, 2003b]

10 Indicator H10: Air Quality

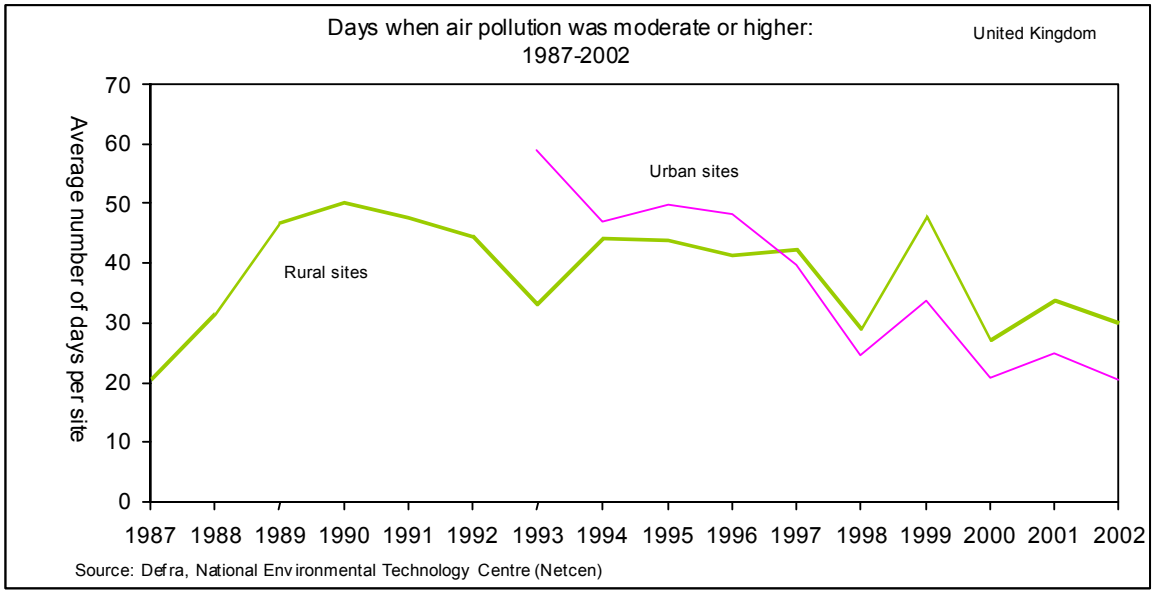


Figure 15: Days when air pollution was moderate or higher, UK

Objective: Reduce air pollution and ensure air quality continues to improve through the longer term

Interpretation and context setting

10.1 Latest data for indicator H10 show that while there has been a decline in the number of days of air pollution at rural sites since 1990, the frequency remains higher than in 1987. Urban air quality has improved significantly since 1993 suggesting that (for example) stricter emissions regulation, pedestrianisation and changing industrial patterns in cities have had a beneficial effect in urban areas.

Comparisons: how well is the UK doing?

Government's own goals

- Improve air quality by meeting air quality strategy targets for carbon monoxide, lead, nitrogen dioxide, particles, sulphur dioxide, benzene and 1-3 butadiene
- Quality of life counts states 'it is not possible to produce targets for H10 directly from national objectives for individual pollutants. Work is being carried out to develop a robust approach to estimate the impact that meeting the objectives will have on the Headline indicator.'

10.2 Due to specific and technical nature of air quality targets these are not assessed in this report.

Best practice within the UK

10.3 Regional air quality and emissions data is not available in comparable format. Government data is reported only from a limited number of monitoring stations and show no significant local variations.

10.4 The data does not show how, for example, low income inner city areas compare to more affluent areas. Air quality links to QoL through health (especially in children) and social exclusion.

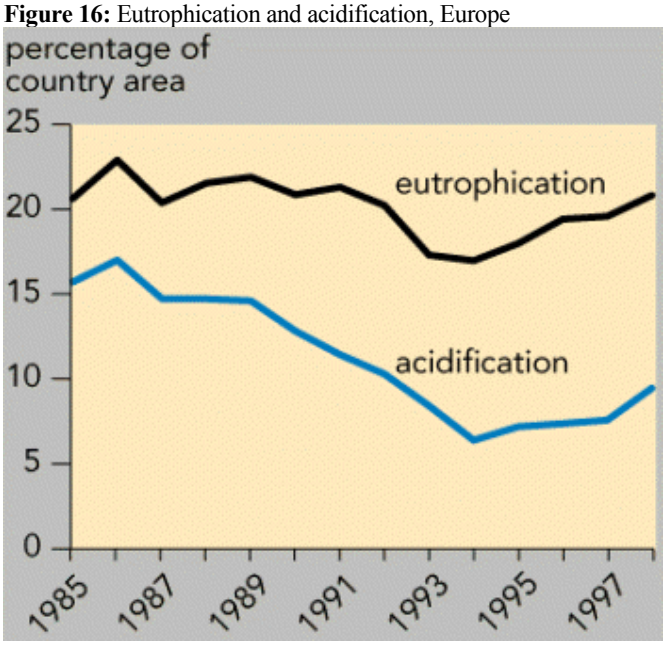
10.5 Core indicator P4 (acidification of lakes) shows that the moderate declines seen and reported in quality of life counts have not continued, and latest data shows acidification rising again since 1999 in most selected lakes.

International comparisons

10.6 There is very limited international emissions data (EEA has aggregated data but no breakdowns). As in the UK air quality targets relate to individual pollutants which tend to be activity (such as road transport) or industry (such as agriculture) specific. Comparisons are difficult within constraints of this analysis.

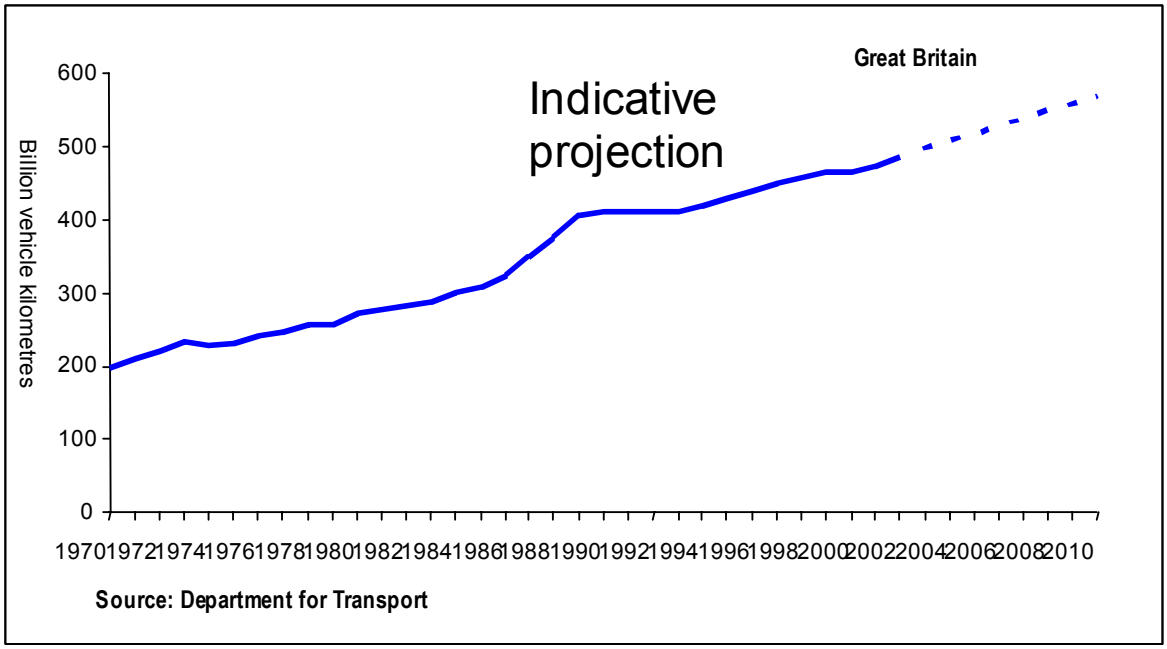
10.7 European acidification and Eutrophication data also show levels becoming more severe since 1994 (Figure 16).

Figure 16: Eutrophication and acidification, Europe



Source: EEA State of the environment indicators online: http://dataservice.eea.eu.int

11 Indicator H11: Road Traffic



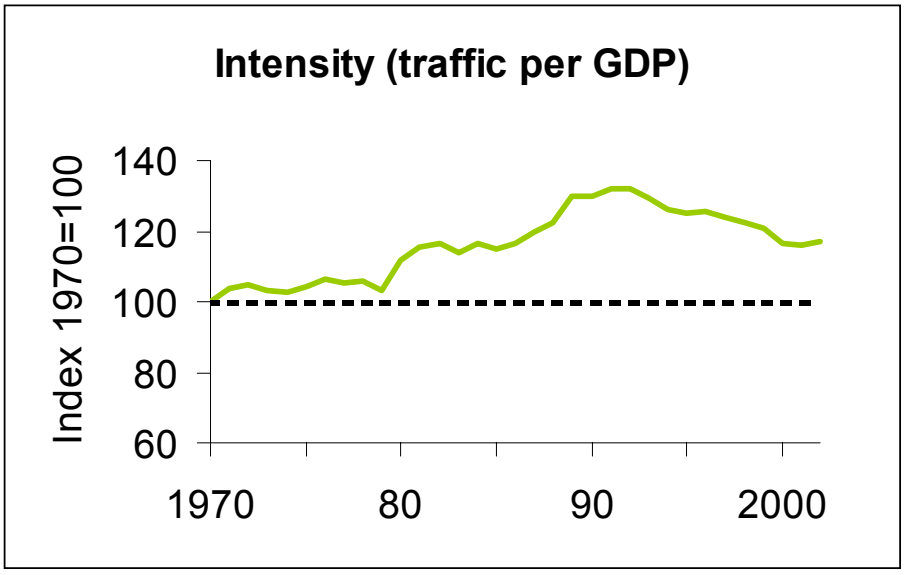


Figure 17a and 17b: Road traffic and traffic projections, and road traffic intensity (per GDP)

Objective: Improve choice in transport; improve access to education, jobs, leisure and services and reduce the need to travel

Interpretation and context setting

11.1 The UK has experienced a consistent and rapid increase in the amount of road traffic since the 1970s. Latest data show that this trend has not been changed, and there is no evidence from the data to suggest that the rate of increase is slowing.

