

Redefining prosperity:
resource productivity, economic growth and
sustainable development (SDC report)

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Sustainable
Development Commission

Redefining prosperity: Resource productivity, economic growth and sustainable development

1. Introduction

“Real progress cannot be measured by money alone. We must ensure that economic growth contributes to our quality of life, rather than degrading it.”

(Tony Blair, Foreword to A Better Quality of Life 1999)

In those words, included in the Foreword to the Government’s first Sustainable Development Strategy in May 1999, the Prime Minister made a straightforward but often neglected distinction: from the first day of an undergraduate course to the most sophisticated current research, the inadequacies of standard definitions of Gross Domestic Product (GDP) and economic growth as yardsticks for wellbeing are staples of academic economics. Yet economic policy still seems to be designed as though maximising GDP was its sole objective.

HM Treasury defines its aim as follows: “to raise the rate of sustainable growth, and achieve rising prosperity, through creating economic and employment opportunities for all.” This aim is pursued not just for its own sake, but to make possible delivery of the Government’s key social objectives: jobs, redistribution of income and spending on public services. By “sustainable”, the Treasury has said it means that “growth must be both stable and environmentally sustainable. Quality of growth matters; not just quantity.”

As far as the Sustainable Development Commission is concerned, sustainable development provides the best possible framework for redefining progress and redirecting our economies to enable all people to meet their basic needs and improve their quality of life. This has to be done whilst simultaneously ensuring that the natural systems, resources and diversity upon which we depend are maintained and enhanced for our benefit and for that of future generations.

Part of the debate about sustainable development lies in confronting those difficult issues that most people would rather leave undisturbed. The compatibility between economic growth (as we know it today) and sustainable development is perhaps the most difficult of all those difficult issues.

No one denies that securing the benefits that economic growth brings simultaneously generates both social and environmental externalities of varying kinds and severity: costs which, if they are large enough, can outweigh the welfare gains.

Environmentalists argue that these externalities are now so grave (in terms of impact on ecosystems, resource depletion, climate change, biodiversity and so on) as to imperil Nature’s self-regenerating capacities – and, in the process, imperil humankind’s own capacity to improve our quality of life. Whilst avoiding the apocalyptic rhetoric, Government Ministers now regularly acknowledge the seriousness of the situation, and deploy a range of policy levers in an attempt to limit the impact of these externalities.

But just how effective are they in that mitigation strategy? Would they be better served by a more fundamental re-appraisal of the model of progress that may have served politicians pretty well over the second half of the 20th Century, but now appears to be losing steam?

We do not pretend to have the answers at this stage; the main point of this publication is to stimulate debate, to get other branches of government to think about the issues, and to begin to put in place processes which should change the way we think about economic growth and wellbeing.

2. The heart of the problem

The Government now has an unparalleled opportunity to engage in just such a radical re-appraisal. It is about to undertake a thorough review of the 1999 Sustainable Development Strategy *A Better Quality of Life*, looking at the fifteen Headline Indicators it uses to assess progress against a range of

key social, economic and environmental parameters, and the four Strategic Objectives that lie at the heart of the strategy:

- Social progress which meets the needs of everyone
- Effective protection of the environment
- Prudent use of natural resources
- Maintenance of high and stable levels of economic growth and employment

It's the fourth Objective that we are principally addressing in this paper. While the majority of people in government, business, academia and indeed society at large are perfectly comfortable with the pursuit of "high and stable levels of economic growth" (and have no reason to suppose there is any fundamental incompatibility between this and the other three Objectives), a vocal minority see in that wording ambiguity, intellectual incoherence, and a continuing failure properly to understand the essence of sustainable development and the impact of economic growth as it is measured today.

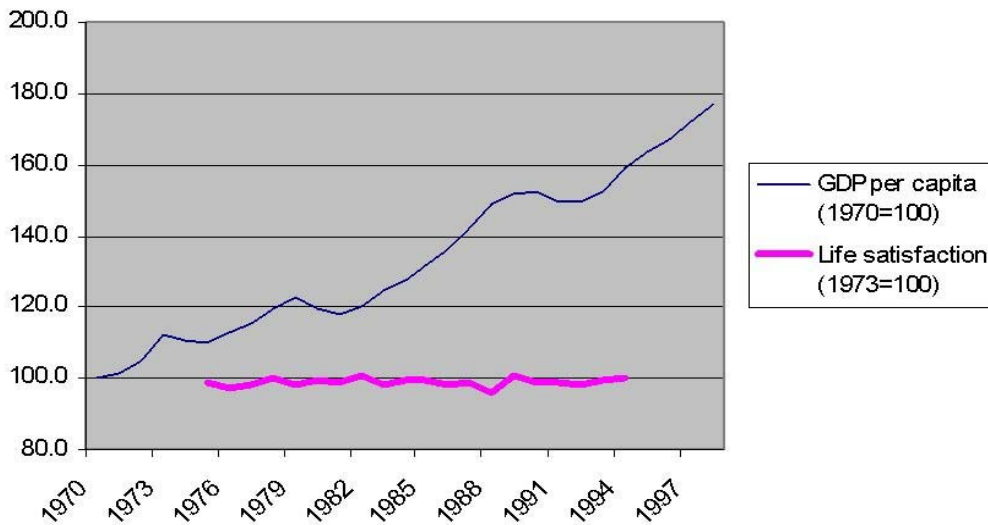
At the heart of today's worsening ecological crisis lies a systemic misperception about the relationship between the earth and the global economy that has expanded so dramatically over the last fifty years. For most economists and politicians, the global economy has become the centre of reality, the overarching system within which all else is subsumed. Human societies, communities, eco-systems, and habitats are all seen as subsystems of that overarching system. As such, there is no inherent reason why that overarching economic system shouldn't go on expanding indefinitely, with constant increases in the throughput of both energy and matter.

In terms of today's prevailing political economy, such a world view is not all that surprising. Unfortunately, it ignores both the basic laws of thermodynamics and the natural laws on which all life support systems depend. However dynamic it may be, the global economy is in the first instance a sub-system of human society, which is in itself a sub-system of the totality of life on earth.

This means that the majority of economists (and the politicians they advise) choose to ignore the fact it is the physical limits of that eco-system which constrain the speed and scale at which the economic sub-system can expand. In the long run, it cannot grow beyond the capacity of the surrounding eco-system to sustain that growth – in terms of its ability to provide high grade resources and absorb low grade waste. What we have is what we've got. Matter can neither be created nor destroyed.

This does not make all economic growth inherently unsustainable - far from it. But it does mean we need fundamentally to rethink the dominance of economic growth as the driving force in the modern political economy, and to be far more rigorous in distinguishing between the kind of economic growth that is compatible with the transition to a genuinely sustainable society and the kind that absolutely isn't. Optimists here tend to point to the so-called "invisible environmental hand", where economic growth can actually help reduce pollution if it accelerates resource productivity at a faster rate than both resource consumption and population growth. Wilfred Beckerman, for instance, asserts that "in the longer run, the surest way to improve your environment is to become rich". The pessimists promptly point to the "rebound effect" (whereby any additional "environmental space" created by increased resource efficiency is immediately offset by additional consumption), and simply invite people to re-examine the irrefutable empirical evidence of continuing and worsening ecological damage.

And does the pursuit of year-on-year economic growth automatically deliver the goods? The relationship between economic growth and peoples' quality of life (or "life satisfaction") has been seized on recently by senior government advisers. In a paper published by the Cabinet Office's Strategy Unit in December 2002 ("Life Satisfaction: the state of knowledge and implications for government"), Nick Donovan and David Halpern highlight the basic problem contained in the following data from the Eurobarometer survey.



They advance a number of reasons to explain why levels of life satisfaction do not follow increases in national income:

“Three explanations have been put forward for the failure of life satisfaction to follow the increases in national income, that:

- the role of hereditary factors might overshadow any effects of income;
- while GDP may have arisen, other trends such as rising crime or divorce rates may have had an offsetting impact on life satisfaction; and
- while an increase in an individual’s income may increase their satisfaction it may also cause envy and reduce that of others (if people’s happiness is determined by relative rather than absolute status) or the increase in satisfaction may be temporary (if people adapt to their new circumstances and their aspirations rise).

Policy makers in the UK are, in effect, confronted with a double dilemma. Increased economic growth is generating more and more negative externalities that threaten to overwhelm the life-support systems on which we depend. Equally, increased economic growth isn’t necessarily making people any happier. These two are obviously intricately linked, but each needs to be addressed separately.

3. Resource productivity

In broad policy terms, the Government’s favoured strategy for squaring the first of these circles (ie maintaining high and stable levels of economic growth but without the social and environmental externalities) is improving resource productivity – getting more economic value from each unit of production, thus “decoupling” economic growth from increased resource use.

Resource productivity lies at the heart of the DTI’s own Sustainable Development Strategy, and featured prominently in the three big environment speeches that the Prime Minister gave in 2001 and in his sustainable development speech in February 2003. It’s a seductive strategy in that it appears to offer an almost pain-free route to a “cleaner environment” without in any way jeopardising macro-economic priorities. It is far more attractive to concentrate efforts on the supply side (seeking technological changes that improve efficiency of resource use) than it is to confront problems of demand management.

As the Government’s annual *Quality of Life* report demonstrates, some dramatic step change improvements have already been achieved. Since 1970, many polluting emissions (of sulphur dioxide, ozone-depleting gases, nitrogen oxides and carbon monoxide, for instance) have been substantially cut, though some are now creeping up again, albeit from a much lower base level, because of economic growth.



And the picture on overall resource consumption is also encouraging. A recent comparison of EU countries rated the UK as one of the top five in terms of resource use efficiency. Research by the Wuppertal Institute in Germany showed that the UK's 'Total Material Requirement' grew by just 12% between 1970 and 1999, whilst GDP increased by 88% during the same time - a decoupling of economic growth and resource use that has surprised many commentators given the enormous difficulties the UK has had in implementing effective waste policies. (Much of the decoupling effect can be attributed to the shift from manufacturing to services, which tends to have a far lower environmental impact per unit of GDP). Total resource use per capita in the UK has remained fairly stable over the last thirty years, despite steady increases in economic output.

With greenhouse gas emissions, the race so far is a dead heat: efficiency improvements are just about keeping pace with increases in consumption. In road and air transport, however, efficiency is not managing even this: increases in consumption are outrunning efficiency improvements. Even with predicted increases in the fuel efficiency of passenger planes, predicted increases in the UK's air traffic would offset between 30% and 50% of the UK's committed emissions reductions under the Kyoto Protocol.

But the problem is that markets will only reward improved resource productivity if it simultaneously reduces costs. For as long as environmental resources and impacts are cheap compared to other factors of production, there will be far more occasions where companies will improve their competitive position by increasing environmental impacts to reduce labour or capital inputs than vice versa. Celebrating the handful of counter examples is a 'Mississippi fallacy': concentrating on a few little boats struggling upstream while ignoring the vast volume of water pouring downstream. According to DTI's own figures, "30% of the energy used in the UK every year - the equivalent of £12bn - is wasted."

It has been claimed that the 'weightless' economy (driven by new information and communication technologies) could bring the required 'step change'. But this is a field where hype outstrips evidence. Such evidence as we do have suggests that new activity of this kind generally occurs as well as 'old' or 'heavy' activity rather than instead of it; that the behavioural changes it makes possible often increase other areas of consumption; and that "rebound" and behavioural effects can add to environmental impacts as readily as reduce them. The technologies which were supposed to achieve the 'paperless office' actually increased paper use by reducing the cost and time disincentives to endless redrafting and indiscriminate copying. And there is no evidence in other fields that digital technologies will of themselves significantly change the environmental intensity of the economy.

The first priority for the Government must therefore be to take resource productivity much more seriously. In some areas, decisive action is already being taken: landfill tax, for instance, will increase by £3 per tonne per annum (from 2005 onwards) until it reaches the rate of £35 a tonne - still much less than in some other European countries, but a clear enough signal of the need for dramatic changes in our waste management strategy. In other areas (such as pesticide reduction, or ending the anomaly that no taxes are paid on aviation fuel), it's all still talk, with no real intent to get to grips with the different problems.

But the truth of it is that taking resource productivity seriously (ie systematically driving down resource and energy consumption across the entire economy) is not as pain-free as it first appears. Decades of perverse subsidies and the licensed externalisation of costs to keep prices low, has left a mountain of market failures that people have got used to and resent having taken away from them. The fuel tax protests of 2000 are etched in the memory of civil servants and ministers alike, as an example of what happens when an eco-instrument is deployed insensitively or punitively. The fact that no one in Government could summon up the courage to defend the fuel tax escalator as a key policy measure in the Government's overall transport and climate change strategies, was both deeply regrettable and an important reminder that even something as 'simple' as resource productivity demands consistent, sustained and inspirational political leadership. Of which, on that occasion, there was none.

But let us assume for one moment that these missing ingredients (leadership, urgency, transparency, cross-departmental co-ordination etc) are injected into the Government's overall approach. What might then be expected in terms of the scale of resulting improvements in resource productivity? There are widely differing estimates in answer to this question, depending on the particular resource input under consideration (different sources of energy, precious metals, raw materials, chemicals, minerals, aggregates and so on), or the degree of 'techno-optimism' of those making the estimates.

However, the overwhelming consensus amongst academics is that resource productivity will not, on its own, deliver the desired reconciliation between the pursuit of economic growth and the imperative of learning to live within the Earth's biophysical constraints and carrying capacities. We must therefore look at the other side of the Sustainable Production and Consumption challenge: is it possible to decouple improvement in people's quality of life (or their overall level of life satisfaction) from increases in consumption?

4. Sustainable consumption

One of the few positive pointers to come out of the World Summit on Sustainable Development's Plan of Implementation can be found in para 15:

"All countries should "Encourage and promote the development of a 10 year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production to promote social and economic development within the carrying capacity of ecosystems..."

Ten years sounds forever, but many countries will struggle even with this complacent time frame, particularly on the sustainable consumption side. This concept currently has almost no serious traction in public policy terms; if it means anything at all, it means "the slightly more responsible consumption of slightly more sustainable products", a piece of neutralising circularity that has suited policy makers just fine until now. But the decision of the UK Government to produce a new Sustainable Consumption and Production Strategy by the summer of 2003 necessitates something rather more profound.

The recommended prescription as far as radical environmentalists are concerned is simple: people in the rich world must not just consume in more socially and environmentally responsible ways, but must be persuaded to consume less. To bring that about, the hypothesis is advanced that people who have reached a certain level of material comfort and security can (and should) be persuaded that their future quality of life resides in freeing themselves of the trappings of consumerism and in opting instead for low-maintenance, low-throughput, low-stress patterns of work, recreation and home life.

The clearest manifestation of this has been described as 'downshifting', detected in a growing number of people quietly reconfiguring their work to spend more time at home, with their children, doing other things – entailing a lower income but a higher quality of life. The fact that this is a predominantly middle-class phenomenon does not invalidate its significance, but it inevitably raises questions about its usefulness in policy-making terms.

There are significant macro-economic implications in any low-consumption economic model. Lower levels of economic growth (the inevitable consequence of large numbers of people opting for lower levels of economic activity) would mean lower tax revenues, which in turn would necessitate lower levels of public expenditure on key public services such as health and education, as well as lower levels of capital expenditure on things like transport. The negative impact of this on society and people's individual quality of life is as much of concern to advocates of genuine sustainable development as the negative impacts on the environment of current levels of economic growth.

The whole question of employment must also be factored in here. To what extent would lower levels of consumption impact on employment levels in both rich and poor countries? Environmentalists may well have robust and entirely legitimate concerns about the compatibility of

genuinely sustainable development and "high and stable levels of economic growth", but they might also feel very positive about "high and stable levels of employment".

From a demand-side perspective, there would appear to be very little public support for 'consume less' political alternatives. Green parties the world over have succeeded in attracting significant minorities of voters, but have rarely seen that percentage move above 10% even in the world's richest countries, which one might reasonably assume to be more open to the concept of reaching some kind of 'affluence threshold' beyond which further increases in consumption or material standard of living are deemed to bring diminishing utility.

The concept of 'voluntary simplicity' will continue to have considerable resonance with a relatively small number of people in rich northern countries, but is unlikely to have much purchase either for OECD governments intent on addressing residual poverty within their own borders, let alone in developing countries, where the principal challenge resides in the fate of the world's poorest 2 billion people who live on less than \$2 a day. There is very little if any evidence that those countries are prepared in any way to forego the delights of Western consumerism which they see paraded in front of them through a constant battery of mass-media programming and advertising that reaches into the poorest corners of the poorest countries.

Despite more than twenty years of lively debate about one of the earliest definitions of sustainable development ("sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs"), as first used in the 1987 Brundtland Report, there is no consensus either on the 'boundary conditions' to be used in defining human needs, or on the potential usefulness of the concept of human needs in promoting better policy making. The vexed debate about what is a 'need' and what is a 'want' rumbles inexorably on.

It's clear, for instance, that increasing individual choice does not automatically make us better off. Every choice we make is conditioned and constrained by the choices others have already made, and in turn conditions future choices. Individually sensible choices to travel by car, for instance, lead cumulatively to traffic-clogged degraded inner cities, car-dependent suburbs and amenities accessible only by car - a mess nobody wanted or intended, in which nobody can access what they want reliably and easily, those without cars are further disadvantaged, and fossil fuel wastage is structured into lifestyles.

Choices come in 'package deals'. Claiming that a policy or decision 'increases choice' should be the beginning not the end of debate. Are the kinds of choice being increased ones that really matter? What other choices do they curtail or foreclose? Can we be certain the gains are worth the losses? Choices of some kinds or for some people preclude or constrain other kinds of choices or choices for other people.

5. Redefining prosperity

Which leads us back inexorably into the territory of consumption, quality of life and individual wellbeing. By and large, conventional economic thinking (and our own reflex instinct) tells us that the greater one's per capita income, the greater one's purchasing power, the greater one's opportunity to go out there and consume, then the greater the amount of personal utility or wellbeing we will derive from that consumption. After all, the amount that people pay for any product or service tells us what that product or service is really worth to them.

But ever since the ground-breaking work of Abraham Maslow and Manfred Max Neef, psychologists and alternative economists have set out to demonstrate that, far from there being any automatic increase in wellbeing for every increase in levels of consumption, much of our current consumption is turning out to be a very inadequate surrogate for meeting human needs in a more satisfying, durable way.



People can be happy with very little wealth and few possessions, or miserable with plenty. Some studies support the view that increased consumption does not automatically lead to increased wellbeing, and some conclude exactly the opposite! Most research indicates that peoples' quality of life is determined far more by the quality of their working life, their family life and their overall social relationships – all seem to be more important relatively than the amount of consumption they are able to enjoy. And if that consumption is increasingly eroding the quality of those other aspects of overall wellbeing, then it is clearly far less beneficial than it might at first sight appear.

There is also a large amount of US literature on the reduced wellbeing of family life in the middle classes as well as of the working class, as a result of intensified workplace pressures over the last 20 years. The percentage of people describing themselves as 'very happy' has declined since the late fifties, despite the fact that personal real income has more than doubled since that time.

It's worth remembering that for governments, the end goal of their use of their democratic mandate is to improve people's wellbeing. The means available to them for achieving this are many and various, though securing as high a level of economic growth as possible has become the most important. Indeed, it's become so dominant that it's easy to forget that the ultimate purpose of this economic growth is in fact to improve wellbeing. Economic growth may well have served post-war politicians well as a reasonably accurate proxy for human wellbeing or contentment, but now that the environmental, social and psychological externalities entailed in generating economic growth in that way are weighing more heavily on people than ever before, there is a pressing need to reopen the debate about economic growth and wellbeing itself.

What makes this so hard to interpret is that our single most important indicator of economic prosperity (namely GNP) obscures the reality of what is actually happening. The standard, aggregated index of GNP is used to capture all marketed exchanges and government expenditures, and therefore measures the increase in the economic value of overall production – but not decoupled from levels of biophysical throughput that generate that increased economic value. So as we eat up our 'natural capital', or degrade the eco-system's capacity to renew the kind of natural services on which we depend, we persist in counting all that destructive economic activity as current (benign) income. At the same time, we also count in many so-called 'defensive expenditures', caused by having to deal with some of the externalities of economic growth, be they environmental (environmental protection and restoration, damage compensation etc) or social (car accidents, poor health, rising crime etc).

As we pointed out in the introduction, there is no particular controversy about this. Economists are forever pointing out how inappropriate it is to use GNP as a sole measure of increased welfare. A huge amount of intellectual ingenuity has therefore been devoted to finding more appropriate measures of economic welfare. Perhaps the best known of these is the UNDP's Human Development Index (HDI), used every year as part of its influential Human Development Report. Others include Nordhaus and Tobin's Measure of Economic Welfare and Daly and Cobb's Index of Sustainable Economic Welfare (ISEW).

ISEW is an attempt to make a better measure of welfare than per capita GDP by adding to it some measure of benefits omitted from it because they are not traded (such as unpaid domestic work), subtracting the value of activities which are traded but do not contribute to human welfare, (such as the treatment of pollution-related illnesses), and by correcting for income inequality. The UK's ISEW rose until the mid 1970s, then stayed level, and then began to decline again (while per capita GDP continued to rise). ISEWs calculated for several other developed countries all show the same overall pattern of levelling off and then decline. This overall shape is robust over a wide range of weightings of the contributory factors - a partial answer to valid criticisms that ISEW is a methodological mongrel, made by arbitrarily aggregating incommensurable (and often individually questionable) indicators of very different kinds of things.

6. Recommendations

The position of the Sustainable Development Commission in this political minefield is a simple one. It took the best part of 20 years to demonstrate that economic growth and increased energy



consumption were not inextricably wedded, and that it was perfectly possible to secure high levels of economic growth without corresponding increases in energy consumption. But will it really take another 20 years to persuade politicians that one can de-couple improved societal wellbeing and individual happiness from high levels of consumption?

Whilst it may be perfectly reasonable for politicians to avoid high-risk strategies on economic growth and consumption, given the dearth of convincing evidence that such strategies will strike a chord with today's electorate, it is not reasonable to ignore the true nature of the economic challenge entailed in learning to live sustainably on this planet.

The Government can already take considerable credit for its decision to publish its annual Quality of Life Report. The fifteen Headline Indicators chosen (total economic output; investments; employment; property and social exclusion; education; health; housing; crime; climate change; air quality; road traffic; river water quality; wildlife; land use; waste) do indeed cover the waterfront of sustainable development, and although movement on any one indicator, on a year to year basis, is inevitably slight, cumulative data provide a useful snapshot of some of the key parameters of wellbeing and quality of life. To our knowledge, this is the only national report of its kind, an expression of serious intent on the part of the Government to get people to think in a more integrated and long-term way about sustainable development.

It is now the recommended policy of both the United Nations and the European Union that countries should revise the way in which they prepare their national accounts to begin to address the kind of sustainability gap that is currently hidden within them. We would very much like to see leading politicians in all political parties engage much more purposefully in the questions about economic growth, quality of life and sustainable consumption. It is not helpful for UK voters to be lulled into a sense of false security that the status quo ("growth at more or less all costs", on an exponential basis, despite ever-stronger scientific evidence that the ecological crisis is beginning to run away with us) is likely to remain the status quo for very much longer.

And that, in essence, is the purpose of this paper: to invite politicians, policy experts, commentators, business people, religious leaders and NGOs to put these issues on their 'must get to grips with' agenda, rather than defer them endlessly as tomorrow's issues. And with that in mind, we are making a number of key recommendations to Government:

Sustainable Development Strategy

The Government is about to launch out on a major review of its 1999 Sustainable Development Strategy. This provides an unprecedented opportunity to confront some of the dilemmas – and opportunities – raised in this paper, looking in some detail at the four over-arching Objectives, the principles and approaches used by Defra to convey the basics of sustainable development, and the 15 Headline Indicators against which it reports progress on an annual basis.

As regards the Four Objectives (see page 1), we believe the wording in the Government's fourth objective is both unhelpful and misleading. It does nothing to encourage people to think more carefully about the nature of economic growth in terms of its compatibility with broader societal goals and environmental imperatives. Indeed, it encourages people to go on supposing that genuinely sustainable development is completely compatible with the pursuit of high levels of conventionally-measured, unreconstructed, exponential economic growth.

We would therefore encourage a wider debate about this, exploring different forms of wording in order to capture the spirit of the debate raised in section 4 of this paper. At the very least, we would like to see "high and stable levels of economic growth" de-coupled from "high and stable levels of employment", and a recognition that economic growth is only a means to an end (or a number of different ends) rather than an end in its own right. It will also be necessary to review the first Headline Indicator which deals with economic output in terms of GDP per head.

Sustainable Production and Consumption



Margaret Beckett's decision to produce a formal Strategy for Sustainable Consumption and Production (as part of the follow-up to the World Summit on Sustainable Development) is very welcome. For this process to work, Defra and DTI must ensure two things:

- That the recommendations on resource productivity (ie the production end of Sustainable Consumption and Production) must move us beyond the kind of bland rhetoric that has dominated all previous government publications in this area.
- There must therefore be a clear process for adopting definitive indicators for resource productivity, which government as a whole will adopt for all public sector bodies (including, most importantly, Regional Development Agencies) and actively promote across the whole of the private sector.

Given the complexity surrounding the sustainable consumption debate, it is unlikely that the Government's new Strategy will come up with any specific policy recommendations. At the very least, it must therefore set out an inclusive, transparent process to secure ongoing, cross-sectoral engagement. New institutions (as in the kind of National Coalition on Sustainable Consumption recommended by UNEP) may be needed, and both Defra and DTI must be seen to be taking such processes much more seriously than has been the case in the past.

National Accounts

Although HM Treasury has carried out some low-key investigations into publishing 'satellite accounts' (showing the depletion of non-renewable natural capital) alongside the end-of-year regular accounts, this work would appear to have stalled.

It is crucially important that the Treasury sees this as an essential ingredient of its own efforts to get to grips with more transparent accounting systems, and commits itself formally to a proper annual publication of these 'satellite accounts' in order to encourage much wider public participation. This would be reinforced by an authoritative analysis of material flows through the UK economy, both by economic sector and by region. This will entail a much more comprehensive research programme in this whole area, with a clear understanding of the contribution such research will make to achieving the Treasury's central aim: "to raise the rate of sustainable growth, and achieve rising prosperity, through creating economic and employment opportunities for all".

Beyond that, the Treasury needs to commit itself to including a chapter on Resource Productivity both in the Budget and the Pre-Budget reports. It will also have a chance to 'raise the bar' for the rest of Government when the next spending Review gets underway in 2004. We would like to see departmental reports on the sustainable development aspects of their bids to Treasury published and properly debated.

It is clear there is an enormously important role for the Treasury in this area, building on the developments it has already initiated over the last few years. However, a public policy process of this kind impacts on all key departments, and demands strong leadership from the Government as a whole.

Jonathon Porritt
Chairman, Sustainable Development Commission
June 2003

Annex 1: Redefining the debate

INTRODUCTION

“Real progress cannot be measured by money alone. We must ensure that economic growth contributes to our quality of life, rather than degrading it.”

(Tony Blair, Foreword to *A Better Quality of Life*)

That’s what this paper is about. How well are we doing in “ensuring” such an important policy outcome?

First and foremost, this paper is an invitation to people to re-engage in a debate that has gone strangely quiet. It’s become one of those unnerving “elephants in the cupboard”: we all know it’s there, that it has to be addressed, but no-one wants to open the cupboard door!

Yet for many people (in the policy community, government departments, academia, NGOs and business), there’s a niggling feeling that we can’t really do justice to the concept of sustainable development unless and until we revisit one absolutely critical question: to what extent are economic growth and genuinely sustainable development compatible?