11.2 Traffic intensity remains considerably above levels in 1970 and 1980, though has fallen since 1990. Latest data show that the reductions in traffic intensity may be slowing or even reversing, though the data is inconclusive. Aspects such as increased car engine size (eg popularity and use of 4x4 vehicles) and workforce mobility may begin to outweigh initial intensity improvements.

Comparisons: how well is the UK doing?

Government's own goals

- Quality of life counts target is to reduce rate of growth, with an absolute reduction where environmental damage is greatest. Commission for integrated transport has remit to advise on setting a target for England
- Road traffic to rise by less than a third over next 20 years (i.e. reduce rate of growth) and make absolute reduction where damage is greatest.
- Integrated Transport White Paper:
  - Reduce inner-urban trunk road congestion and large urban areas in England to below 2000 levels by 2010
  - Secure improvements in rail punctuality and reliability with 50% increase in rail use from 2000 levels by 2010
  - Local public transport improvements, with increase in use of at least 12% from 2000 levels by 2010
  - Cut journey times on London Underground: increased capacity and reduced delays
  - Reduce number of people killed or seriously injured in GB in road accidents by 40% and same for children by 50%, by 2010 from average of 1994-98, especially in disadvantaged communities
  - Recognition of the importance of access being goal as opposed to transport, thus demand management and reduced need for travel.
- Transport 2010, DETR, July 2000:
  - £180bn investment in transport over 10 years, split roughly equally between rail, road and local transport.
  - Reduced congestion, improved experience of travel (by whatever mode), and increased travel 'choice'.
  - It hoped to achieve a slight reduction in the growth of traffic - from 2% to 1.6% per year - but there is no commitment to reduce either traffic or the need to travel

11.3 Labour's 1997 campaign handbook promised to halt and then reverse the growth in traffic on Britain's roads. John Prescott arrived as a Minister promising that he would "have failed if in five year's time there are not many more people using public transport and far fewer journeys by car". Traffic levels have been rising consistently since and in spite of clear QoL link, *quality of life counts* has abandoned this as an indicator (see cutting below).

11.4 While investment in rail has increased from levels in the mid 1990s the UK is still investing more in road infrastructure than rail and the downward trend in road infrastructure has been reversed since 2000 (Tables 31 and 32).

11.5 Tables 28-34 represent a broad selection of available transport indicators and data for the UK. Generally data suggest that the UK is not yet making progress towards sustainable transport, with reliance on road traffic and investment in public transport remaining critical issues in spite of strong government assertion to tackle this issue.

11.6 A further major issue is the movement of people from city centres to suburbs and the countryside. Tables 32 and 33 show that both the time of average journeys and the distances people are travelling have increased considerably. The fact that more people are living further away from amenities and jobs is a likely contributant to this. Research by the Town and Country Planning Association for the DETR highlights "this self-reinforcing trend towards decentralised residential and employment locations", and suggests the need for demand restraint if it is to be reversed. [Town and Country Planning Association. The People: Where Will They Work? Report for DETR, 1999, cited in CfIT online www.cfit.gov.uk/research/10year/second/03.htm accessed 04/02/04]

Guardian June 6, 1997

GDN -6 JUN 1997

10 | POLICY AND POLITICS

Plan to ration car space in cities

Prescott points buses to fast lane

Paul Brown
Environment Correspondent

A PLAN to ration road space for cars and give buses express corridors through city centres is part of Labour's blueprint to reform the transport system, John Prescott, the Deputy Prime Minister, said yesterday.

De-regulation of bus services will be reversed and local authorities given power to link timetables and make sense of the current chaos in public transport, Mr Prescott said, adding: "I want buses in cities to go faster than cars."

A transport white paper will be published next spring after widespread public consultation. "I will have failed in this if in five years there are not many more people using public transport and far fewer journeys by car. It is a tall order but I want you to hold me to it," he said.

In a wide-ranging speech at the Royal Geographical Society in London on World Environment Day Mr Prescott won loud applause from the audience of environment and industry groups meeting to discuss the UN's Earth Summit plus five years meeting in New York this month.

With his civil servants in tow, Mr Prescott had taken the Circle Line from his office in Victoria to South Kensington and walked to the conference, rather than making use of Tony Blair's red Jaguar.

The fundamental transport review was the main plank of his speech, but Mr Prescott also stressed that 'green' taxes to curb pollution and discriminate against larger cars would be considered.

Mr Prescott said: "Tax is not a popular word. But environmental taxes can encourage industry to find cost-effective, innovative ways of reducing pollution. They can be particularly attractive if they provide revenue which may be used to reduce other taxes, or recycled in other ways."

Whatever the environmental concern, the Government had to ensure "that the polluter bears the cost of measures required".

He said the Government's tough target of a 20 per cent cut in carbon dioxide emissions by 2010 was not enough on its own. It would take a lead in negotiations to bring the US and other large emitters to lower targets.

Domestic priorities included reducing the use of harmful chemicals, which are hitting animal and bird populations and interfering with sex hormones.

"I believe the time is right for stepping back a pace and developing a more strategic overview of the whole question of chemicals in the environment," Mr Prescott said.

Leader comment, page 18

John Prescott taking the Tube on the way to his press conference yesterday

PHOTOGRAPH: SAM PEARCE

Table 28: Passenger transport by mode 1961 - 2001

Passenger transport: by mode (Billion passenger kilometres)						
Great Britain						
	1961	1971	1981	1991	1996	2001
Road						
Car and van[1]	157	313	394	582	606	624
Bus and coach	76	60	48	44	44	46
Motorcycle	11	4	10	6	4	5
Bicycle	11	4	5	5	4	4
All road	255	381	458	638	658	679
Rail[2]	39	35	34	39	39	47
Air[3]	1	2	3	5	6	8
All modes	295	419	495	681	703	734
1 Includes taxis.						
2 Data relate to financial years.						
3 Includes Northern Ireland and Channel Islands.						
Source: Department for Transport / ONS: http://www.statistics.gov.uk						

11.7 International travel has expanded rapidly since the 1980s, with the largest growth being in air transport, a mode with heavy environmental costs and infrastructure needs (Table 29).

Table 29: International travel (millions of journeys) by mode

International travel: by mode[1] (Millions)							
United Kingdom							
	1981	1991	1996	1999	2000	2001	
Visits abroad by UK residents							
Air	11.4	20.4	27.9	37.5	41.4	43.0	
Sea	7.7	10.4	10.7	10.4	9.6	9.7	
Channel Tunnel	.	.	3.5	5.9	5.8	5.6	
All visits abroad	19.0	30.8	42.1	53.9	56.8	58.3	
Visits to the United Kingdom							
by overseas residents							
Air	6.9	11.6	16.3	17.3	17.8	16.1	
Sea	4.6	5.5	6.2	5.0	4.3	4.0	
Channel Tunnel	.	.	2.7	3.1	3.1	2.8	
All visits to the United Kingdom	11.5	17.1	25.2	25.4	25.2	22.8	
1 Mode of travel from, and into, the United Kingdom.							
Source: International Passenger Survey, Office for National Statistics http://www.statistics.gov.uk							

11.8 Table 30 shows that while investment in roads declined between 1993 and 1999, it has since begun to rise again, it would seem contrary to the policy assertions of government

Table 30: Investment in road infrastructure 1993 – 2001/02

Great Britain								
Trend 1.7: Investment in road infrastructure: 1993/94 - 2001/02								
£ million: 2001/02 prices								
1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
5838	5692	5033	4456	3853	3500	3292	3458	3688
Source: DfT, 2003								

11.9 Table 31 shows that at the same time investment in rail infrastructure has increased, but remains below the levels of investment in road infrastructure.

Table 31: Investment in rail infrastructure 1993 – 2002/03

Great Britain								
Trend 1.7: Investment in national rail infrastructure: 1993/94 - 2001/02								
£ million: 2001/02 prices								
1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/2003
1070	1053	1338	1579	1965	2115	2450	3148	3681
Source: DfT, 2003								

11.10 Yet in spite of increased investment in infrastructure all journey types (ie actually getting to the things we need / want) have become longer in terms of trip time, with the largest increases in commuting and business journeys (Table 32). Table 33a and 33b shows data for core indicator G3. The average length of journeys for all purposes have increased since 1985. Equally those with cars are travelling further.

Table 32: Average trip time by purpose

Average trip time, by purpose: 1985/86 and 2002 (minutes)						
	Commuting	Business	Education	Shopping	Leisure	All journeys
1985/86	22	32	17	16	24	20
2002	26	41	20	18	27	23
Source: DfT, 2003						

Table 33a and 33b: Average journey length by purpose and distance travelled per adult (core indicator G3), by household car ownership

33a:

Average journey length by purpose: 1985/1986-1999/2001				
Great Britain				
miles				
	leisure	commuting	shopping	education
1985/1986	7.8	6.1	2.9	2.1
1989/1991	9.1	7.2	3.3	2.6
1992/1994	9.4	7.5	3.5	2.8
1995/1997	9.5	8.1	3.8	2.8
1998/2000	9.8	8.4	4.2	2.9
1999/2001	8.7	8.5	4.2	3
DfT				

33b

Distance travelled per adult, by household car ownership: 1985/86 and 1999/01				
miles per adult per year				
		1985/86	**1999/01**	
	No car	2,481	2,946	
	One car	6,346	7,333	
	Two or more cars	9,953	11,100	
	All	5,959	7,634	
Source: DfT, 2003				

11.11 Table 34 shows that trains have become less punctual since 1997, but that all operators did improve punctuality between 2001 and 2003 (though controversial timetable changes may have contributed to this). Table 35 shows that transport infrastructure continues to require land-use changes, both within and outside greenbelt areas.

Table 34: Train punctuality 1997 – 2002/03

National rail trains arriving on time : 1997/98-2002/03					
Percentage					
	Long distance operators	London & SE operators	Regional operators	All operators	London & SE peak services
1997/98	81.7	89.6	90.6	89.7	86.9
1998/99	80.6	87.9	88.6	87.9	85.3
1999/00	83.8	87.1	89.1	87.8	85.1
2000/01	69.1	77.6	81.7	79.1	73.7
2001/02	70.2	77.8	79.1	78.0	73.6
2002/03	70.6	79.0	80.5	79.2	75.7
Source: DfT, 2003					

Table 35: Land converted to transport infrastructure

England									
Cumulative area of land, for which use changed to transport : 1985-1998 (hectares)									
	1990	1991	1992	1993	1994	1995	1996	1997	1998
Within Green Belt land	2,302	2,579	2,844	3,187	3,379	3,690	4,196	4,858	5,420
Outside Green Belt land	11,669	13,543	15,622	17,070	18,536	20,041	22,425	24,107	25,613
Source: DfT, 2003 / OPDM									

Best practice within the UK

11.12 Regional variation exists in road traffic use, though all areas (apart from London) have seen similar percentage increases between 1993 and 2002.

Table 36a and 36b: Regional data for road traffic by type and increase in road traffic.

Road traffic, by type of vehicle (billion vehicle kilometres) 2002			
	Cars/taxis	**Other vehicles**	**All motor vehicles**
North East	16	3	19
North West	45	10	55
Yorkshire and the Humber	32	9	40
East Midlands	31	8	39
West Midlands	38	9	48
East of England	43	11	54
London	27	6	33
South East	70	15	85
South West	37	9	46
England	**338**	**81**	**419**

Increase in road traffic on all roads : 1993 to 2002	
	Percentage increase
North East	17
North West	20
Yorkshire and the Humber	19
East Midlands	20
West Midlands	17
East of England	18
London	6
South East	21
South West	20
England	**18**

Source: *regional quality of life counts*, http://www.sustainable-development.gov.uk/indicators/regional/2002

International comparisons

11.13 "Here in the UK we have fallen a generation behind the best in Europe in planning transport in a holistic way…As a result of the previous neglect…we have more congestion than any other European country and the most intensely used road network other than in Spain. Despite the relative compactness of the UK we spend more time commuting each day than any other European nation. We have the most car-dominated economy in Europe.

11.14 Even with their superior transport infrastructure already in place France has been investing half as much again as us. Their high speed train services are visible proof of that investment. In Germany they have invested two thirds more. Until now we have trailed down near the bottom of the investment league.

11.15 There is one piece of good news, we lead the way in road safety. The UK has the lowest death toll in the European Union, less than half that of France and Italy. However, even on road safety we can't be complacent-pedestrians and cyclists are more than twice as likely to be killed in the UK as in Sweden and the Netherlands" [CfIT, 2001]

11.16 Figures 18 – 22 and Table 37, highlight a number of key transport indicators at the European level for comparison. These data were highlighted by the Government Commission for Integrated Transport and as such detailed analysis is not given here. They all expose the UK as having a national transport capability which is in nearly all respects inferior to most comparable countries in Europe and that continued pressure on roads is unlikely to provide a solution.

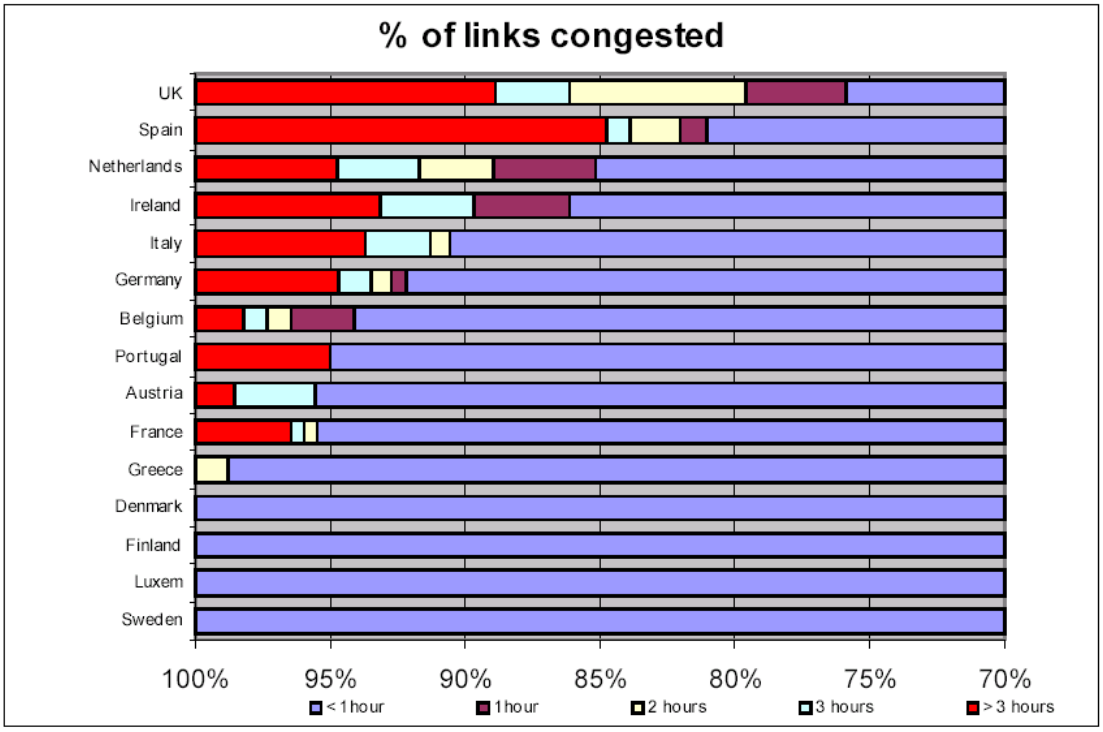


Figure 18: European congestion comparison.
Source: Image from CfIT, 2001

Figure 19: Average daily commuting times, Europe.
Source: Image from CfIT, 2001

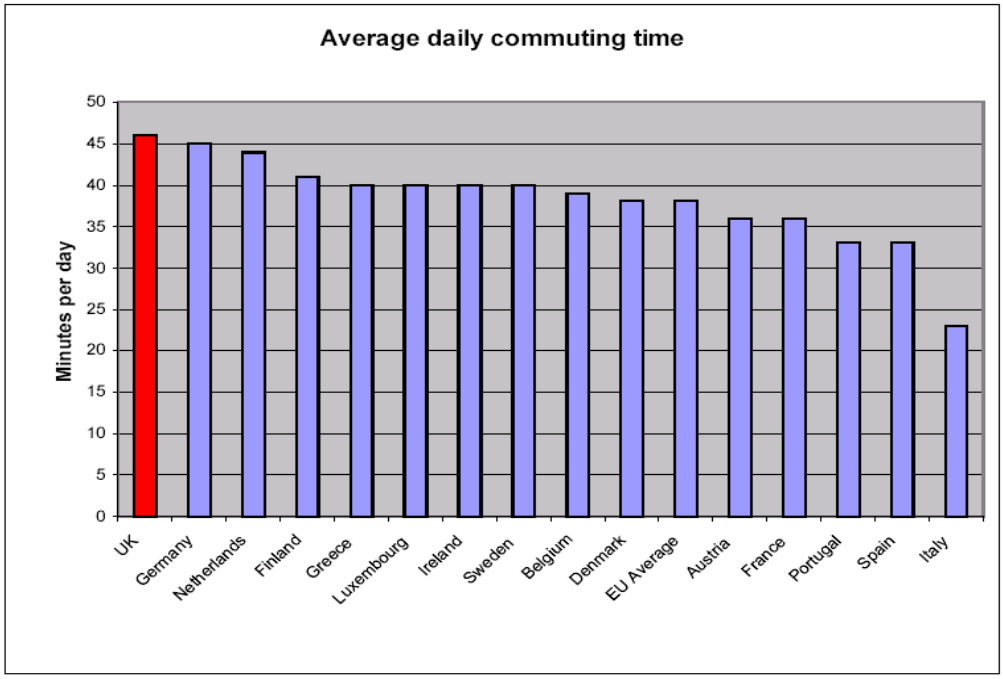
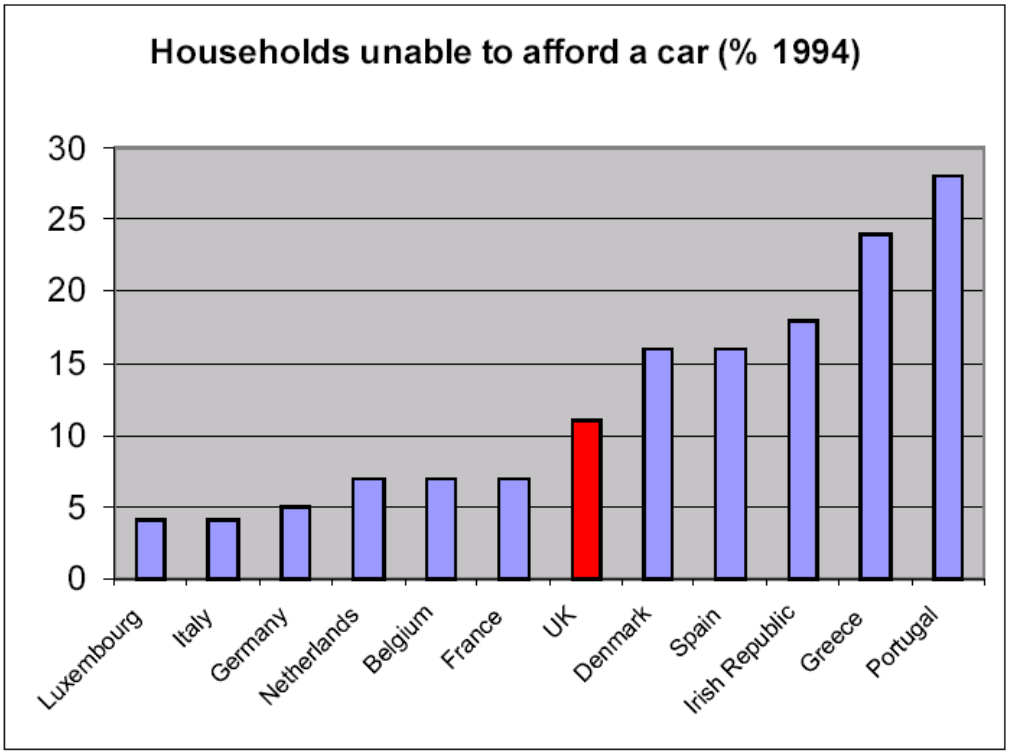