Towards the end of its life, the UK Round Table on Sustainable Development (our predecessor body) drew attention to the possible tension between the fourth of the Government’s four sustainable development objectives (“maintenance of high and stable levels of economic growth and employment”) and the first three (“social progress which recognises the needs of everyone”; “effective protection of the environment”; “prudent use of natural resources”). It identified this as a key challenge in sustainable development – as others have before and since – and recommended that the Sustainable Development Commission should address it directly.

This we have been keen to do from the outset. We established a Steering Group to develop a work programme in this area and commissioned some research from the Fabian Society and the Levett-Therival Consultancy, whose report, *A better choice of choice*, is available from the Fabian Society. A peer group of external reviewers have contributed generously to our internal debate.

We have also reflected on the importance of these issues in our work on energy, sustainable agriculture, regeneration and health (more details of which can all be found on our website), and in developing our own set of Core Principles for sustainable development, which appear on page 2 - 3 of this report.

Those discussions have persuaded us that there are no easy answers to that critical question, and we do not attempt to provide any in this paper. But we are convinced, as the general understanding of the whole area of sustainable development gradually matures, that this is now a more important question than ever before.

As Defra sets out on its review of the UK Sustainable Development Strategy, part of our contribution will be to ensure that the fundamental issues raised in this paper are a central element in that review process.

1. Policy context

If not an outright failure, the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002 was hardly a resounding success. Thinking back to the Earth Summit in 1992, or even as far back as the publication of the Brundtland Report in 1987, it’s hard to be anything other than deeply disappointed at the lack of progress made.



Indeed, some commentators have argued recently that things have actually gone backwards over the last decade or so, rather than moved forward. Where there was once a sense of real urgency and gathering purpose, the speeches of world leaders at Johannesburg were for the most part formulaic, unapologetic about a decade largely wasted, and despairingly short on binding commitments.

In 1990 Time magazine designated the Earth as "Planet of the Year", with a stern editorial mandate that "man must abandon the belief that the natural order is mere stuff to be managed and domesticated, and accept that humans, like other creatures, depend on a web of life that must be disturbed as little as possible." People sat up and listened. This time round, any number of equally apocalyptic warnings seemed to fall on far too many deaf ears.

This despite the fact that the usual swathe of Summit documentation emphatically confirms that almost all the environmental indicators regarding the state of the planet, and many (though by no means all) of the social indicators, show a deteriorating situation. Ten years on from Rio, the world is not a better place, notwithstanding real progress in implementing sustainable development strategies in key sectors and certain countries.

But it was George Bush Snr. who came up with the most redolent (and ominous) quote of the whole Rio Earth Summit when he declared that "the American way of life is not negotiable". Ten years on, it would appear that that it's the way of life of the whole rich world and its one billion citizens that has been declared "not negotiable". The intervening years have witnessed the greatest burst of consumer-driven materialism the world has ever seen, with no attempt made by any leading politicians anywhere in the world to question the wisdom, values or inherent unsustainability of the prevailing culture that has emerged. Addressing the symptoms is still very much the name of the game.

But both in the formal proceedings at Johannesburg and all the different side events, there was a strong focus on the theme of sustainable production and consumption. The resulting Plan of Implementation is particularly emphatic about the importance of sustainable production and resource efficiency - though a great deal less forthcoming about sustainable consumption!

Putting Sustainable Development at the Centre

The simple truth is that sustainable development has as yet had only a marginal impact on the way in which both nation states and international bodies conduct their affairs. Given that this was meant to be the decade in which the practice of sustainable development became commonplace, this has persuaded some people that it is the concept of sustainable development itself that has been found wanting. Some see it as too fuzzy (meaning all things to all people), some an oxymoron (believing that no economic development can be truly sustainable), and others a front for a "business as usual", extractive economy, now becomingly draped in little bits of superficial greenery.

Not surprisingly, the Sustainable Development Commission has little truck with any of these interpretations. Just as it is always easier to blame the messenger than to listen carefully to the news that he or she brings, so it is always more convenient to indulge in terminological disputation rather than confront the root causes of any looming crisis. The fault lies not in the concept of sustainable development itself, but in the difficulties we are all having in coming to terms with what it means for the global economy, for our dominant model of progress, and for our own personal way of life and future aspirations.

As far as the Sustainable Development Commission is concerned, sustainable development provides a framework for redefining progress and redirecting our economies to enable all people to meet their basic needs and improve their quality of life whilst ensuring that the natural systems, resources and diversity upon which we depend are maintained and enhanced for our benefit and for that of future generations. It goes without saying that this is a contested idea. It wouldn't be worth much if it wasn't. Putting its principles into practice demands debate, experimentation and continuous learning, and therefore depends on a rich democratic process to allow it to evolve and flourish.



To help ourselves get to grips with how this can be interpreted in practice, we've developed a set of Core Principles (see below) which we believe should provide the framework within which any new policy can be thought through and eventually put into practice. Without that kind of shared framework, it's very easy for politicians, NGOs and business people to find themselves talking about something completely different even when they are using the same language!

Principles for Sustainable Development

- **Putting Sustainable Development at the Centre**

Sustainable development should be the organising principle of all democratic societies, underpinning all other goals, policies and processes. It provides a framework for integrating economic, social and environmental concern over time, not through crude trade-offs, but through the pursuit of mutually reinforcing benefits. It promotes good governance, healthy living, innovation, life-long learning and all forms of economic growth which secure the natural capital upon which we depend. It reinforces social harmony and seeks to secure each individual's prospects of leading a fulfilling life.

- **Valuing Nature**

We are and always will be part of Nature, embedded in the natural world, and totally dependent for our own economic and social wellbeing on the resources and systems that sustain life on Earth. These systems have limits, which we breach at our peril. All economic activity must be constrained within those limits. We have an inescapable moral responsibility to pass on to future generations a healthy and diverse environment, and critical natural capital unimpaired by economic development. Even as we learn to manage our use of the natural world more efficiently, so we must affirm those individual beliefs and belief systems which revere Nature for its intrinsic value, regardless of its economic and aesthetic value to humankind.

- **Fair Shares**

Sustainable economic development means "fair shares for all", ensuring that people's basic needs are properly met across the world, whilst securing constant improvements in the quality of peoples' lives through efficient, inclusive economies. "Efficient" simply means generating as much economic value as possible from the lowest possible throughput of raw materials and energy. "Inclusive" means securing high levels of paid, high quality employment, with internationally recognised labour rights and fair trade principles vigorously defended, whilst properly acknowledging the value to our wellbeing of unpaid family work, caring, parenting, volunteering and other informal livelihoods. Once basic needs are met, the goal is to achieve the highest quality of life for individuals and communities, within the Earth's carrying capacity, through transparent, properly-regulated markets which promote both social equity and personal prosperity.

- **Polluter Pays**

Sustainable development requires that we make explicit the costs of pollution and inefficient resource use, and reflect those in the prices we pay for all products and services, recycling the revenues from higher prices to drive the sustainability revolution that is now so urgently needed, and compensating those whose environments have been damaged. In pursuit of environmental justice, no part of society should be disproportionately impacted by environmental pollution or blight, and all people should have the same right to pure water, clean air, nutritious food and other key attributes of a healthy, life-sustaining environment.

- **Good Governance**

There is no one blue-print for delivering Sustainable Development. It requires different strategies in different societies. But **all** strategies will depend on effective, participative systems of governance and institutions, engaging the interest, creativity and energy of all citizens. We must therefore celebrate diversity, practice tolerance and respect. However, good governance is a two-way process. We should all take responsibility for promoting sustainability in our own lives and for engaging with others to secure more sustainable outcomes in society.

- **Adopting a Precautionary Approach**

Scientists, innovators and wealth creators have a crucial part to play in creating genuinely sustainable

economic progress. But human ingenuity and technological power is now so great that we are capable of causing serious damage to the environment or to peoples' health through unsustainable development that pays insufficient regard to wider impacts. Society needs to ensure that there is full evaluation of potentially damaging activities so as to avoid or minimise risks. Where there are threats of serious or irreversible damage to the environment or human health, the lack of full scientific certainty should not be used as a reason to delay taking cost-effective action to prevent or minimise such damage

One key challenge for policy makers is to find a robust way of translating sustainable development principles into measurable and clear policy objectives and targets. Without this sort of analysis, it is difficult to introduce wide-ranging "polluter-pays" policies, or robustly apply the precautionary approach. Different ways of doing this should be more widely applied by Government departments. The Environmental Space Method (originated by the Wuppertal Institute in Germany and Friends of the Earth) uses estimates of environmental system limits and capacities to calculate acceptable resource take and pollution loads. It also determines "fair shares" for these environmental goods for present and future generations. Another complementary method is Ecological Footprint Analysis, pioneered in the UK by WWF, where energy, materials and other kinds of natural resource consumption are quantified and catalogued for particular countries, regions or cities.

As the Government's principal advisory body on sustainable development, we are also mindful of the Government's own "take" on sustainable development, as laid out in its *Better Quality of Life* strategy published in May 1999. It was from the Foreword to this strategy that the Prime Minister's words at the top of this paper were taken. The strategy itself is based on four principal Objectives, as laid out below:

Sustainable Development Objectives

1. Social progress which recognises the needs of everyone. Everyone should share in the benefits of increased prosperity and a clean and safe environment. We have to improve access to services, tackle social exclusion, and reduce the harm to health caused by poverty, poor housing, unemployment and pollution. Our needs must not be met by treating others, including future generations and people elsewhere in the world, unfairly.

2. Effective protection of the environment. We must act to limit global environmental threats, such as climate change; to protect human health and safety from hazards such as poor air quality and toxic chemicals; and to protect things which people need or value, such as wildlife, landscapes and historic buildings.

3. Prudent use of natural resources. This does not mean denying ourselves the use of non-renewable resources like oil and gas, but we do need to make sure that we use them efficiently and that alternatives are developed to replace them in due course. Renewable resources, such as water, should be used in ways that do not endanger the resource or cause serious damage or pollution.

4. Maintenance of high and stable levels of economic growth and employment, so that everyone can share in high living standards and greater job opportunities. The UK is a trading nation in a rapidly changing world. For our country to prosper, our businesses must produce the high quality goods and services that consumers throughout the world want, at prices they are prepared to pay. To achieve that, we need a workforce that is equipped with the education and skills for the 21st century. And we need businesses ready to invest, and an infrastructure to support them.

High and stable levels of economic growth

This paper focuses on Objective 4, around which there has been a continuing (though muted) debate since the strategy first emerged. While the majority of people in government, business, academia and indeed society at large are perfectly comfortable with the pursuit of "high and stable levels of economic growth", and have no reason to suppose there is any fundamental incompatibility between this and the other three Objectives, a vocal, durable minority see in that wording ambiguity, intellectual incoherence, and a continuing failure properly to understand the essence of sustainable development and the impact of economic growth as it is measured today.

The paper addresses the problems of our over-dependence on economic growth (and on GNP as its principal indicator) in Chapter 4. But right from the start, it's important to distinguish between different kinds of growth: growth in the amount of energy and raw materials we use in the economy; growth in the economic value generated (as measured by GNP); or growth (improvements) in economic welfare. Economic welfare (or wellbeing) is absolutely **not** the same thing as growth in GNP, and it's the assumption that increased wellbeing flows automatically from increased growth in GNP that lies at the heart of the dilemma over Objective 4. It doesn't. Yet government policy would appear to be geared permanently to the notion that it does.

We are not, incidentally, concerned about the commitment to 'high and stable levels of employment', which we too see as a critical element in securing a sustainable society. We would like to see these aspects of Objective 4 decoupled.

No one denies that securing the benefits that economic growth brings simultaneously generates both social and environmental externalities of varying kinds and severity. Beyond a certain threshold, the environmental and social costs effectively reduce economic wellbeing. Environmentalists argue that these externalities are now so grave (in terms of impact on eco-systems, resource depletion, climate change, biodiversity and so on) as to imperil Nature's self-regenerating capacities – and, in the process, imperil humankind's own capacity to improve our quality of life. Whilst Ministers are quick to distance themselves from the apocalyptic rhetoric of such an analysis, they now regularly acknowledge the seriousness of the situation and deploy a range of policy levers in an attempt to limit the impact of these externalities.

But just how effective are they in that mitigation strategy? Would they be better served by a more fundamental re-appraisal of the model of progress that served politicians pretty well in the second half of the 20th Century, but now appears to be losing steam? As Richard Reeves put it in the RSA Journal in 2002:

"In the last couple of decades, the very idea of progress has lost its moorings. The principal means through which western societies have advanced throughout modern history - economic growth - is faltering: richer no longer means better. We have lost the philosophical comfort of the Cold War, which at least provided a clear picture of what we were not. And science and technology now often appear as handmaidens to scary futures full of cloned people with microchips in their eyelids, rather than offering escape routes from disease and want. If we measure our progress in terms of our happiness or evaluation of our own wellbeing, we have not advanced for half a century."²

It's this kind of re-appraisal that has already been called for by Rowan Williams, the new Archbishop of Canterbury, in a number of thoughtful articles and sermons around his inauguration. The intemperate, defensive dismissal of these by Home Secretary David Blunkett demonstrates just how difficult it can be to persuade politicians to engage in deeper debate.

2. Resource Productivity

The two most familiar definitions of sustainable development (The 'Brundtland' definition: 'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs', and the 'Caring for the Earth' definition: 'improving the quality of life within the carrying capacity of supporting ecosystems') both see it as a challenge to reconcile or integrate human aspirations - 'meeting needs' or 'improving the quality of life' - with natural constraints - living within environmental limits, not foreclosing options for future generations. This tension between human aspiration and natural constraint is the distinctive essence of sustainable development. It is crystallised in the name itself: development that is capable of continuance into the long-term future.

The scale of human impact on the environment is determined by a race between economic growth and efficiency improvements. Growth means increasing consumption of traded goods and services.