Figure 20: Households unable to afford a car.
Source: Image from CfIT, 2001



11.17 But, in spite of the fact that a relatively high number of UK residents cannot afford a car, we have the second most used roads in Europe:

Figure 21: Road utilisation measured in vehicle kilometres per kilometre of road.
Source: Image from CfIT, 2001

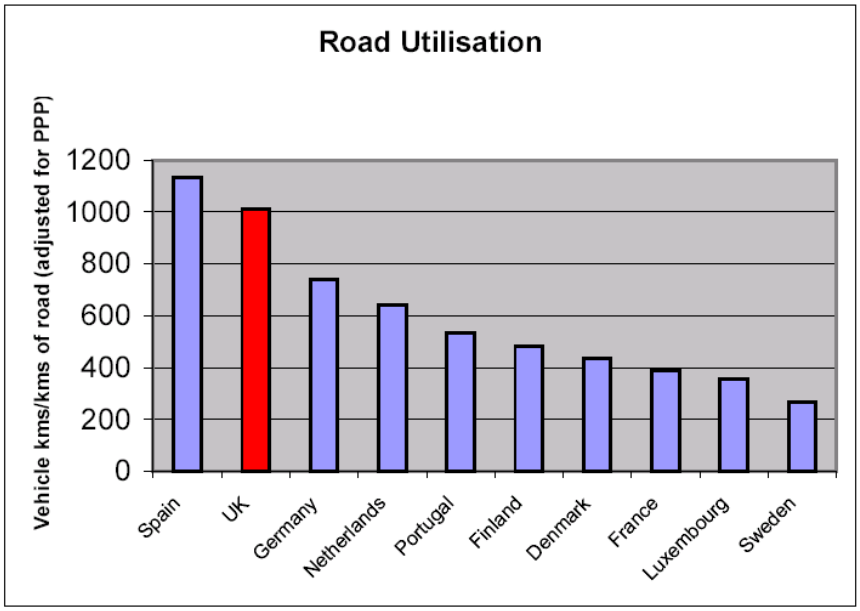


Figure 22: Public infrastructure investment, 2001.
Source: Image from CfIT, 2001.

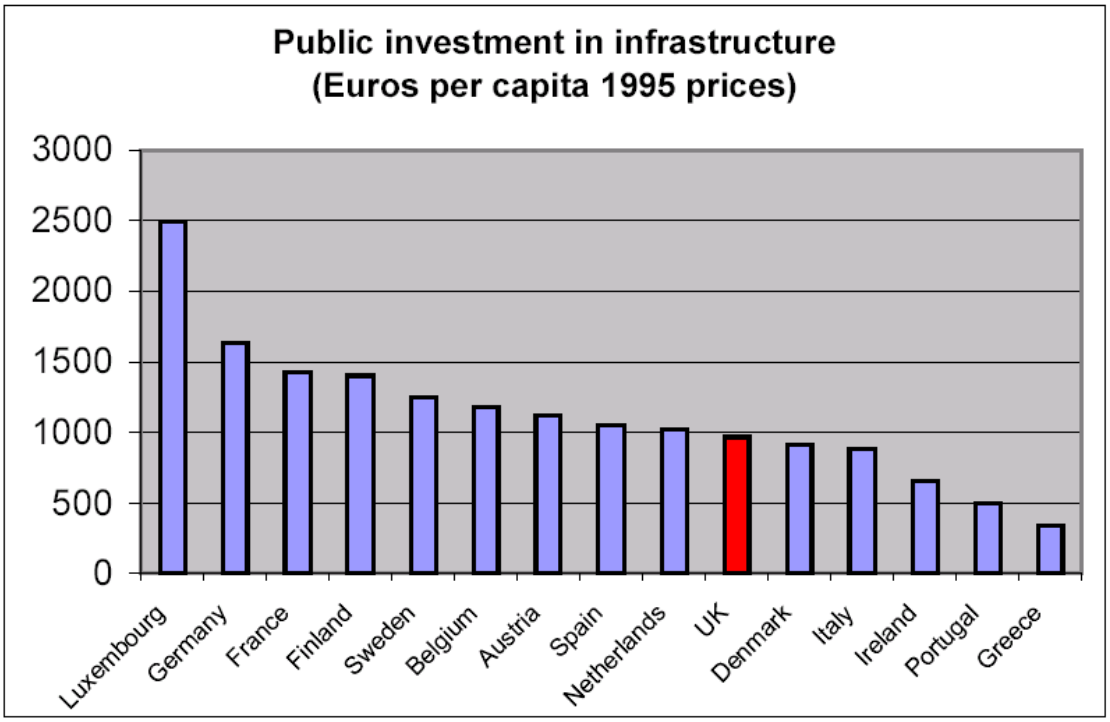


Table 37: Share of road in inland freight transport for comparison countries

Modal split of freight transport - Percentage share of road in total inland freight transport (road, rail and inland waterways), tonne-km		
Country	2000	2001
Belgium	67.8	-
Denmark	92.2	91.9
Germany	66.3	67.5
France	75.6	77.7
Netherlands	60.2	59.7
Finland	61	60.5
Sweden		
EU15 average	77.3	-
United Kingdom	**91.9**	-
Eurostat: http://europa.eu.int/comm/eurostat/Public/datashop		

True sustainability and progress summary

Traffic / transport and QoL:

11.18 From SEU Social Exclusion Unit's 2002 report: Making the connections: final report on transport and social exclusion

- **Access to healthcare:** 31 % of people without a car have difficulties travelling to their local hospital, compared to 17 % of people with a car. Over 1.4 million people say they have missed, turned down, or chosen not to seek medical help over the last 12 months because of transport problems.
- **Access to food shops:** 16 % of people without cars find access to supermarkets difficult, compared to 6 % of the population as a whole.
- **Access to social, cultural, and sporting activities:** 18 % of people without a car find seeing friends and family difficult because of transport problems, compared with 8 % for car owners. People without cars are also twice as likely to find it difficult getting to leisure centres (9 %) and libraries (7 %).
- **Impact of traffic on deprived communities:** Children from the lowest social class are five times more likely to die in road accidents than those from the highest social class. More than a quarter of child pedestrian casualties happen in the most deprived 10 % of wards.
- These problems have an **impact on the individuals concerned**, for example by cutting them off from jobs, education and training. This in turn prevents them from breaking out of the cycle of social exclusion. The problems have **costs for communities**, which may be left isolated or unable to attract investment. They also **undermine Government objectives** that are essential to combat poverty and social exclusion like welfare to work, raising educational participation and attainment, narrowing health inequalities, and reducing crime and antisocial behaviour.

Sustainable city transport: the Freiburg example:

11.19 The 'global transport concept' – with a transport infrastructure that is friendly to people, the environment and the city – is intended as an integral part of the development of the city, which now has 202,000 inhabitants. It includes reinforcing the city as regional capital, developing a 'quickest route to the city' campaign, preserving cityscape and urban spaces, and reducing pollution.

11.20 The concept was approved in 1969 and, since then, the city has developed many pioneering plans and measures, including establishing cycle lanes, banning traffic from the city centre, introducing Germany's first transferable flat-rate travel card, and building a city and suburban railway. Its objectives are:

- To reduce traffic in the city and give priority to local public transport, cyclists and pedestrians.
- To create a rational balance between all modes of transport.
- To create global traffic calming and concentrate private vehicles onto well constructed main arteries.
- To control parking in public places.

11.21 Comparing figures for 1982 and 1999 for the three modes of transport – motor vehicles, local public transport and bicycles – clearly shows the positive effects of the concept:

- Local public transport increased from 11 to 18 %
- Bicycle use from 15 to 26 %
- Motor vehicle traffic decreased from 38 to 32 %, despite the increase in the issue of motor vehicle licences.
- This result is in complete contrast to the trends observed in practically all other Central European cities.

From *Our planet* the UNEP magazine for environment and development
http://www.ourplanet.com/imgversn/121/bohme.html

12 Indicator H12: River Water Quality

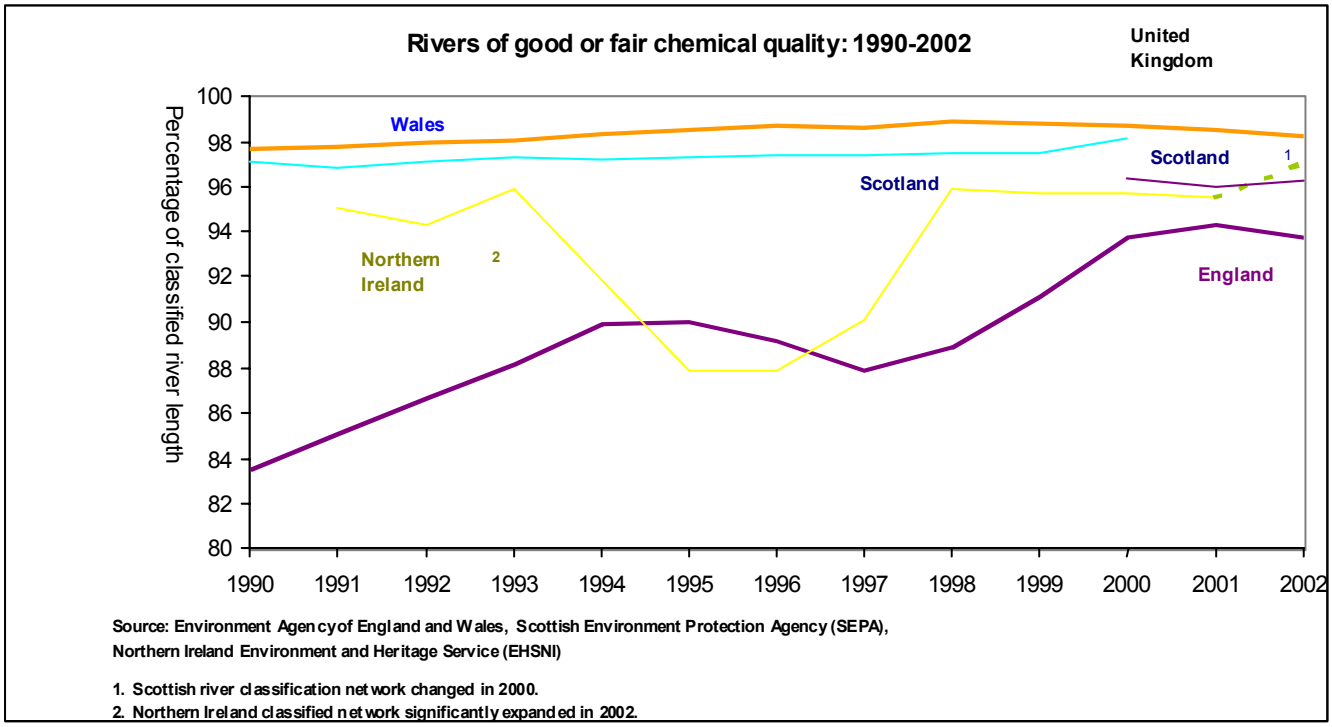


Figure 23: River water quality 1990-2002

Objective: Improving river quality

Interpretation and context setting

12.1 Indicator H12 shows that improvements in the quality of river water in England and Northern Ireland since the mid 1990s has brought them closer to the levels existent in Scotland and Wales (96% and 98% respectively) but that quality in these to administrations have remained largely unchanged.

12.2 Latest available data suggest that quality improvements seen in 1997-2000 period for England have levelled off and declined again slightly since 2001.

Comparisons: how well is the UK doing?

Government's own goals

- At least half of River Quality Objectives (RQO) shortfall to be eliminated by 2005 in England and Wales
- Government target RQO compliance in England and Wales from 82% in 1987 to 91% in 2005

12.3 The UK has progressed well against these targets, with river water quality in the UK improving significantly since 1990.

Best practice within the UK

12.4 Improvements have been seen in river water quality in all regions, however the increase is much less marked in North East, North West and Yorkshire and Humber.

Table: 38a and 38b

Percentage of total river lengths of good or fair chemical quality: 1990–2001						
	1990		**2001**		**Change (% points)**	
	Good	**Good or fair**	**Good**	**Good or fair**	**Good**	**Good or fair**
North East	70	92	83	97	12	6
North West	41	73	59	92	18	19
Yorkshire and the Humber	52	76	57	91	5	15
East Midlands	20	79	65	96	45	16
West Midlands	39	82	66	94	27	12
East of England	21	82	55	94	34	12
London	13	71	37	88	24	17
South East	40	84	63	94	24	10
South West	62	93	81	97	20	4
England	**43**	**83**	**66**	**94**	**23**	**11**

Percentage of total river lengths of good or fair biological quality: 1990-2000						
	1990		**2000**		**Change (% points)**	
	Good	**Good or fair**	**Good**	**Good or fair**	**Good**	**Good or fair**
North East	67	90	80	98	13	8
North West	39	64	44	84	5	20
Yorkshire and the Humber	54	79	57	88	2	9
East Midlands	29	86	58	96	29	10
West Midlands	45	83	58	94	13	11
East of England	45	92	81	99	36	7
London	8	49	30	84	22	34
South East	62	95	76	99	14	4
South West	76	96	86	99	11	3
England	**53**	**86**	**66**	**94**	**13**	**8**

Source: *regional quality of life counts*, http://www.sustainable-development.gov.uk/indicators/regional/2002

12.5 As referred to in H10, above, core indicator P4 (acidification of lakes) shows that the moderate declines seen and reported in *quality of life counts* have not continued, and latest data shows acidification rising again since 1999 in most selected lakes.

International comparisons

12.6 Detailed comparison of river water quality has not been possible. However, in 2003 the EEA published a broad indicator based assessment of water in Europe [EEA, 2003]. Figure 24 shows that England and Wales have relatively high levels of water stress and recent proposals for large scale housing and employment growth in certain regions are likely to increase pressure on water in the future.

12.7 The water exploitation index (WEI) in a country is the average annual total abstraction of freshwater divided by the long-term average freshwater resources. It gives an indication of how the total water demand puts pressure on the water resource. The WEI identifies those countries that have high demand in relation to their resources and therefore are prone to suffer problems of water stress. It should be underlined that it is an indicator of the average water stress in a country and thus can hide considerable regional differences within a country. [EEA, 2003b]