All things being equal, this inevitably adds to environmental impacts and demands. In competitive markets, we can expect the economy to get progressively more productive per unit of environmental impact because, all things being equal, a company that can produce the same amount of output with less inputs and waste will reduce its costs and therefore be more profitable.

In broad policy terms, the Government's favoured strategy for squaring this particular circle (ie maintaining high and stable levels of economic growth but without the social and environmental externalities) is improving resource productivity. This simply means reducing the input of energy and raw materials required for each unit of output in the economy. Getting more from less, or, as the Government 'Quality of Life' report puts it: "getting the most out of finite resources, maximising the use of renewable resources and minimising waste." Resource productivity lies at the heart of the DTI's own sustainable development strategy, and featured prominently in the three big environment speeches that the Prime Minister gave in 2001.

This is a perfectly rational response to a set of environmental problems that are simply too visible, already too damaging, and far too threatening for the future any longer to ignore. It's also a seductive strategy in that it appears to offer an almost pain-free route to a "cleaner environment" without in any way jeopardising macro-economic priorities. One of the hardest tasks any democratically elected politician can be asked to perform is to call for curbs on forms of consumption – as witnessed by the extreme difficulty for politicians of all parties in facing up to the problems of road congestion and in accepting arguments from advisors for the introduction of road pricing schemes. It is far more attractive to concentrate efforts on the supply side (seeking technological changes that improve efficiency of resource use) than it is to confront problems of demand management. For New Labour, there's an added attraction in the whole concept of resource productivity in that it resonates powerfully with its own modernising, high-tech, business-friendly orientation.

Measures of progress

As the Government's annual *Quality of Life* report demonstrates, some dramatic step change improvements have been achieved. Since 1970, many polluting emissions (of sulphur dioxide, ozone-depleting gases, NO_x and carbon monoxide, for instance) have been substantially cut, though some are now creeping up again, albeit from a much lower base level, because of economic growth.

And the picture on overall resource consumption is also encouraging. A recent comparison of EU countries rated the UK as one of the top five in terms of resource use efficiency. Research by the Wuppertal Institute in Germany showed that the UK's 'Total Material Requirement' grew by just 12% between 1970 and 1999, whilst GDP increased by 88% during the same time, a 'decoupling' of economic growth and resource use that has surprised many commentators given the enormous difficulties the UK has had in implementing effective waste policies. (Much of the decoupling effect can be attributed to the shift from manufacturing to services which tends to have a far lower environmental impact per unit of GDP.)

In its recent sustainable development strategy, Defra has prioritised overall resource consumption as one of its own key indicators. Total resource use per capita in the UK has remained fairly stable over the last thirty years, despite steady increases in economic output – as indicated in Figure One. As of now, Defra has not taken the next obvious step, which is to set a target against that indicator for a gradual reduction in overall resource use.

UK resource use from *Foundations for our Future*, Defra, 2002.

With greenhouse gas emissions, the race so far is a dead heat: efficiency improvements are just about keeping pace with increases in consumption. In road and air transport, however, efficiency is not managing even this: increases in consumption are outrunning efficiency improvements. Even with predicted increases in the fuel efficiency of passenger planes, predicted increases in the UK's air traffic would offset between 30% and 50% of the UK's committed emissions reductions under the Kyoto protocol.



There is no guarantee that markets will reward improved resource productivity. For as long as environmental resources and impacts are cheap compared to other factors of production, there will be far more occasions where companies will improve their competitive position by increasing environmental impacts to reduce labour or capital inputs than vice versa. Celebrating the handful of counter examples is a 'Mississippi fallacy': concentrating on a few little boats struggling upstream while ignoring the vast volume of water pouring downstream.

It is commercially advantageous for a company to use a cheap factor of production less efficiently if doing so enables it to use an expensive factor of production more efficiently. High labour costs and low motoring costs make it sensible for companies to encourage employees to drive around much more than is socially or environmentally desirable. Over the last century, British agriculture became more cost efficient by substituting increasingly expensive labour with relatively cheap petroleum fuels and artificial fertilisers. Farms which lagged this trend tended to go out of business. Moreover, if market demand is shifting to intrinsically less resource efficient products, companies must respond.

Looking for a step change

As the Performance and Innovation Unit's own report on resource productivity³ *Making More with Less* made very clear, there is no hard, evidence-based reason for expecting - or even hoping - that the relationship between efficiency improvement and growth, which over the last 30 years has been very close to 1:1, should over the next 30 years become 4:1 or even 10:1 instead - the kind of factor improvements which sustainability requires - unless there is a step change in the way Government drives policy in this area.

It has been claimed that 'new' or 'weightless' economy could bring that 'step change'. But this is a field where hype outstrips evidence. Such evidence as we do have suggests that 'new' or 'weightless' activity generally occurs as well as 'old' or 'heavy' activity rather than instead of it; that the behavioural changes it makes possible often increase other areas of consumption; and that 'rebound' and behavioural effects can add to environmental impacts as readily as reduce them. The technologies which were supposed to achieve the 'paperless office' actually increased paper use by reducing the cost and time disincentives to endless redrafting and indiscriminate copying. The small body of real evidence currently available suggests that, likewise, better information technologies are increasing the appetite for face-to-face business meetings rather than replacing them, although there is now some evidence that the events of September 11th 2001 are beginning to change that.

Observers with any sense of historical perspective may conclude that the spread of digital technologies is evolutionary rather than revolutionary, and arguably less transformative or epoch-making than (for example) antisepsis, fossil fuel engines, printing or broadcasting. There is no evidence that digital technologies will of themselves significantly change the environmental intensity of the economy. They could enable social and/or behavioural changes to reduce environmental intensity - but only as a roll of film enables a photographer to make a picture. No amount of film makes a picture without a photographer and a camera.

The first priority for the government must therefore be to take resource productivity much more seriously. In that respect, the PIU's report was deeply disappointing. Having just about managed to capture the debate about resource productivity as it existed in the early 1990s (when the World Business Council for Sustainable Development first launched its drive for eco-efficiency), it faded gently away into a morass of process-intensive, bureaucratic recommendations that would have done justice to Charles Dickens' Circumlocution Office. Not surprisingly, this report would appear to have had no impact whatsoever on DTI, and not even to have crossed the threshold into the Treasury.

This would seem to be confirmed by the outcome of the Comprehensive Spending Review, announced in July 2002. As expected, Treasury was as keen as ever to stress the importance of increased productivity, but everything it had to say about this was about labour productivity (ie output per employee) with not so much as a passing reference to resource productivity. This after a detailed sustainability appraisal was carried out by each department as part of its 'bid' to Treasury - though the value of this commendable exercise is unknown, as Treasury has refused to publish any details.



Mystifying. According to DTI's own figures, "inefficient use of resources is estimated to cost UK business in excess of £20bn per year. And 30% of the energy used in the UK every year – the equivalent of £12bn – is wasted."⁴ It's hard to imagine any other policy area where the Government's response to around £30bn going down the pan is so lackadaisical and disconnected – with the one important exception of the Climate Change Programme.

It's not that the policy instruments for driving dramatic improvements in resource productivity aren't to hand. Governments are under growing pressure for instance to phase out historical subsidies that promote inefficiency and unsustainable production processes. Globally, this is a massive problem (or a massive opportunity, depending how you look at it), and one which certainly warrants much closer scrutiny by bodies such as the World Trade Organisation, UNEP and the OECD.

Eco-taxes and other economic instruments

But the most important feature in any resource productivity strategy is to internalise some of the cost that is currently externalised, so that the price we pay for any product more accurately reflects the true costs of its production. The Government already uses a range of eco-taxes and levies (such as the Landfill Tax and the Climate Change Levy), and has developed some real expertise in both Treasury and Defra. But the current, net effect of the Government's deployment of these measures falls far short of what is required.

In a piecemeal way, this is clearly recognised by Treasury officials. The Pre-Budget Report⁵ (in November 2002) contained a detailed and impressive analysis of the different policy areas where economic instruments of one kind or another are being deployed to help meet the Treasury's Public Service Agreement "to protect and improve the environment by using instruments that will deliver efficient and sustainable outcomes through evidence-based policies". In some areas, decisive action is being taken: landfill tax, for instance, will increase by £3 per tonne per annum (from 2005 onwards) until it reaches the rate of £35 a tonne - still much less than in some other European countries, but a clear enough signal of the need for dramatic changes in our waste management strategy. In other areas (such as pesticide reduction, or ending the anomaly that no taxes are paid on aviation fuel), it's all talk still, with no real intent to get to grips with the different problems.

Beyond the use of the price signal, governments can intervene in the economy to help establish new markets or to help establish more level playing fields by subsidising eco-efficient technologies. Initial efforts to establish a market for wind power in the UK (through the Non-Fossil Fuel Obligation) provided one highly successful example of such intervention.

These and many other options were reviewed for the Economic and Social Research Council by Imperial College and the Fabian Society in January 2001 *Innovation and the Environment: Challenges and Policy Options for the UK*. Its overall conclusion was damning. It cites as examples of this the fact that both the 1998 Competitiveness White Paper and the 2000 Science and Innovation Paper almost entirely ignored the potential and importance of environmental technologies.

This has become a highly politicised area. Any and every pollution tax is of course fiercely resisted by industry, as with the Climate Change Levy or the aggregates tax, for example. Householders only see the higher taxes - they do not generally understand or benefit from the few lower tax rates for doing the environmentally correct thing - for example, using cleaner fuels at much lower duty. What is missing is a coherent strategy to develop the potential for incentives or complementary tax breaks and credits - reinvesting the pollution revenues appropriately - or to direct public sector investment to encourage companies and households to develop, sell and buy environmentally-friendly goods, products, services and infrastructures. The Treasury's Green Technology Challenge, based on a more comprehensive Dutch model, was a start. But much more needs to be done.

Again, theoretically, HM Treasury would appear to be up for this. In November 2002, it published *Tax and the Environment: Using Economic Instruments*⁶, to serve as a five-year progress report on its 1997 *Statement of Intent* on environmental taxation. That document boldly stated: "Over time, the Government will aim to reform the tax system to increase incentives to reduce environmental

damage. That will shift the burden of tax from "goods" to "bads"; encourage innovation in meeting higher environmental standards; and deliver a more dynamic economy and a cleaner environment, to the benefit of everyone."

The politics of resource productivity

Six years on, it's still a very patchy picture that emerges. And the principal reason for this (to be fair to a government that is clearly doing more in this area than any preceding government) is that taking resource productivity seriously (ie systematically driving down resource and energy consumption across the entire economy) is not as pain-free as it first appears. However disconcerting it may be for relatively affluent, well-educated environmentalists, most people not only enjoy the benefits of a cheap-energy, consumer-driven economy, but would appear to be relatively unconcerned about the impact of this on future generations. They are not out dancing in the streets at the news that such an economy's days are numbered.

Decades of perverse subsidies and the licensed externalisation of costs to keep prices low has left a mountain of market failures that people have got used to and resent having taken away from them. The fuel tax protests of 2000 are etched in the memory of civil servants and ministers alike, as an example of what happens when an eco-instrument is deployed insensitively or punitively. The fact that no one in Government could summon up the courage to defend the fuel tax escalator, as a key policy measure in the Government's overall transport and climate change strategies, was both deeply regrettable and an important reminder that even something as "simple" as resource productivity demands consistent, sustained and inspirational political leadership. Of which, on that occasion, there was none.

But let us assume for one moment that these missing ingredients (leadership, urgency, transparency, cross-departmental co-ordination etc) are injected into the Government's overall approach. What might then be expected in terms of the scale of resulting improvements in resource productivity? There are widely differing estimates in answer to this question, depending on the particular resource input under consideration (different sources of energy, precious metals, raw materials, chemicals, minerals, aggregates and so on), the degree of "techno-optimism of those making the estimates, or the choice of aggregate or "proxy measures". (The DTI, for instance, is moving to adopt two proxy indicators for resource productivity: greenhouse gas emissions relative to GDP, and the volumes of waste disposal relative to GDP).

Some of the most optimistic assessments come from a group of American visionaries including Amory and Hunter Lovins *Factor Four: Doubling Wealth, Halving Resource Use*, Paul Hawken's *Natural Capitalism*, Lester Brown's *Eco-Economy* and John McDonough and Michael Braungart's *Cradle to Cradle*. Most European experts are rather more measured, as reflected in Paul Ekins's authoritative overview, *Economic Growth and Environmental Sustainability*, and Friends of the Earth's *Tomorrow's World*. Ernst von Weizäcker (as co-author of *Factor Four*) and colleagues at the Wuppertal Institute are perhaps the most upbeat of the Europeans.

Economists also point out that governments have not fully understood how to use the policy levers available to them to drive a fully-fledged efficiency revolution. As Professor David Pearce puts it: "Energy productivity is significantly a function of the price of energy. If the price of energy has not been allowed to rise to its social cost level, we can hardly be surprised that energy productivity has not increased as fast as it might have done. So, whatever the past record on energy productivity, it ought not to tell us much about the future potential for productivity to outstrip demand."⁷⁷

Inevitably, there's a lot of confusion here between growth in biophysical throughput (a volumetric measure of energy and raw materials) and growth in the monetary value of increased production (a measure of value, captured (albeit misleadingly) in GNP). Theoretically, initiatives to 'dematerialise' the economy could turn out to be so successful, and efficiencies in resource use so substantial, that GNP could increase indefinitely IF dematerialisation proceeds at a rate equal to or greater than the growth of GNP. It must be stressed that this is only a theoretical possibility!



However, the overwhelming consensus amongst academics, think tanks and NGOs is that resource productivity will not, on its own, deliver the desired reconciliation between the pursuit of economic growth and the non-negotiable imperative of learning to live within the Earth's biophysical constraints and carrying capacities.