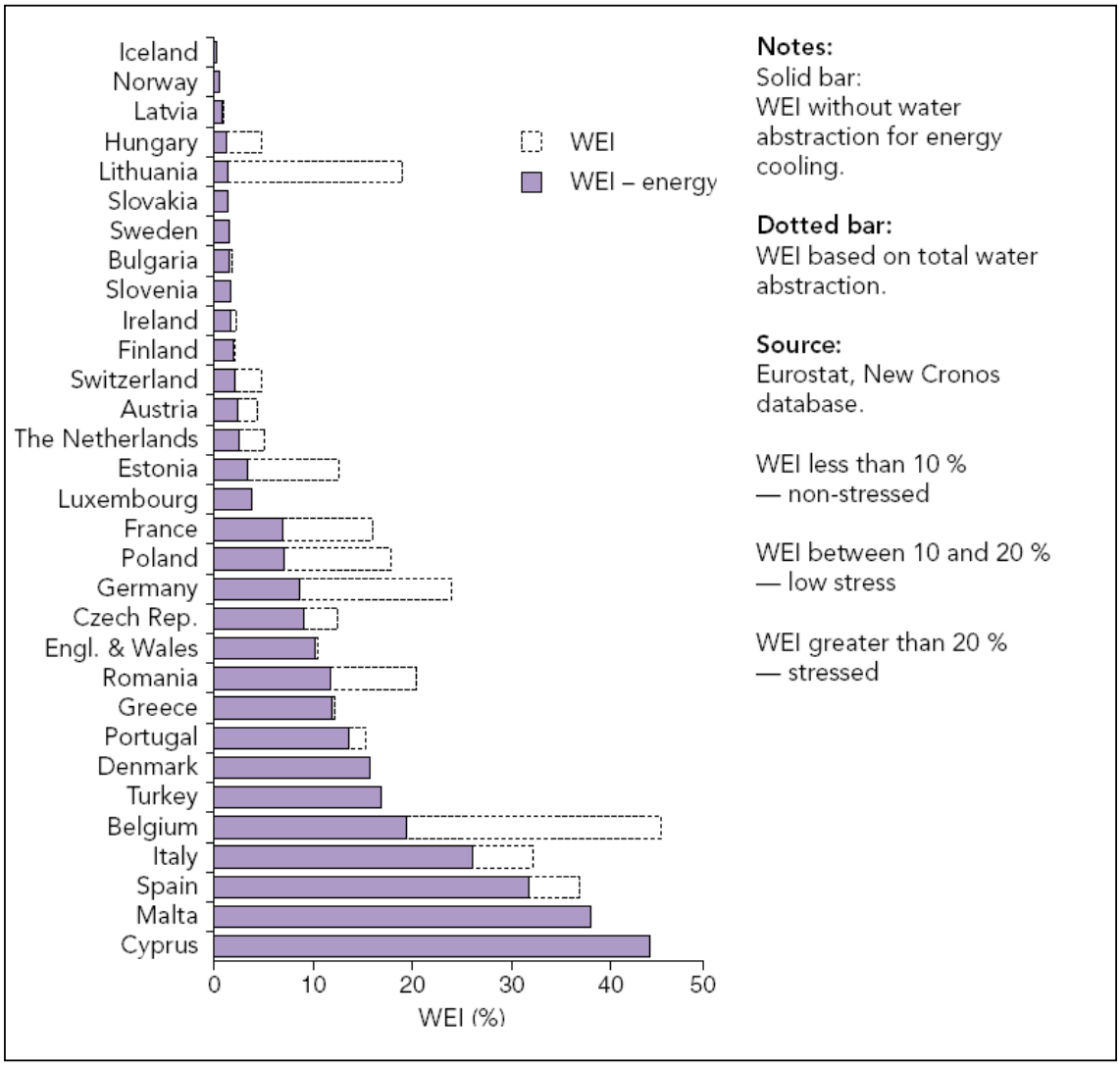


Figure 24: Water Exploitation Index, From EEA 2003b

True sustainability and progress summary

12.8 Water quality is linked fundamentally to those activities which produce the chemical and biological pollutants – agriculture, industry, air pollutants washed in by rainfall etc.

13 Indicator H13: Wildlife

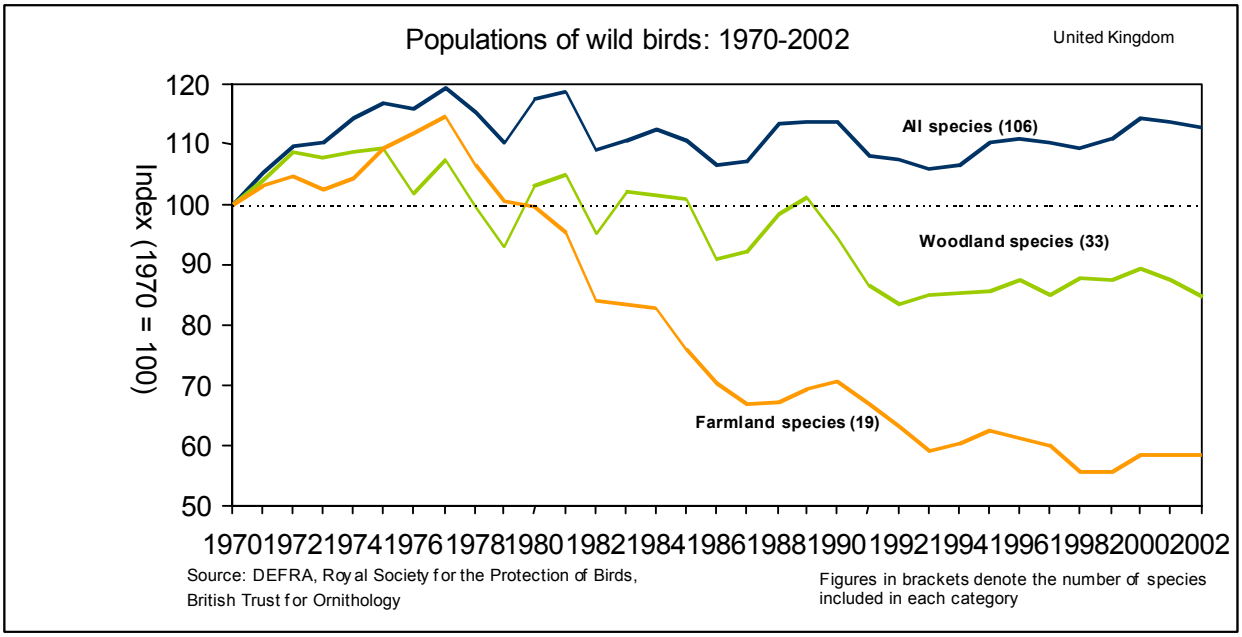


Figure 25: UK wild bird population 1970-2002

Objective: Reverse the long-term decline in populations of farmland and woodland birds

Interpretation and context setting

13.1 Indicator H13 shows that while the 1980s and 1990s saw dramatic declines in woodland and farmland bird species data since 2000 suggest this log term decline may have slowed, and in the case of farmland species even have been halted. Due to natural fluctuations in species populations such trends are hard to predict and as such it is too early to estimate population change in future.

13.2 Data for all species of wild birds show these to be much more stable than farmland and woodland species, with their population in 2002 being higher than in 1970, though below peak population levels in the 1970s and 1980s.

Comparisons: how well is the UK doing?

Government's own goals

- Reverse the long-term decline in populations of woodland and farmland birds
- bring into favourable condition by 2010 95% of all nationally important wildlife sites [Defra PSA]
- opening up public access to mountain, moor, heath and down and registered common land by the end of 2005 [Defra PSA]

13.3 Latest data make progress assessment uncertain. It does appear that the decline in populations has slowed and perhaps even stopped, but evidence of increasing populations is not yet demonstrated.

13.4 "In the UK…intensive agriculture has squeezed wildlife out of many former strongholds. RSPB research has shown that the population declines of farmland birds have been greatest in those European countries with the most intensive farming systems. In the UK, between 1970 and 1999, the skylark has declined by 52%, the yellowhammer by 53% and the corn bunting by 88%. Of around 453 species of bird occurring regularly in Europe, 150 (about one third) rely on sustainable farming for their future survival. Birds at most immediate risk are those that are particularly vulnerable to intensive agriculture, such as the corncrake, the red-backed shrike and the great bustard." RSPB http://www.rspb.org.uk/countryside/farming/policy/CAP/warning.asp

13.5 Changes in farmland:

13.6 In 1945 there were 362.5 thousand holdings compared with 175.2 thousand in June 1999 and the average farm size increased from under 40 hectares in 1995 to just over 60 hectares in 1995. The majority of agricultural land in the United Kingdom in 1999 was grasses and sole right rough grazing. Since 1961 there has been a substantial increase in the amount of agricultural land given over to wheat growing: in 1999 wheat covered 1,847 thousand hectares, two and a half times the area in 1961. [ONS, http://www.statistics.gov.uk/STATBASE]

Best practice within the UK

13.7 Regional data show that certain areas (notably the south and east of England) have experienced far greater population falls than others. This is likely to be due to differences in development, demographic and farming trends (Figure 26).

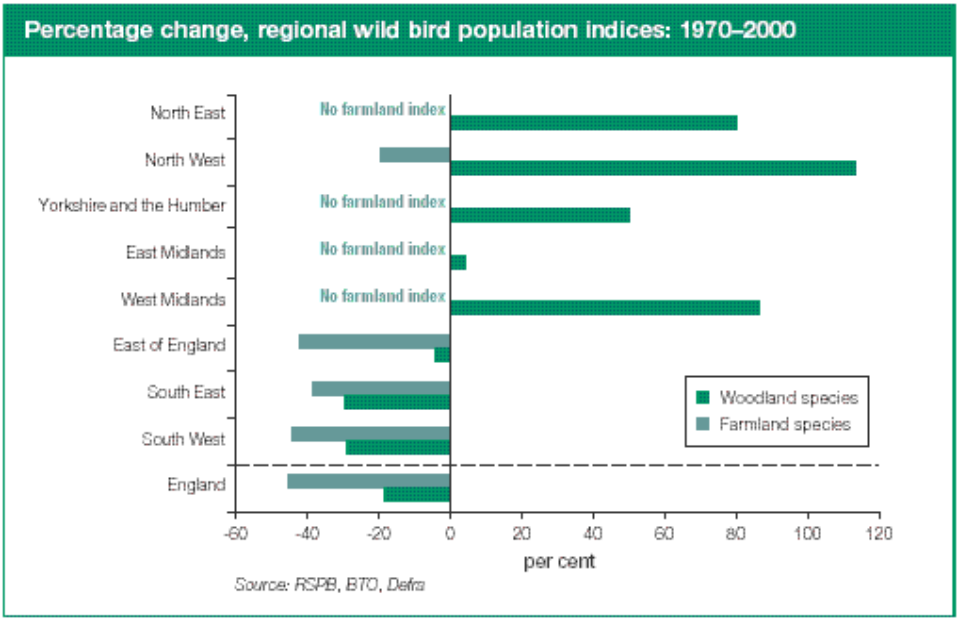


Figure 26: Percentage changes by region of wild bird populations.
Source: *UK Regional Quality of Life Counts*, 2002 update, online http://www.sustainable-development.gov.uk/indicators/regional/index.htm