3. Alternative strategies

Which prompts the obvious question: what else can we do? In the broadest possible terms, we are still dealing with a set of variables first brought together in a simple equation by Paul Ehrlich in the late 1960s: $I = P \times C \times T$, where environmental impact (I), our collective "footprint" on the Earth's resources and natural systems, is a function of the number of people (P), their level of per capita income (C), and the technological efficiency with which they generate that per capita income (T).

As we've just seen, T is not as easy to influence as is often assumed. And as we'll see in a moment, increasing people's material prosperity remains the cornerstone of every political system everywhere in the world – and in free market democracies, it remains the *sine qua non* of getting elected. Which is why that generation of environmental activists that cut their teeth on the "Limits to Growth" debate in the 1970s steadfastly assert that population must be brought back into the debate.

Given the analysis of the scale of the challenge we now face, one might imagine that politicians the world over would be doing everything in their power to slow the growth in human numbers. In a number of countries, they are, often controversially (as in China), or completely unrecognised (as in Bangladesh). Unfortunately, the United Nations Population Fund remains seriously under-funded, with hundreds of millions of women still denied the right to manage their own fertility through improved education, health care and access to contraception. With the exception of a small group of dedicated NGOs, there's very little pressure on governments to address this underfunding, with almost all right-thinking environment and development groups barely able to mention population at all. Future generations may deem it somewhat peculiar that the agenda for the 2002 World Summit on Sustainable Development took no serious account of population issues.

This has become taboo territory for politicians, banished forever to the realm of the too big, too controversial and much too much like hard work to develop appropriate interventions. If anything, politicians in the developed world are more concerned about declining fertility and the impact this may have on future economic prospects. Replacement fertility requires 2.1 children per woman, and most European countries now have fertility levels well below that, with Italy the lowest at just 1.2 children born to each Italian woman. In fact, this phenomenon is not restricted to OECD countries. Around 60 countries have fertility rates below replacement level, leading some demographers to talk of a process of "cultural diffusion" gradually spreading across the entire world. This may mean that global population stabilizes at considerably less than is currently predicted at around 9 billion. Other demographers strongly disagree, pointing to very high levels of population growth in most Muslim countries and in Africa. Either way, politicians are disinclined to include population policy in their mix of interventions to promote more sustainable economies.

Addressing sustainable consumption

If it's politically difficult to drive the kind of resource productivity revolution that is needed, and politically off-limits even to talk about population, then we have no choice, by a process of logical exclusion, to return to the C variable – the level of consumption/affluence/per capita income in both developed and developing countries. The recommended prescription as far as radical environmentalists are concerned is equally simple: people in the rich world must not just consume in more socially and environmentally responsible ways but must be persuaded to consume less. To bring that about, the hypothesis is advanced that people who have reached a certain level of material comfort and security can (and should) be persuaded that their future quality of life resides in freeing themselves of the trappings of consumerism and in opting instead for low-maintenance, low-throughput, low-stress patterns of work, recreation and homelife.



The clearest manifestation of this has been described as "downshifting", detected in a growing number of people quietly reconfiguring their work to spend more time at home, with their children, doing other things entailing a lower income but a higher quality of life. The fact that this is a predominantly middle-class phenomenon does not invalidate its significance, but it inevitably raises questions about its usefulness in policy-making terms. With levels of poverty as high as they still are in the UK (and indeed in many developed nations, let alone in the developing world) alternatives to economic growth are non-starters unless underpinned by an equally strong commitment to eliminate poverty (particularly amongst the young and the old) as espoused by more conventional political paradigms. The Labour Government must certainly be given credit for taking steps to improve the economic welfare of the poorest in society - the essential precondition for a better individual quality of life. The Working Families Tax Credit, the minimum wage, and some "stealthy" redistribution by Gordon Brown have all boosted the incomes of the less well off. The gap between the poorest and the most affluent is still a yawning gulf, but it is at least being addressed. The Government would not want to see such measures jeopardized.

What's more, people still put enormous emphasis on the importance of financial security and money as critical ingredients in assessing their own quality of life - as can be seen in the latest survey of public attitudes on the quality of life and the environment.

Consuming less?

Not that a debate about the desirability of downshifting is likely to materialise either within the mainstream parties or through the mainstream media. Indeed, the broad theory that "the rich world should consume less" for compelling environmental, social justice and moral reasons, is no less taboo an area of political discourse than population. And there are some powerful reasons why this should be:

3.1 However uneasy people may be about the current model of free market capitalism, it stands up well in comparison to any other political/ideological alternatives. Communism (or indeed any variation of command and control socialism) is entirely discredited - not least (from the sustainable development perspective) because of its horrendous environmental record which has left many Eastern European countries with a devastating and life-threatening legacy.

3.2 There are significant macro-economic implications in any low-consumption economic model. Lower levels of economic growth (the inevitable consequence of large numbers of people opting for lower levels of economic activity) would mean lower tax revenues, which in turn would necessitate lower levels of public expenditure on key public services such as health and education, as well as lower levels of capital expenditure on things like transport. The negative impact of this on society and people's individual quality of life is as much of concern to advocates of genuine sustainable development as the negative impacts on the environment of current levels of economic growth.

3.3 Despite more than twenty years of lively debate about one of the earliest definitions of sustainable development ("sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs"), as first used in the 1987 Brundtland Report, there is no consensus either on the "boundary conditions" to be used in defining human needs (the vexed debate about what is a "need" and what is a "want" rumbles inexorably on), or on the potential usefulness of the concept of human needs in promoting better policy making.

3.4 As per the discussion above, it is widely held that the concept of "voluntary simplicity" may well have considerable resonance with a relatively small number of people in rich northern countries, but is unlikely to have much purchase either in OECD countries intent on addressing residual poverty within their own borders, let alone in global terms, where the principal challenge resides in the fate of the world's poorest 2 billion people who live on less than \$2 a day. (Such a crude generalisation cannot of course do justice to the rich debate about the meaning of poverty. Average income is widely and conveniently used as a proxy for human wellbeing/happiness, notwithstanding the evidence that many people in developing countries who are leading secure and dignified lives in



rural areas, but on very low incomes, are often a great deal "happier" than those on higher incomes in hellish urban slums.)

3.5 From a demand-side perspective, there would appear to be very little public support for "consume less" political alternatives. Green parties the world over have succeeded in attracting significant minorities of voters, but have rarely seen that percentage move above 10% even in the world's richest countries, which one might reasonably assume to be more open to the concept of reaching some kind of "affluence threshold", beyond which further increases in consumption or material standard of living bring diminishing utility.

As regards the developing world, there is very little if any evidence that those countries are prepared in any way to forego the delights of Western consumerism which they see paraded in front of them through a constant battery of mass-media programming and advertising that reaches into the poorest corners of the poorest countries.

3.6 The concept of the "sovereignty" of the individual consumer has taken a firm hold on both political and business mind-sets. "The consumer is king/queen" is not just a clapped-out mantra that consumer-facing companies trot out at every available opportunity, but a core ideological tenet of free market democracy. The fact that this often obscures critical realities about the nature of "free choice" in today's economy is deeply regrettable, but hardly surprising – a point to which we shall return later in this paper.

3.7 The whole question of employment must also be factored in here. To what extent would lower levels of consumption impact on employment levels in both rich and poor countries? As we'll see in section 4.4, environmentalists may well have robust and entirely legitimate concerns about the compatibility of genuinely sustainable development and "high and stable levels of economic growth", but they feel very differently about "high and stable levels of employment".

Though there's substantial literature in the Green Movement about the importance of thinking more in terms of sustainable livelihoods and access to high-quality, fulfilling work, rather than straight numbers of jobs, the social and redistributive benefits of employment in the formal economy still feature large in almost all accounts of moving towards a more sustainable future.

All in all, the notion that the "rich world should consume less" (if only to allow the poor world more breathing space for its own consumption) rings few political bells. Indeed, Lewis Mumford's prediction that consumer-led capitalism would make virtues of at least five of Christianity's seven deadly sins (pride, avarice, lust, envy and gluttony) would appear to have come all too true.

Consumption-driven economics is underpinned by the seductive notion of unlimited consumption. There just can't be too many varieties of cat food on our supermarket shelves, too many exhortations to people to go further into debt or too many new ways of persuading people they're not properly fulfilled without the latest gizmo or throw-away product. The concept of deferred gratification seems unlikely to make any kind of a come-back in the foreseeable future. And yet, simultaneously, most people would intuitively acknowledge that development and restraint often go hand in hand. You can indeed get "too much of a good thing", whether we're talking chocolate, alcohol, houses in the South East or cars on the same road.

Such arguments provide a formidable set of impediments to engaging in the "consume less" debate. If politics is the "art of the possible", then the complexities of espousing a low-consumption economic model, or a "make population a priority" world view, must be weighed on the scales against the complexities of serious resource productivity. After fifty years of aspirational, growth-at-all-costs, no-limits individualism, the available psychological terrain for politicians currently to operate within in pursuit of sustainable development is severely constrained. Rather than "consume less," the thrust of any new debate here is likely to be "consume wisely". That may not be sufficient, but it's all that would appear to be available right now.

4. Key debates

And that's precisely why our political leaders now carry such a weight of responsibility in opening up that terrain, securing in the process greater openness to the need for more radical change in the future. There is not just an urgent job to be done right now in maximising the policy opportunities around resource productivity and more sustainable economics, but an equally important job in bringing electorates into a better appreciation of the scale of the challenge ahead. Today's politicians must build the platforms from which tomorrow's politicians can push out further and much faster into today's no-go areas.

The great American economist Lester Thurow once wrote: "The proper role of government in capitalist societies is to represent the interests of the future to the present". That's proving a pretty tough challenge for governments all over the world. Few of us take the future seriously enough. Perhaps we really are suffering from "temporal exhaustion" – so out of breath from coping with the sound and fury of the present that we have no energy left over for visioning the future.

There are four main areas, all interconnected, which we believe warrant strategic engagement on the part of our political parties today – all of which are covered in greater detail in the background report *A Better Choice of Choice*.⁹

4.1 Wellbeing

For governments, the end goal of their use of their democratic mandate is to improve people's wellbeing. The means available to them for achieving this are many and various, though securing as high a level of economic growth as possible has become perhaps the most important.

Indeed, it's become so dominant that it's easy to forget that the purpose of this economic growth is in fact to improve wellbeing. Economic growth may well have served post-war politicians well as a reasonably accurate proxy for human wellbeing or contentment, but now that the environmental, social and psychological externalities entailed in generating decades of economic growth in that way are weighing more heavily on people than ever before, there is a pressing need to reopen the debate about economic growth (see 4.4 below) and wellbeing itself.

Survey data regularly show that there is no straightforward connection between levels of affluence and personal happiness. More financial security does deliver more well-being for the less affluent, but the rich are not reliably made happier by having much more of it than the rest of us. A host of studies in the US show that the percentage of people describing themselves as 'very happy' has declined since the late fifties, despite the fact that personal real income has more than doubled since that time.

There is plentiful quantitative and qualitative evidence of a broader issue – that rising average affluence in the West has not been associated with the elimination of many psychic ills. Money can buy us goods and services undreamed of in previous centuries, but it can't buy love or meaning, or at least not for long and not reliably. The pursuit of financial security is often associated with declining quality of life in much of the West. There is a large amount of US literature on the reduced wellbeing of family life in the middle classes as well as of the working class as a result of intensified workplace pressures over the last 20 years.

In the UK, the latest ESRC study on modern employment trends indicates a rising dissatisfaction with working life over the past decade. Oliver James summarises a mass of research on the psychology of affluent societies, concluding that rates of depression, suicide and drug dependence are increasing because the competitive pressures of modern life combine to produce unhappy, tense and rancorous personalities. (Oliver James has also asserted that "the closer a nation approximates the American model a highly advanced and technologically developed form of capitalism the greater the rate of mental illness amongst its citizens"). Richard Wilkinson of Sussex University has documented the negative health effects on society of relative deprivation and relative income inequalities,

emphasising that it is the distribution of assets and capabilities that counts for wellbeing, not absolute levels of income.

These studies and many others suggest that conventional growth produces many unwanted side-effects and is associated with diminishing returns in many respects. Together, these add up to a body of evidence that, while not (yet) associating GDP growth with declines in overall quality of life, does associate it with limits to the satisfactions that can be gained from many forms of consumption growth, and with damage to the social and environmental basis of wellbeing.

The Index of Sustainable Economic Welfare

A number of efforts have been made to come up with a better way of measuring wellbeing, perhaps the best known of which is the Index of Sustainable Economic Welfare (ISEW). ISEW is an attempt to make a better measure of welfare than GDP (by adding to it some measure of untraded benefits such as unpaid domestic work, by subtracting the value of activities which are traded but do not contribute to human welfare, such as the treatment of pollution related illnesses, and by correcting for income inequality). The UK's ISEW rose until the mid 1970s, then stayed level, and then began to decline again (while per capita GDP continued to rise.) ISEWs calculated for several other developed countries all show the same overall pattern of levelling off and then decline. This overall shape is robust over a wide range of weightings of the contributory factors - a partial answer to valid criticisms that ISEW is a methodological mongrel, made by arbitrarily aggregating incommensurable (and often individually questionable) indicators of very different kinds of things.

It is hard to validate the ISEW curve against comprehensive studies of perceptions of quality of life, since few surveys have been done that measure changes in people's views of their well-being. However, the accumulated data from many theoretical, quantitative and qualitative studies that have examined aspects of quality of life do suggest that the ISEW's picture of a sizeable gap between GDP per capita measures of welfare and 'real life' welfare is on the right lines.

The relationship between utility and happiness is complex. People can be happy with very little wealth / income / possessions, or miserable with plenty. As a number of our external peer review group have pointed out to us, there is a plethora of different studies in this area, some of which support the view that increased consumption does not necessarily engender increased wellbeing (or happiness), and some of which conclude exactly the opposite! To derive very strong conclusions from the existing literature would therefore be unwise.