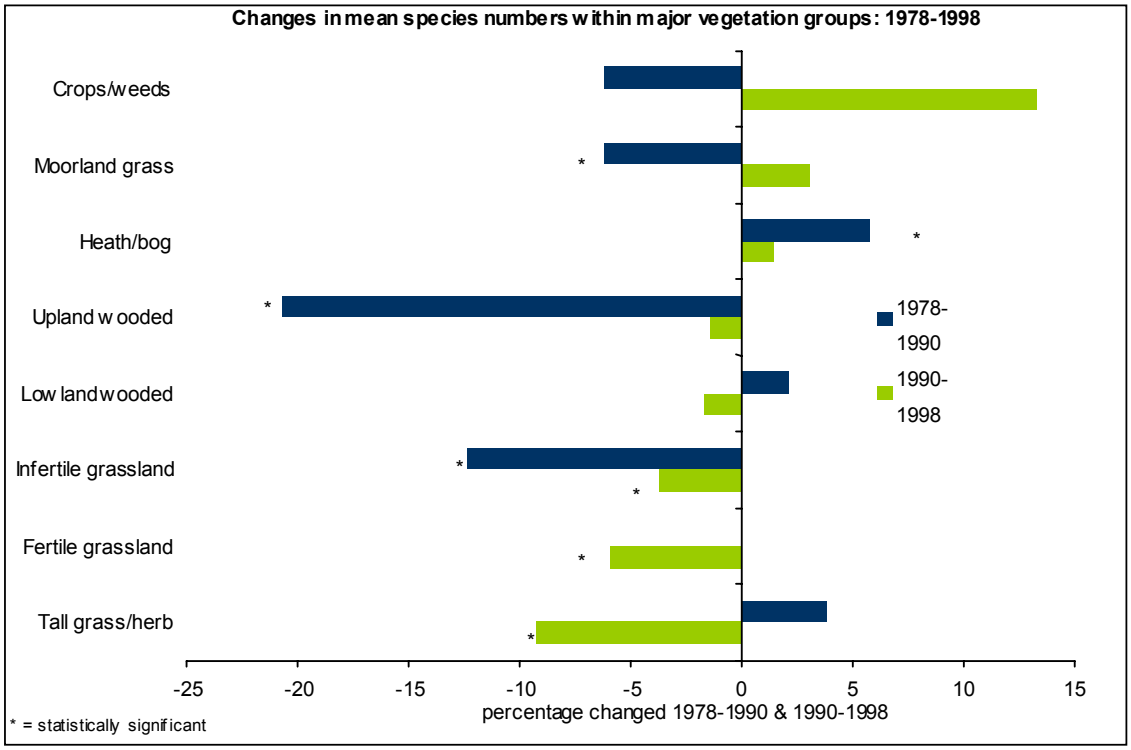


Figure 27: Changes in other species numbers 1978 – 1998 (Core indicator S3)

International comparisons

13.8 Data and comparisons for European countries have not been identified.

True sustainability and progress summary

13.9 Species populations depend on a variety of factors for viability. The declines in wild bird populations seen in the UK since 1970 are generally believed to be caused by changing farming and rural practices, leading to a loss of both habitat and food (intensification and pesticide use).

13.10 In the future, while farming practices (or at least the change in rural modification) may put less pressure on species rapid climate change is likely to cause major losses of biodiversity, including extinctions, as species cannot move or adapt fast enough.

14 Indicator H14: Land Use

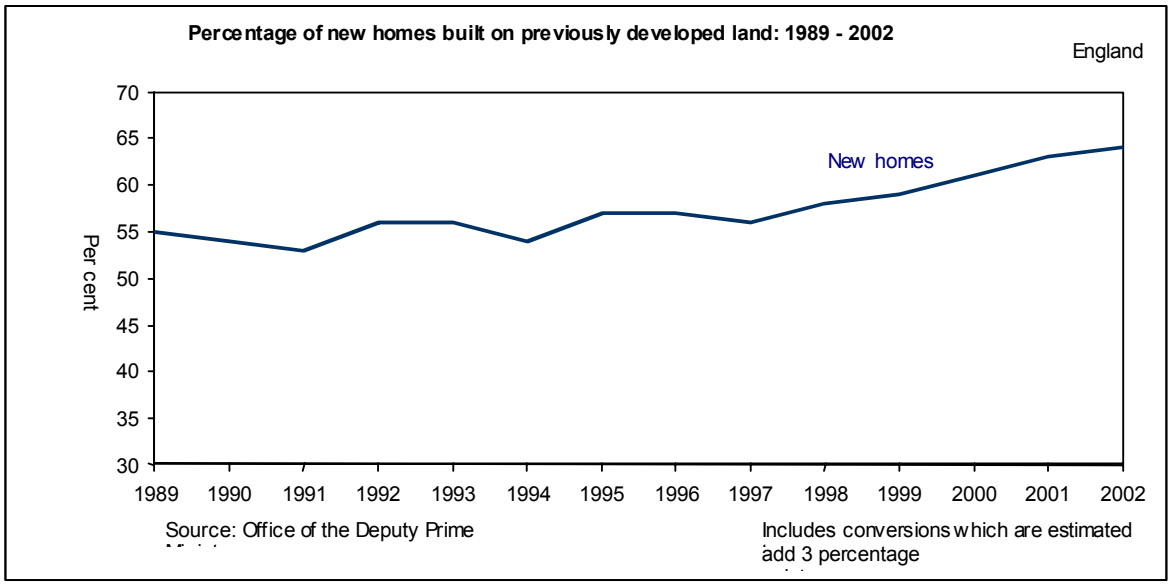


Figure 28: New homes built on previously developed land 1989 - 2002

Objective: Re-using previously developed land, in order to protect the countryside and encourage urban regeneration

Interpretation and context setting

14.1 Indicator H14 shows that in England the percentage of new homes built on previously developed land has risen steadily since 1997. This indicator does not provide any information on the total number of houses being built, and an increased percentage could simply be indicative of increasing pressure on all land for housing development.

Comparisons: how well is the UK doing?

Government's own goals

- Increase to 60% by 2008 in England

14.2 Latest national data show that the Government has exceeded the original 60% target.

14.3 Housing data are hard to come by. However as an indicator the percentage of new homes built on previously developed land tells us nothing about the total number of new homes, and may disguise an actual increase in these, and in use of new (green) land for homes.

Best practice within the UK

14.4 Regional data below show that only London, the South East and the North West are above the UK average (with London exceedingly high at 90%) (Table 39). These high figures seem likely to be due to high levels of previous urbanisation. Lower levels (in three regions below 50%) in other regions would seem to support this, and suggest that the Headline indicator progress is in fact limited, and the barometer interpretation perhaps misleading.

Percentage of new homes built on previously developed land (excluding conversions): 1989–2001		
	1989-1993 average	**1998-2001 average**
North East	46	46
North West	57	65
Yorkshire and the Humber	46	53
East Midlands	38	40
West Midlands	51	56
East of England	50	55
London	86	90
South East	54	60
South West	40	42
England	**52**	**57**

Table 39: New homes built on previously developed land by region
Source: *UK Regional Quality of Life Counts*, 2002 update, online http://www.sustainable-development.gov.uk/indicators/regional/index.htm

International comparisons

14.5 International comparison has not been possible for this indicator due to data being unavailable,

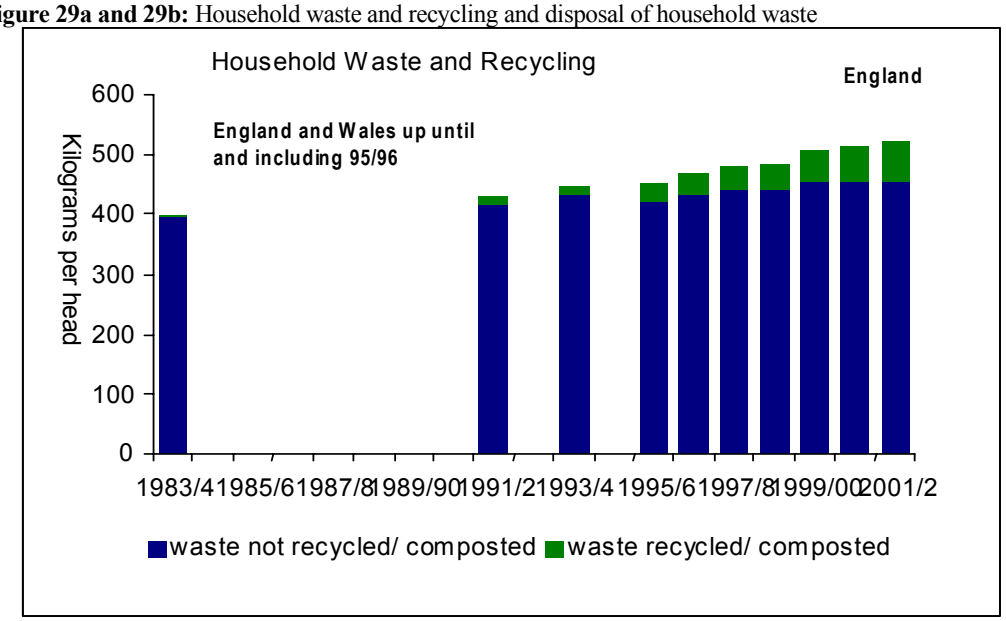
True sustainability and progress summary

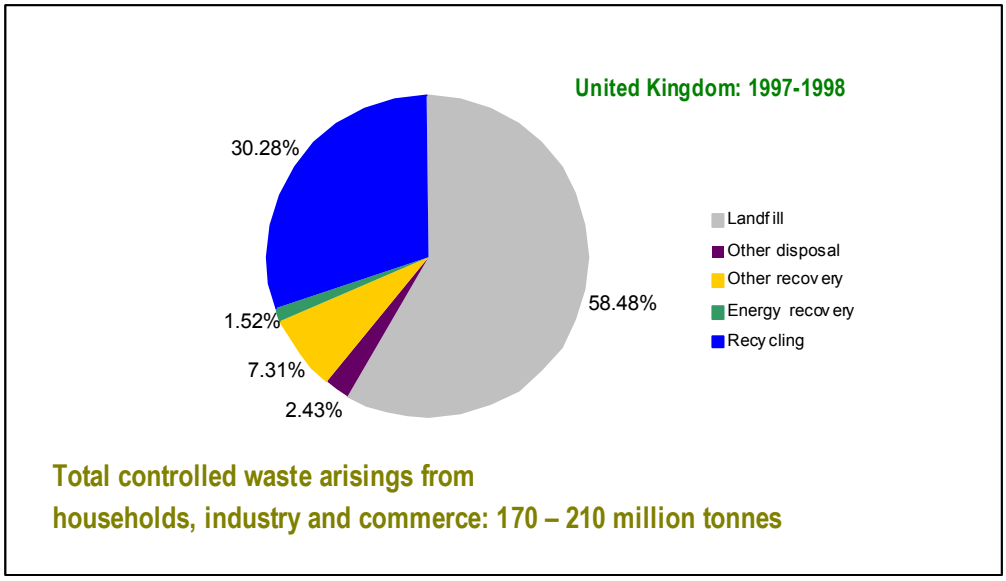
14.6 Policy has increased the proportion of new homes built on previously developed land to above the Government's 60% target. However considerable regional variation exists and in some areas more than 50% of new homes are being constructed on greenfield land suggesting pressure is still being put on countryside around towns.

14.7 This indicator also does not tell us anything about the possible value of certain inner-city or brownfield sites for other uses than housing, such as wildlife or amenity use. Quality of life requires a balance of services and access within both urban and rural areas.

15 Indicator H15: Waste

Figure 29a and 29b: Household waste and recycling and disposal of household waste





Objective: Move away from disposal of waste towards waste reduction, reuse, recycling and recovery

Interpretation and context setting

15.1 Indicator H15 shows that the amount of household waste generated has risen steadily since 1991. While the level of recycling has increased over the same period, this has not been sufficient to offset the overall rise in waste generation.

15.2 In 1997-1998 nearly 60% of UK waste went to landfill.

Comparisons: how well is the UK doing?

Government's own goals

- 2000 waste strategy: Recover value from 45% of municipal waste and to recycle 30% of household waste by 2010
- Reduce landfill for industrial and commercial waste to 85% of 1998 level by 2005
- Enable 25% of household waste to be recycled or composted by 2005-6 (Defra PSA)

15.3 Data do show that the UK is recycling more, and that the rate is now at or close to the 30% target set in the 2000 waste strategy.

15.4 However as a nation we are creating new waste at a rate which outstrips this rise in recycling rates. In fact waste generation is rising faster than GDP. [PIU, 2003]

15.5 The growing volume of municipal waste is pushing up the costs of waste management. At current rates, the amount of municipal waste produced in England will double by 2020, with the costs of managing this waste stream, doubling to £3.2 billion per annum from £1.6 billion currently on unchanged policies. [PIU, 2003]

Best practice within the UK

15.6 UK Best practice examples have not yet been identified.

International comparisons

15.7 The amount of municipal waste produced in England is growing at around 3-4% per year. This is faster than growth in GDP (around 2-2.5%) and is one of the fastest growth rates in Europe (Table 40).

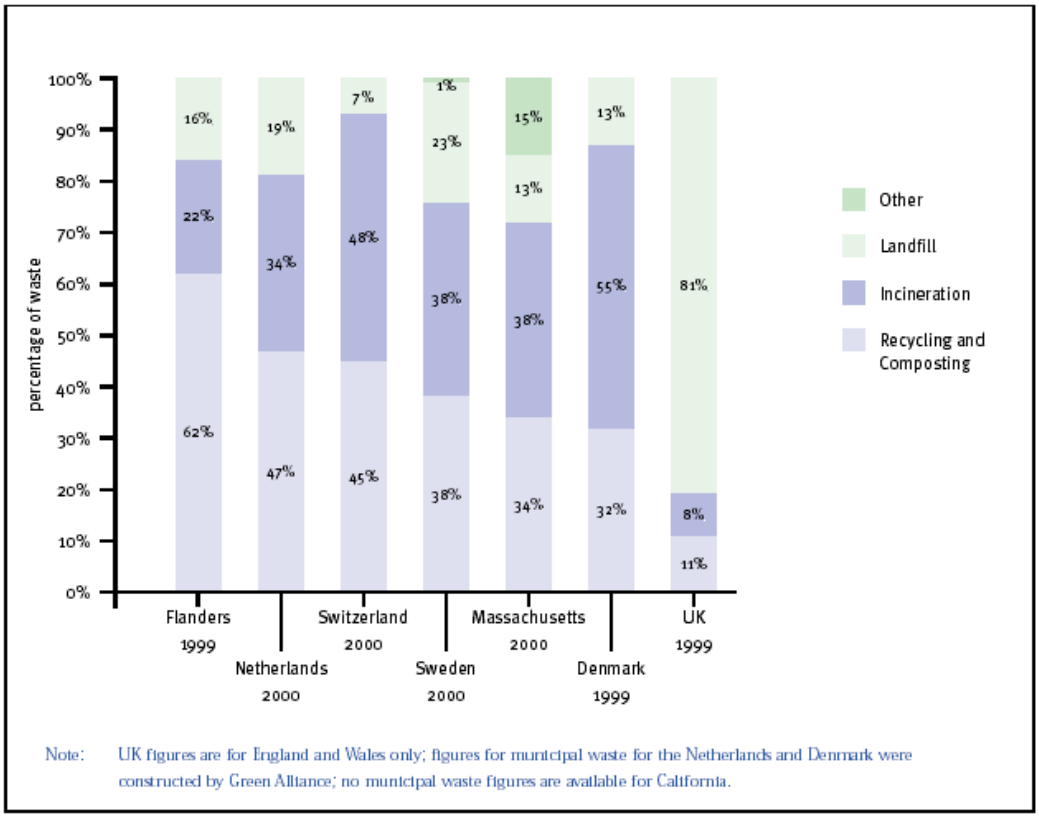
15.8 A range of economic and social factors lie behind this growth such as rising household incomes, changing lifestyles, advertising and the growth in sales of pre-packaged goods. [PIU, 2003]

15.9 Figures 30 and 31 also show that the UK compares poorly to most other European countries in terms of waste management and waste management.

Table 40: Municipal waste landfilled in comparison countries

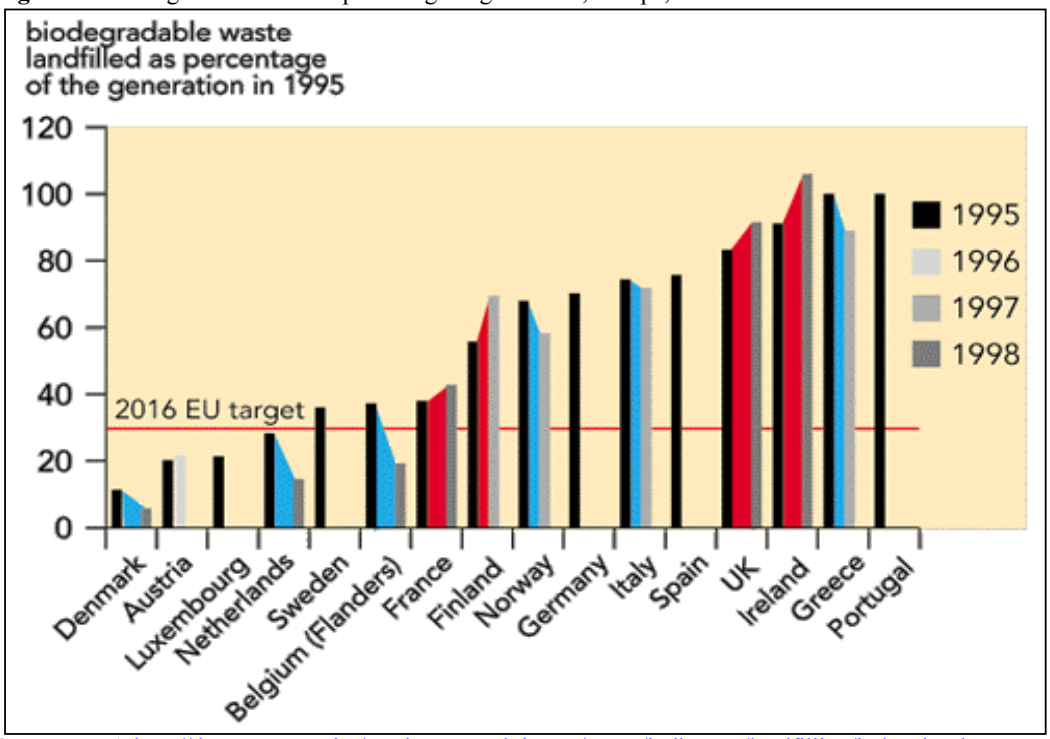
Municipal waste landfilled – measured in Kg per person per year		
Country	1998	1999 (last year UK data)
Belgium	152	140
Denmark	67	68
Germany	201	182
France	250	247
Netherlands	82	72
Finland	294	284
Sweden	147	-
EU15 average	291	292
United Kingdom	**503**	**511**
Eurostat: http://europa.eu.int/comm/eurostat/Public/datashop		

Figure 30: Methods of waste management by country (UK Figures for England and Wales only).



Source: Green Alliance, 2002

Figure 31: Biodegradable waste as percentage of generation, Europe, 1995.



Source: EEA http://themes.eea.eu.int/Environmental_issues/waste/indicators/landfilling/index_html

True sustainability and progress summary

15.10 In a finite and densely populated nation, waste management must be a critical issue for government. Current trends in the UK in waste generation and management portray a worrying picture for the future. Waste generation is linked to a variety of social and economic factors, and recent trends suggest that the UK climate of consumption and growth could raise critical waste issues in the future.

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