There is much greater agreement on certain aspects of this debate. There are much clearer links, for instance, between unemployment and unhappiness. And everybody accepts that some of the things that matter most for wellbeing are not tradable - and that some kinds of economic activity can undermine these untraded benefits. Research for the Henley Centre and others has demonstrated that many of today's most seductive consumer trends are tending to isolate people rather than bring them together. The TV is no longer a substitute 'family hearth', with individuals in a modern household more likely to be 'going solo' on their own TVs, computers or games consoles. And the idea of the shared family meal is less and less commonplace.

These new patterns of consumption are therefore very hard to read. Most research indicates that peoples' quality of life is determined far more by the quality of their working life, their family life and their overall social relationships - all seem to be more important relatively than the amount of consumption they are able to enjoy. And if that consumption is increasingly eroding the quality of those other aspects of overall wellbeing, then it is clearly less beneficial than it might at first sight appear. As Ian Christie and Ken Worpole put it: "One deeply uncomfortable message for the entire culture of policy-making is that privatisation and individualisation of our ideas about "quality of life" have developed to such an extent that it is now extremely difficult for politicians of any stripe to articulate a vision of the common good, and the dependence of individual well-being on the health of the social and environmental commons. Yet the travelling political issues confronting us demand precisely that we do make the connections between private and public quality of life."¹⁰



One might have some sympathy for those politicians who dismiss these debates about wellbeing/ quality of life as somewhat ethereal – were it not for the fact that it's principally the fuzzy thinking on their part (about the difference between means and ends) that leaves most citizens so disengaged and confused.

Notwithstanding the nervousness that many neo-classical economists feel about the whole question of human needs (seeing such a notion as both subjective and deeply flawed by comparison with empirical measures such as market choice), it's important to reassert the linkage between wellbeing and the satisfaction of human needs. In an excellent paper on consumption, sustainable welfare and human needs, Tim Jackson and Nic Marks emphasise how important it is to start "from the assumption that human wellbeing is related to the satisfaction of human needs. The welfare of an individual may be said to be high when that person's needs are largely satisfied. Collective welfare is high when the needs of the population generally are satisfied. Conversely, individual or collective welfare is low when many such needs remain unsatisfied."¹¹

4.2 Consumption

The relationship between wellbeing and consumption is a close one. By and large, conventional economic thinking (and our own reflex instincts) tells us that the greater one's per capita income, the greater one's purchasing power, the greater one's opportunity to go out there and consume, then the greater the amount of utility/wellbeing we will derive from that consumption. (The amount that people pay for any product or service tells us what that product or service is worth to them.)

People consume more because they believe they will be happier. Looking at survey figures from around the world, there is an indisputable correlation between subjective perceptions of well-being and per capita income. But research by Robert Lane, Ed Diene and Ruut Veenhoven clearly demonstrates that, beyond a certain point, that correlation first weakens and then disappears. People may set that threshold at different levels, but it's clear that the law of diminishing returns applies as much here as in any other area.

In *The Loss of Happiness in Market Democracies*,¹² Robert Lane describes this as "the waning power of income to yield that ephemeral good utility", and castigates both academics and politicians for being in thrall to that "economistic fallacy" that, beyond poverty or basic subsistence levels, higher incomes will automatically increase levels of subjective wellbeing.

Ever since the ground-breaking work of Abraham Maslow, psychologists and alternative economists have set out to demonstrate that far from there being any automatic increase in wellbeing for every increase in levels of consumption, much of our current consumption is turning out to be a very inadequate surrogate for meeting human needs in a more satisfying, durable way.

It's important to be clear about what we mean by subjective wellbeing. In the consultancy work they have done for the Sustainable Development Commission, Roger Levett and colleagues have come up with a simplified model, building on the work of Manfred Max-Neef, demonstrating the different needs that are being met by the goods and services that people buy.

The first category of benefit is **subsistence** - the wherewithal of basic survival. Subsistence needs are determined by human physiology. Humans can only live healthily and comfortably within a narrow range of conditions - ambient temperatures, amounts of different gases present and absent in the air, fresh water, nutrition, protection against the weather, predators, parasites and criminals. Where conditions fall short of these standards, consumption can improve quality of life (for example ability to buy more food, clothing, space heating and to secure one's home and basic possessions.) But once these standards are met, extra consumption provides no extra subsistence benefits. There is no subsistence advantage from eating more vitamins than the recommended daily intake, wearing more clothes or heating the house above a healthy comfortable temperature. From the point of view of subsistence, 'enough is as good as a feast'.

The second category of benefit is **experience**. Consumption can keep rising well above subsistence levels and keep providing more comfort. Increases in the variety, quality and amounts of food and

drink keep increasing pleasure for a long time, and the same goes for many other physical comforts and sensual pleasures. But here again, there are ultimately physiological limits. The number of pleasure receptors in our brains, and the rate they can 'fire', are finite. More stimulation encounters diminishing returns. Sensual overindulgence eventually loses its savour and feels like a chore.

So for both these benefits, physiological factors impose 'limits to growth' - points beyond which further increases in consumption produce no further increase in wellbeing. Most of the world's major belief systems in fact argue that increases in consumption coarsen and corrupt human nature well before this point.

The third category of benefit is **belonging**. Consumption contributes to group identity through having enough, and having the right type, of goods. 'Enough' goes up with wealth. The size of car that confers a given social status in a company car park or outside a school has escalated inexorably: people who wish to claim a place in the pecking order by such means have to go upmarket every time they replace their car. Type will vary with fashion, but will also tend to become more expensive as wealth increases. This would appear to be a zero sum game: having the right (expensive) trainers in 2002 probably provides no more sense of group identity than having a pair of (cheaper) Doc Martens in 1980.

The fourth category of benefit is **self-actualisation**. The only kinds of benefit which seem potentially unlimited are self actualisation benefits that come from challenges one sets oneself: for example, to improve one's personal best at some sport, or to play a musical instrument better and better - with the aim not of 'beating' other players but of coming ever closer to the soul of the music. Consumption obviously plays a role in these (better sporting equipment or musical instruments), but quality takes over from quantity.

Table 1. Expanded model of consumption and quality of life

	Physical goods	Services from goods	Quality of life benefits				
			Subsistence	Experience	Belonging	Self-actualisation	
Spending power	CD player	Music reproduction	-	Enjoyment of music	Participation in cultural group	Personal experiment / taste in music	Happiness
	Washing machine	Clothes cleaning	Hygiene	Comfort	Compliance with social norms about grooming	-	
	Clothes	Being clad	Protection against weather	Comfort	Expression of group identity	Express individual taste	
	Car	Mobility: controlled environment	Access to life support basics	Comfort, power, isolation	Expression of status; membership of 'haves'	Autonomy and choice of address	
	Food	Eating	Nutrition, support to health	Taste, pleasure in eating	Cultural / traditional / religious affiliation	Enjoyment of different tastes	
	House	Space for living and storing possessions	Shelter, security	Comfort, convenience, delight	Neighbourhood, way of life	Architectural taste	

One of the most important points Table 1 brings out is that a single act of consumption may produce a range of different benefits. If we want to change particular consumption patterns, we need to consider all the benefits affected. For example, if we want to encourage less driving, we need to consider not only the rational or utilitarian benefits from driving, but also the irrational ones - in particular, the extraordinary degree to which social status, economic success and personal potency are now symbolised and expressed by possessing and displaying particular types and brands of car. This does not mean it is impossible ever to reduce car use, but rather that, in order to succeed, 'rational' transport policy aimed at reducing the objective incentives to drive needs to be accompanied by quite different kinds of policy intervention designed to alter perceptions of cars and provide alternative sources of the irrational/subjective benefits currently attached to the car.

Such an approach also helps to explain what some have described as the "Mr Toad Syndrome". In *Wind in the Willows*, Mr Toad was quite happy with his narrowboat until he set eyes on a passing horse-drawn caravan, and quite happy with his caravan until he saw a car. These days, of course, one car leads inevitably to another (bigger, faster, snazzier) car. Comparisons of the perceived happiness of rich and poor in different countries demonstrate time after time that it's where people place themselves on the ladder of relative affluence that counts, rather than what they consume in absolute terms.

As Richard Easterlin puts it: "Even though rising income means people can have more goods, the favourable effect of this on welfare is erased by the fact that people want more as they progress". He refers to this effect as "the hedonic treadmill", as our desire for more constantly outstrips what we already have.¹³



Not unreasonably, critics of our consumer culture have questioned the degree to which this sense of 'relative dissatisfaction' is in fact created (or at least inflated) by the advertising and marketing strategies of those who stand to benefit most from persuading people that they're not quite as happy as they could be – and would be if they bought x or y. The power of marketing to create demand is of course hotly contested, but any parent who's had to watch Saturday morning television with their young children will be deeply unimpressed by the marketing industry's expressions of innocence in this regard.

George Monbiot puts it as follows:

"Plenty of evidence suggests that as we become richer, we become less content with ourselves. It is incorrect to say that necessity is the mother of invention. In the rich world, invention is the mother of necessity. When people already possess all the goods and services they need, growth can be stimulated only by discovering new needs. Advertising creates gaps in our lives in order to fill them. We buy the products, but the gaps remain."¹⁴

4.3 Choice

For perfectly sound ideological reasons, the concept of "free choice" came to define one of the key battle zones of the Cold War: on one side of the divide, in the West, people were free to choose from a range of goods and services, subject only to availability and their own purchasing power; on the other, in the former Soviet Union and communist countries, there was no free choice. You got what someone else determined you should get. You couldn't even choose the politicians who made those determinations on your behalf.

Even now, with the Cold War behind us, the privilege of choice features high in the pantheon of capitalism's many benefits. Some economists look on the whole process of economic development as anything that increases peoples' options. To espouse political positions that appear to limit choice (as the Green Parties in Europe often do) is a high-risk and politically unpopular strategy. For the vast majority of people, it's certainly counter-intuitive to suggest that improvements in our quality of life might come about as a consequence of restricting rather than expanding choice.

Yet it's clear that increasing individual choice does not automatically make us better off. There are several reasons for this. First, there is no such thing as a completely 'free' choice. Every choice we make is conditioned and constrained by the choices others have already made, and in turn conditions future choices. Individually sensible choices to travel by car lead cumulatively to traffic-clogged degraded inner cities, car-dependent suburbs and amenities accessible only by car - a mess nobody wanted or intended, in which nobody can access what they want reliably and easily, those without cars are further disadvantaged, and fossil fuel waste is structured in to lifestyles.

Choices come in 'package deals'. Claiming that a policy or decision 'increases choice' should be the beginning not the end of debate. Are the kinds of choice being increased ones that really matter? What other choices do they curtail or foreclose; can we be certain the gains are worth the losses?

To express this, our consultants have developed the idea of the choice set - the set of interconnected acts of consumption, and other behaviours that come with them, and the production and infrastructure that supports them. Each choice set - the choices that are available - comes with a constraint set - the choices and options which it excludes.

Transport choice

The current transport 'choice set' maximises:

- Freedom to drive a car wherever and whenever you want. Almost all public roads are open to car traffic. Restrictions, conditions and charges are rare exceptions requiring special justification;
- Low cost personal mobility. Once you own a car, you can go a long way in it per pound of expenditure. People with use of a car enjoy extraordinary - historically unprecedented - freedom of mobility;
- Ability to get anywhere with a road;



- Ability (for those with cars) to choose between competing providers of many services.
- The attempt to reduce congestion (where possible), which is now an increasingly serious constraint as far as UK business is concerned.

But these choices preclude others. Very few people can now choose to:

- Live free from traffic noise and pollution and with children able to play safely in front of their homes;
- Get access to a satisfactory range of daily amenities on foot without resort to any motorised vehicle;
- Walk or cycle with much safety or pleasure;
- Make most journeys reliably, without having to make allowance for unpredictable and unavoidable problems and hold ups.

Most households no longer have the option to live a normal full life without owning at least one car. Those who cannot afford a car, or cannot drive because of disability or age, are excluded from areas of normal life, without any choice in the matter. Moreover, the patterns of behaviour that result from high car ownership deprive us of other social choices:

- Traffic is the biggest environmental problem in many town centres, and unrestricted car-based mobility the biggest threat to the traditional multifunctional town or city centre. Car use is thus a 'double whammy' against urban vitality;
- Hypermobility undermines community vitality;
- Personal transport accounts for over a quarter of greenhouse emissions and is still rising. The freedom to drive is one of the main threats to future climate security.

Apparently innocuous and perfectly rational choices by individuals - to buy and drive cars more, as other transport options appear less able to provide access to amenities wanted - led cumulatively to disbenefits which nobody consciously sought. At no stage was an explicit decision taken that the benefits justified the disbenefits. In consciously exercising our individual, incremental choices, we have sleepwalked into some larger choices and foreclosed others without even realising it. In this respect, the market can be an 'invisible elbow', shoving us into an unwanted corner, as well as Adam Smith's 'invisible hand.'

Individual rational choices do not necessarily add up to the best overall outcome because of the way each choice alters the choices available to others. For example, each perfectly sensible choice to make a journey by car instead of bus will slightly:

- Reduce the fare income to the buses while increasing the congestion they face, thus making the service a bit less effective;
- Reduce the safety and attractiveness of cycling;
- Encourage shops and other amenities to move to car-accessible rather than bus-accessible locations;
- Encourage better-off people to move out of more heavily trafficked central areas to suburbs with better car access to the new amenities.

Each of these changes will encourage more people to switch from bus to car. The cumulative effect of these individually tiny but self-propagating and reinforcing changes is the apparently inexorable trend to urban flight, "doughnut development" (with dead zones in the middle of our cities), and increasing car dependency.

Moreover, no exercise of individual choice can reverse this. If a few people become convinced of the limitations of the current choice set, and switch back from car to bus, they will first have to plan very carefully to work out ways to get access to fragmented locations without a car. Then they will find themselves waiting a long time at the bus stop, being splashed by all the other people who are (sensibly) still driving their cars, waiting for a bus which has a long service interval (because most people now drive instead), and is often delayed by all those cars. The individual choices available within the current choice set cannot solve the problem. Instead, we need collective action to change the choice set itself.



The limitations of choice

So far this section has pointed out several ways in which expanding the scope of individual choice can reduce, rather than increase, people's ability to get what they want, let alone increase our wellbeing. The second main reason why increasing individual choice does not automatically make us better off is that the experience of choice is not always the unalloyed pleasure that market theorists assume, but can in itself be oppressive, bewildering and a source of unwanted risk and uncertainty.

Having to keep choosing is itself an unchosen intrusion and demand on time. But anyone who chooses not to spend their time choosing between (for example) energy or telecommunications providers and tariffs or savings accounts, but simply sticks with the one they have already got, is liable to end up paying over the odds - particularly as providers of such services now routinely exploit the inertia of existing customers by worsening the terms of old accounts while introducing new ones with better terms to lure new customers. What is presented as lively market competition delivering ever keener deals to consumers actually forces them to spend time continually checking up to avoid being ripped off.

It's for this reason that some have argued that relying on 'green' or 'ethical' consumers to drive corporate social responsibility or the greening of the economy is:

- Unrealistic, in that it requires concerned citizens to spend considerable time on research to put their beliefs into action;
- Disempowering and demotivating to the majority who cannot make the time or do not have the research and analytical skills or confidence to do it;
- Ineffective, because only a minority do it.

It's certainly a long, slow haul. For the last three years, the Co-op Bank and the New Economics Foundation have been tracking the volume of ethical purchasing in the UK in order to construct an Ethical Purchasing Index (EPI). The 2002 report provides a fascinating snapshot:

"Total sales in the year grew by £1.1 billion, taking the total value of ethical consumption in the UK to £6.8 billion. A further £3.4 billion, an increase of 29%, is deposited with ethical banks and £3.8 billion in ethical investments, taking the total value of the ethical wallet to £13.9 billion.

The fastest growing sector in 2001 was Fuel and Light, where sales of green energy increased market share by 125%. The 2002 EPI included for the first time an ethical "leisure" category, where the sales of key eco-tourism options in the UK grew by a factor of twelve. Ethical purchases of organic food have more than doubled between 1999 and 2001 - from £389 million to £802 million and market shares increased from 1% in 2000 to 1.3% in 2001 - a growth of 28.1%."¹⁵

At one level, both consumers and businesses should indeed be encouraged by this kind of progress - worth so much more than all those surveys that tell us **theoretically** how socially and environmentally responsible consumers are! But at another level, these are still pitifully small percentages of overall market share - after decades of NGOs, Government Ministers, and green businesses themselves banging on about it.

On the other hand, this may still be the 'least worst' way of influencing individual choice over time. Critics have accused some environmentalists of 'elite liberalism' in seeking (implicitly if not explicitly) to dictate 'appropriate' lifestyles in pursuit of a sustainable society. As Professor David Pearce has pointed out, externality theory (ensuring that the price we pay for things reflects as accurately as possible the costs entailed in bringing them to market) offers a more promising way of influencing personal behaviour than seeking to proscribe environmentally and socially irresponsible - though still legal lifestyle choices:

"One important role for Government is to ensure that, when I make my choices, I am faced with the full social cost of them. I will then adjust my choices accordingly; the higher the cost, the less likely I am to engage in that activity, or in that form of the activity. But if I choose to pay the cost, so be it: my freedom to choose is preserved. Government at least makes nodding acknowledgement of this

view, and we would probably all agree they do not make enough of this approach. But sending out social cost signals is rather different to having some group of social engineers telling me what I can and can't have."¹⁶

Nonetheless, claiming that a policy or change 'increases choice' does not prove it is good, still less that it is better than alternatives. Choices of some kinds or for some people preclude or constrain other kinds of choices or choices for other people. Whether the increase of some kinds or people is worth the losses to others is inescapably a matter of judgement, guided by political values grounded in moral principle. The questions of when benefits to one group justify losses to another, and what kinds of intervention to reallocate benefits are legitimate, are perennial topics of ethics. The equally perennial arguments between libertarian and egalitarian political aims, and between increasing or reducing the role of the state, are political reflections of them.

It's this debate which the new Archbishop of Canterbury wants to open up - and which David Blunkett got so dyspeptic about back in January 2002. But is New Labour right to suppose that what people really want is just more choice - especially when it comes to public services? Expropriating traditional Tory territory in this way **may** help secure the middle ground, but at what price? Polly Toynbee set about the Prime Minister on that score in *The Guardian* on October 9th 2002:

"Choice has serious problems - both ideological and practical, something Blair has not faced up to. Choice needs plenty of very expensive spare capacity: there are not enough hospitals and GPs anyway, let alone spare. Blair's threatened 'post-comprehensive era' will mean choice for middle-class children to congregate together, with problem children sinking the unchosen schools.

Choice is not the first priority. If choice comes first, then universal high standards will never be achieved. The public clamour is not for choice, but for speed of treatment in the NHS and for higher quality in local schools. Only once those are achieved is choice a good second order goal. Equality comes before choice."¹⁷

4.4 Growth

Of all the defining characteristics of post-war capitalism, the pursuit of economic growth as the overarching policy objective is perhaps the most important. It has driven turnover in the global economy to a staggering \$23 trillion per annum, doubling in just 25 years, with the volume of world trade now twelve times what it was in 1945. Hundreds of millions of peoples' lives have been enriched, often dramatically, in the process.

Yet we also know that those dramatic increases in economic activity and material wellbeing for some have failed to solve many of the world's worst problems, and have simultaneously created a host of additional problems as a consequence of its environmental and social externalities. This has left some environmentalists arguing that sustainability in the pursuit of economic growth - of any kind - are totally incompatible. But is that really the case?

Going right back to the work of the Reverend Thomas Malthus, people have always tended to underestimate both the resilience of biophysical systems in accommodating the expansion of the human species, and the sheer genius of the human species in finding new resources, bringing on substitutes for diminishing resources, and increasing the efficiency of resource use through market forces. Conventional economics holds that so long as the price of something provides a sufficiently realistic measure of its value, then rising prices for diminishing resources will encourage both greater efficiencies in its use and the development of substitutes.

However, this provides absolutely no guarantee that our ingenuity will always be sufficient to permit the continuance of our current model of progress. What if (as the empirical data would now seem to suggest) the biophysical indicators of scarcity and environmental degradation are telling a very different story from the economic indicators which we almost exclusively rely on?

And this is where the Sustainable Development Commission's centrality principle ("Putting Sustainable Development at the Centre") comes into its own. At the heart of today's worsening



ecological crisis lies a systemic misperception about the relationship between the earth and the global economy that has expanded so dramatically over the last fifty years. For most economists and politicians, the global economy has become the centre of reality, the overarching system within which all else is subsumed. Human societies, communities, eco-systems, and habitats are all seen as subsystems of that overarching system. As such, there is no inherent reason why that overarching economic system shouldn't go on expanding indefinitely, with constant increases in the throughput of both energy and matter.

In terms of today's prevailing political economy, such a world view is not all that surprising. Unfortunately, it ignores both the basic laws of thermodynamics and the natural laws on which all life support systems depend. It also flies in the face of biological reality. However persuasive and dynamic it may be, the global economy is in the first instance a sub-system of human society, which is in itself a sub-system of the totality of life on earth.

This means that the majority of economists (and the politicians they advise) choose to ignore the fact that as an open sub-system of the much larger but essentially closed eco-system, it is the physical limits of that eco-system which constrain the speed and scale at which the economic sub-system can expand. In the long run, it cannot grow beyond the capacity of the surrounding eco-system to sustain that growth – and the planet (or overarching eco-system) cannot grow. What we have is what we've got. Come what may, therefore, the scale of the economic sub-system will eventually be determined by the overall scale of the eco-system, by its ability to provide high grade resources and absorb low grade waste, and by the interdependency of all interlocking elements within that eco-system.

Growth and development

This does not make all economic growth inherently unsustainable - far from it. But it does mean we need fundamentally to rethink the dominance of economic growth as the driving force in the modern political economy, and to be far more rigorous in distinguishing between the kind of economic growth that is compatible with the transition to a genuinely sustainable society and the kind that absolutely isn't. Optimists here tend to point to the so-called "invisible environmental hand", where economic growth can actually help reduce pollution if it accelerates resource productivity at a faster rate than both resource consumption and population growth. Wilfred Beckerman, for instance, asserts that "in the longer run, the surest way to improve your environment is to become rich". The pessimists promptly point to the "rebound effect" (whereby any additional "environmental space" created by increased resource efficiency is immediately offset by additional consumption), and simply invite people to re-examine the irrefutable empirical evidence of continuing and worsening ecological damage, much of it at the hands of the richest nations on Earth.

It's useful at this point to remind ourselves that economic development is not the same thing as economic growth. Economic growth is generally defined as increases in real GDP per head; a quantitative measure that is usually fairly easily available, and which is an average measure of the monetary value of the output produced in a given economy. Economic development takes place when there is an increase in the level of welfare of the residents of whatever spatial unit is being considered (country, region, city etc). Development needs economic growth, but growth alone is not enough. Economic development is successfully achieved when there is an increase in material wellbeing and in the quality of life of the residents - quality of life including things like access to health and education services and cultural facilities, having a sense of security in a clean, improved environment. Much of this is difficult to quantify, and much of it extends beyond what might be claimed to be the purely "economic".

Beyond that, Paul Ekins distinguishes between three different kinds of economic growth:

- Growth in the economy's biophysical throughput (as already explained, in a world bound by the laws of thermodynamics, indefinite growth of this kind is physically impossible)
- Growth in the economic value of that throughput (decoupled from the level of biophysical throughput itself).
- Growth in economic welfare (which is much harder to calculate, and very different from the growth in the economic value of biophysical throughput, although invariably treated as one and the same).

Growth in economic welfare is what matters most; growth in the economic value of biophysical throughput can of course generate precisely that (though it often doesn't), and can certainly do so without any corresponding growth in biophysical throughput as we will see in Section 6. This leads Paul Ekins to the following conclusion:

"It is clear from past experience that the relationship between the economy's value and its physical scale is variable, and that it is possible to reduce the material intensity of GNP. This establishes the theoretical possibility of GNP growing indefinitely in a finite material world. However, neither such a possibility nor previous experience says much about the kind of change in the physical impacts of current economic activity which are required for that activity to become environmentally sustainable in the real world, or whether the technological and economic opportunities exist for these changes to be brought about such that the value of economic activity (GNP) is increased rather than reduced."¹⁸

Relying on GNP

And that's where the distinction between economic growth and sustainable development becomes so crucial. As Herman Daly and others have argued, economic growth is all about quantitative expansion, the notionally "limitless transformation of natural capital into man-made capital". Sustainable development is about qualitative improvement, permitting increased economic activity only in so far as it does not exceed the capacity of the eco-system. In pursuit of economic growth, conventional economists obstinately put the emphasis on the non-physical parameters of the economy (income, choice, distribution, productivity etc), and expect the physical variables to be "adjusted" accordingly. In pursuit of sustainable development, economists must in future put the emphasis on the physical parameters (resources, the laws of thermodynamics etc), and accept that the non-physical variables must be adjusted accordingly.

What makes this so hard to read is that our single most important indicator of economic prosperity (namely GNP) obscures the reality of what is actually happening. The standard, aggregated index of GNP is used to capture all marketed exchanges and government expenditures, and therefore measures the increase in the economic value of overall production – but not decoupled from levels of biophysical throughput that generate that increased economic value. So as we eat up our "natural capital", or degrade the eco-system's capacity to renew the kind of natural services on which we depend, we persist in counting all that destructive economic activity as current (benign) income. At the same time, we also count in many so-called "defensive expenditures", caused by having to deal with some of the externalities of economic growth, be they environmental (environmental protection and restoration, damage compensation etc) or social (car accidents, poor health, rising crime etc).

There is no particular controversy about this. Economists are forever pointing out how inappropriate it is to use GNP as a measure of increased welfare on the grounds that simply aggregating sales of goods and services (and Government expenditures) is unlikely to provide a very good proxy for social welfare. Even improved measures such as Net National Product and Adjusted National Product (derived from GNP by subtracting capital consumption and "defensive expenditures") still won't do the job - although they help a lot in terms of de-coupling growth in biophysical throughput from growth in economic value.

A huge amount of intellectual ingenuity has therefore been devoted to finding more appropriate measures of economic welfare/wellbeing. Perhaps the best known of these is the UNDP's Human Development Index (HDI), used every year as part of its influential Human Development Report. Others include Nordhaus and Tobin's *Measure of Economic Welfare*, and Daly and Cobb's Index of Sustainable Economic Welfare (referred to earlier). And all sorts of different approaches have been recommended in terms of adjusting the way in which the national accounts are classified and calculated in order to take greater account of environmental impacts and any associated depletion of natural capital. As Paul Ekins says:

"The overarching reason for seeking to adjust the national accounts for environmental effects is to gain a clearer understanding of the contribution made to production and human welfare by the environment, and of the way the environment's ability to continue to make that contribution is being undermined by the scale and nature of economic activity."



Ekins himself has put forward proposals which would permit the Treasury to determine the "sustainability gap" between the current national accounts and calculations of an Environmentally Sustainable National Income. What's more, the basic techniques of integrated environmental economic accounting are now being implemented in a number of countries, and this is a formal recommendation of the United Nations and indeed the policy of the European Union.

Engaging the Politicians

However, the prospects for any of these alternatives or techniques getting real purchase in today's political economy are dubious. People have become so accustomed to the notion that "economic growth solves all" (albeit on the patently inadequate grounds that a bigger overall "economic cake" means there's more to spread around, or at least more crumbs to trickle down) that to disabuse them of the thermodynamic impossibility of this would exact a heavy political price. Better by far to deny the physically impossible (that biophysical throughput can keep on growing indefinitely) than face the political "impossibility" of selling the alternatives.

The latest pernicious attempt to obscure that fundamental reality lies in the self-evident oxymoron of "sustainable growth" – assuming that we're talking about conventionally-determined growth (as above) rather than growth in the levels of welfare derived from growth in economic value decoupled from biophysical throughput. Only when politicians are measured by their success in generating that kind of growth will we have begun to take sustainable development seriously. In that regard, environmentally sustainable growth (or, to be more correct, environmentally and socially sustainable growth) is probably the only intellectually acceptable terminology in this area, as it explicitly incorporates some concept of environmental and social limitations into the growth process.

To engage purposefully in debates about the nature of economic growth and its compatibility/incompatibility with the pursuit of sustainability is surely within the "manageable universe" of what politicians can and cannot cope with. So why exactly has this become yet another taboo territory, shunned even by those politicians who've fallen off the greasy pole of personal ambition and have nothing to lose in challenging the shibboleths of today's political economy?

Complacency? A lingering belief that this is an impossibly "black and white area" of debate (it's either gung-ho growth at all costs, as we have it today, or zero growth as espoused by fundamentalist greens back in the early 70s) - even though this is patently not the case? An unthinking sense of "if it ain't broke, don't fix it" - even though the most cursory examination would reveal just how "broke" our dependency on conventional, GDP-driven economic growth really is? Or a feeling (rarely acknowledged in public) that the rich world can probably get away with it anyway, just a little bit longer, so long as the poor world isn't allowed to gatecrash the party?

There is indeed a disturbing insularity in the way in which we conceptualise what the global economy will look like in the future. According to the OECD, there are now well in excess of twenty "developing" countries (half of them in Asia) with increasingly influential middle classes intent on pursuing rapid and substantial increases in their material standard of living. Some calculations have assessed these "new consumers" at more than 1 billion people.

As Professor Norman Myers has pointed out so forcefully, we ignore the impact of these economic trends at our peril:

"The new consumers have a far-reaching impact on economic activities nationwide, and hence on environmental repercussions. A strongly meat-based diet, for instance, entails environmental problems in that the meat is often raised on grain which overloads crop lands and diverts much water in countries with water shortages, as well as putting pressure on grain supplies from international markets. With its 300 million new consumers, China increased its meat intake during the 1990s by 105%, and became the world's biggest meat consumer. Many parts of China now experience water shortages, accentuated in part by the surging demand for grain. Over-pumping is already causing the region's aquifers to decline by at least 1 metre a year. Many new consumers also buy cars in large numbers. Already they possess 125 million cars, one fifth of the global fleet, and by 2010, they could have well over 200 million, which is one quarter."

5. Policy implications

At one level, it is of course both reasonable and understandable that today's political parties are perfectly content that such complex policy areas should remain either marginalised or totally ignored. Let sleeping dogs lie and all that.

At another level, one's vision of political leadership must be a very shrunken one if it is populated only by do-able, expedient quick-hits. We would argue that the task of representing "the interests of the future to the present" is one of the most critical elements of sustainable development – and one which distinguishes sustainable development from any of the other so-called "big ideas" currently floating around in search of some kind of public resonance. What's more, perhaps this continuing neglect of the incontrovertible reality that some time soon – we are going to have to transform our economic paradigm (and with it, our model of contemporary progress) is just bad politics even in conventional political terms. A politics based on maximising immediate personal gratification is incapable of structural change. A more grown-up political culture, in which it is possible to argue for policies on the basis of what needs to happen five, ten or even more years into the future, is a prerequisite for sustainability.

Over the last quarter century, the 'long wave' pendulum of political values has swung to an extreme of individualism, market based solutions, and hostility to and distrust of anything that smacks of central planning and state intervention. This has happened before. But the discrediting and ignominious collapse of the planned economies of eastern Europe has left the discourse of individualism, choice and liberty so overwhelmed, and the image of collectivism, social choice and mutuality so tarnished, that we are in danger of forgetting that there is actually a debate to be had or a pendulum that can swing.

For those of an optimistic disposition, there are already reassuring signals that the political pendulum is beginning to swing back from the dominant model of the last twenty years (premised essentially on me-first individualism, fostered by short-term, profit-maximising, free market economics of the crudest kind) towards a better-balanced, socially-responsible model in which environmental and societal interests are better protected, morally appropriate behaviours (regardless of whether they "pay" or not) are not dismissed as whimsical aberrations, and human nature is not reduced to a function of our ability and desire to consume.

This all calls for more proactive and interventionist government than has been fashionable for the last few decades. Government should consciously decide the sort of economy we want and intervene actively to achieve it, not just assume that past trends towards globalisation and market dominance are inevitable or even desirable. Policy should be based on explicit quality of life and environmental objectives, not economic proxies for them. The state should set standards and provide more services than has been the norm for 20 years (although no more than was taken for granted by governments of left and right before 1979.) We believe the 'long wave' of political fashion is swinging back from extreme individualism to make these changes not only acceptable but popular.

In broad positioning terms, perhaps the best thing Labour politicians can do to promote sustainable development is give that pendulum an even bigger shove on the grounds that it's very difficult to address the whole issue of benign growth and sustainable consumption unless there is a far more pronounced move away from unfettered individualism.

It's a measure of just how topsy-turvy things have got under New Labour that there could be any doubt at all about who the principal beneficiaries will be of that particular swing of the pendulum. Yet you wouldn't know it listening to some Labour politicians today, for whom the primacy of the market, 'free choice' and the sovereign rights of the individual seem to have become at least as important as political benchmarks as for the Conservatives.

Robert Lane is more than a little pessimistic about the chances of challenging such an overwhelmingly powerful economic paradigm:

"If people have difficulties identifying the nature and sources of their unhappiness, and if the guiding disciplines share in the peoples' pluralistic ignorance, and if one cannot identify villains and exploiters in this scenario, and if most people would be better off under another scheme but enough people stand to gain from the way things are to make large-scale persuasion exceptionally difficult, whence cometh our help?"²⁰

Patience is of course a fundamental requisite for those advocating a more environmentally and socially responsible society; after all, it took the best part of twenty years to demonstrate that economic growth and increased energy consumption were not inextricably wedded, and that it was perfectly possible to secure high levels of economic growth without any corresponding increase in energy consumption. But will it really take another twenty years to persuade politicians that one can de-couple improved societal wellbeing and individual happiness from higher levels of both resource and economic consumption?

The position of the Sustainable Development Commission in this political minefield is a simple one. Whilst it may be perfectly reasonable for politicians to be disinclined to pursue high-risk strategies on economic growth and consumption, given the dearth of convincing evidence that such strategies will strike a chord with today's electorate, it is **not** reasonable to ignore the true nature of the economic challenge entailed in learning to live sustainably on this planet. And it's plain irresponsible not to do everything in their power both to facilitate a more informed debate and to help fashion the platforms on which the more radical and realistic policies that will be needed in the future can be developed.

Moreover, we are keen to persuade politicians that even if this exploration of alternative economic paradigms may not lead immediately to a set of hard-edged policy recommendations for the next election, there's no shortage of supportive actions or measures that could be taken right now.

5.1 *Quality of Life* annual report

The Government can already take considerable credit for its decision to publish its annual *Quality of Life* Report, detailing progress against fifteen Headline Indicators. The indicators chosen (total economic output; investments; employment; property and social exclusion; education; health; housing; crime; climate change; air quality; road traffic; river water quality; wildlife; land use; waste) just about cover the waterfront of sustainable development, and although movement on any one indicator, on a year to year basis, is inevitably slight, cumulative data provide a useful snapshot of some of the key parameters of wellbeing and quality of life.

To our knowledge, this is the only national report of its kind, an expression of serious intent on the part of the Government to get people to think in a more integrated and long-term way about sustainable development. So why, one has to ask, is this important innovation accorded so little political significance?

There have been three such reports since 1999, the first two launched at poorly-organised briefings attended by a small number of "the usual environmental suspects". It would have been simpler to send out a press release saying "Please don't take this too seriously".

By contrast, we would like to see the annual *Quality of Life Report* presented formally to the House of Commons by the Prime Minister, with a full debate along the lines of other big set piece occasions such as the Budget or the Public Spending Review. This would position both the Report itself, and the Government's commitment to sustainable development, at the right level, in the right place. This year's launch by the Secretary of State, on a platform together with the Prime Minister and organised jointly by the SDC, was a step in the right direction.



5.2 The Government's sustainable development objectives

We believe the wording used in the Government's fourth sustainable development objective is both unhelpful and misleading. It does nothing to encourage people to think more carefully about the nature of economic growth in terms of its compatibility with broader societal goals and environmental imperatives. Indeed, it encourages people to go on supposing that genuinely sustainable development is completely compatible with the pursuit of high levels of conventionally-measured, unreconstructed, exponential economic growth.

We would therefore encourage a wider debate about this, exploring different forms of wording in order to capture the spirit of the debate raised in section 4 of this paper. (Might it, for instance, be more appropriate to talk of "economic development" here rather than "economic growth" per se?) At the very least, we would like to see "high and stable levels of economic growth" de-coupled from "high and stable levels of employment", and a recognition that economic growth is only a means to an end (or a number of different ends) rather than an end in its own right.

5.3 Higher standards

We would like to see a much clearer recognition that securing sustainable improvements in our quality of life demands a great deal more than simply increasing the range of personal choices through the free market.

In this respect, it's encouraging to see the way in which Ministers are now much more bullish in their defence of "the public realm", emphasising the importance of high-quality environments in our towns and cities, investing in more "liveable" streets and communities, gearing regeneration to take proper account of the "social capital" on which much of people's quality of life still depends.

We are, however, somewhat mystified by the defensive and apologetic way in which government talks about regulating for higher standards in society. Instead of endlessly dumping responsibility for achieving more environmentally and socially responsible lifestyles onto confused and often indifferent consumers, or onto businesses already overburdened by governmental exhortations to become better corporate citizens, it would make a great deal more sense on many occasions to mandate the behaviour changes we now need.

For instance, government ministers have indicated that they would like more house purchasers to buy "greener" homes, thereby encouraging house builders to raise their game in offering more energy efficient housing and more imaginative eco-homes. Fine, but it would be so much simpler for government to revise the Building Regulations to mandate the required levels of thermal efficiency and other environmentally-friendly features, so that every new house in the land contributed to the UK Climate Change Programme rather than a few tokenistic green homes.

5.4 Resource productivity

Finally, given the complexities in changing public attitudes in some of these areas, we must again urge the Government to get far more serious about Resource Productivity. This isn't something that can be fixed by policy experts in the Strategy Unit coming up with a few unimaginative and bureaucratic recommendations. It needs to become a driving force in all key government departments. The Energy White Paper, the revised Waste Strategy, the Planning Green Paper, the massive new investments currently under way in both health and education, the government's procurement strategy – these all offer not-to-be-missed opportunities to embed the basic principles and practice of increased resource productivity at the heart of government policy.

At the end of last year, the Green Alliance produced a helpful *Agenda for Action on Resource Productivity*²⁷, emphasising the importance of developing a headline indicator for resource productivity:

"The indicator should be simple and easily communicable, and linked to an aspirational long-term target based on environmental limits. This indicator should not be seen as the final word on

measuring resource productivity - it should be supplemented by more specific targets covering specific environmental impacts or sectors."

And it ends by reminding the Treasury of the current inadequacies of its approach to productivity:

"One of the Treasury's stated aims is to improve the productivity of the UK economy. This should explicitly include resource productivity, rather than the narrower definition of labour productivity. For example, the analysis of productivity contained in each budget report should include an analysis of resource productivity."

5.5 Economic growth, GDP and the National Accounts

As mentioned in Section 4.4, it is now the recommended policy of both the United Nations and the European Union that countries should revise the way in which they prepare their national accounts to begin to address the kind of sustainability gap that is currently hidden within them. The Treasury has already done some work in this area, but with no discernible impact on policy. The Treasury is also aware of the inadequacies of using GNP as an indicator of economic welfare, but has tended to dismiss efforts by others to overcome this problem. As part of the review of the UK's Sustainable Development Strategy, the fifteen Headline Indicators on which it is currently based will need to be appraised both individually and as a combined set. Defra and HM Treasury should work closely together over the next year to move forward purposefully in both these key policy areas.

6. Conclusion

Notwithstanding some real progress on a number of key sustainable development concerns since New Labour was elected in 1997, there's a disturbing sense of sleepiness or "low priority" about this Government's overall approach to sustainable development. Too many things are put off to tomorrow, relegated to the "too difficult" zone of politics, undersold as a kind of optional extra rather than an urgent priority.

Hence our recommendation that there needs to be a twin-track approach in order to shift this whole agenda into a higher gear. First, it's crucial that this Government connects with the challenge of resource productivity without any further delay. Whatever gains the UK has made so far (in terms of progress towards our Kyoto targets, for instance) could all too easily be cancelled out by failures to get on top of transport, waste, and that tricky time period beyond 2010 when it seems inevitable that CO₂ omissions will begin to rise again.

This is why the Commission is undertaking two major pieces of work in this area. The first will be to carry out an annual audit of progress made by the Government (through its Climate Change Programme) towards meeting the targets for reduced greenhouse gas emissions under the Kyoto Protocol. The second will be to work with a wide range of partners in all different sectors to model some of the economic and social implications of much deeper cuts in CO₂ emissions, taking as our benchmark the 60% recommended by the Royal Commission on Environmental Pollution.

Secondly, with an eye to future policy debates, we would very much like to see leading politicians in all political parties engage much more purposefully in the questions about economic growth, quality of life and sustainable consumption. It's not helpful for UK voters to be lulled into a sense of false security that the status quo ("growth at more or less all costs", on an exponential basis, despite the ever stronger scientific evidence that the ecological crisis is beginning to run away with us) is likely to remain the status quo for very much longer.

And that, in essence, is the sole purpose of this paper: to invite politicians, policy experts, commentators, business people, religious leaders and NGOs to put these issues on their "must get to grips with" agenda, rather than defer them endlessly as tomorrow's issues. They are in fact more present in our lives than most people begin to realise, and we do both ourselves and future generations a grave disservice by not addressing them right now.

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