Weathercocks & Signposts

The environment movement at a crossroads

April 2008

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Foreword

Switching from incandescent to energy-efficient light bulbs has become emblematic of the small steps people can take to help tackle environmental challenges. The columnist and musician Alex James wrote of his New Year's resolutions for 2008: "I'm going to concentrate on climate change because that's the one area where everyone can make a difference… that's the one thing we can all start tackling. Everyone can go out and buy some of those crap light bulbs and get busy."

With the passing of every month, climatologists come to a deeper understanding of positive-feedback mechanisms that suggest change to our climate could be more rapid and more pronounced than we had previously thought. And while climate change may have eclipsed other environmental problems in the public consciousness – the collapse of fish stocks, deforestation and over-abstraction and pollution of watercourses – these, too, continue to intensify.

A marketing approach to behavioural change, which this report begins by characterising, insists that we should ask people to take simple and painless steps. But the widening gulf between the cumulative impact of these behavioural changes and the scale of the challenges we confront is openly acknowledged.

Typical of this consensus is an admission by the British government's Department for Environment, Food and Rural Affairs (Defra). In its recent document *A Framework for Pro-environmental Behaviours*, the Department writes that "most of our consumer research points to the need for pro-environmental behaviours to fit within people's current lifestyle, even if one might aim for more fundamental shifts over the longer term".

Unfortunately, it is now beyond serious dispute that a proportional response to climate change will entail fundamental shifts in both policy and lifestyles in the very short term.

This report raises questions about the trust that is placed in the 'small steps' strategy, and the assumption – frequently left tacit – that by encouraging people to take small and painless steps, they will be ushered onto a 'virtuous escalator' to ever more significant behavioural change. Indeed, the report questions the very basis of marketing strategies for behavioural change – typified by appeals to an individual's self-interest and the social status that might be derived from the purchase of the latest energy-efficient gizmo.

This analysis challenges the environmental movement to reflect carefully on how to stay relevant in a period of rapid change. As business itself seeks to show leadership on environmental issues and embraces the commercial opportunities of 'green consumption', the role of environmental organisations could become ever more peripheral to the debate.

But if marketing approaches to creating behavioural change are simply not up to generating the systemic changes that are required, then we must develop a new approach. And it will fall heavily to the environment movement to help in its midwifery.

The environment movement stands at a crossroads. We can carry on trying to help achieve what is possible, taking slow progress in policy and behaviour change as largely immovable features of the context in which we operate. Or we can begin to inject new urgency into the environmental debate – urgency that will necessarily demand that we move far further than the 'business case for sustainable development' will take us; recognising that environmental challenges will not be met while maintaining a narrow focus on the happy coincidence of economic self-interest and environmental prudence.

In navigating its way through this discussion, WWF-UK does not purport to have the answers. Nevertheless, this report is in places polemical – as a provocation for further discussion, rather than a claim that the analysis is necessarily faultless.

The questions that this report raises have already led to vociferous debate within WWF-UK; and this document cannot be taken to reflect a seamless consensus in our own thinking. But we decided not to keep this debate internal until such time as we had 'answers' that we were willing to defend in public. This discussion is too important to be managed in this way, and this report aims to help open it out to all who may be able to take it further.

David Norman

Director of Campaigns,
WWF-UK

“It is no use saying, ‘We are doing our best’. You have got to succeed in doing what is necessary.”

Winston Churchill

This report was written by Tom Crompton, Change Strategist, as part of WWF-UK’s Strategies for Change Project.

The report is only available electronically, and can be downloaded at:
wwf.org.uk/strategiesforchange

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Debate relating to this report can be found at:
valuingnature.org

– where we encourage you to contribute your own views.

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Executive summary

As our understanding of the scale of environmental challenges deepens, so we are also forced to contemplate the inadequacy of the current responses to these challenges. By and large, these responses retreat from engaging the values that underpin our decisions as citizens, voters and consumers: mainstream approaches to tackling environmental threats do not question the dominance of today's individualistic and materialistic values.

Weathercocks and Signposts critically reassesses current approaches to motivating environmentally-friendly behaviour change. Current behaviour-change strategies are increasingly built upon analogy with product marketing campaigns. They often take as given the 'sovereignty' of consumer choice, and the perceived need to preserve current lifestyles intact. This report constructs a case for a radically different approach. It presents evidence that any adequate strategy for tackling environmental challenges will demand engagement with the values that underlie the decisions we make – and, indeed, with our sense of who we are.

The marketing approach to creating behavioural change

Pro-environmental behavioural change strategies often stress the importance of small and painless steps – frequently in the expectation that, once they have embarked upon these steps, people will become motivated to engage in more significant behavioural changes. Often, these strategies place particular emphasis on the opportunities offered by 'green consumption' – either using marketing techniques to encourage the purchase of environmentally-friendly products, or applying such techniques more generally to create behavioural change even where there is no product involved.

Market segmentation techniques, for example, are used to characterise different sectors of the target audience according to the motivations presumed to underlie their willingness to undertake behavioural change. As a result, messages are tailored to fit with the particular values dominant within different segments of the target audience – rather than engaging these values directly.

Consequently, it is frequently asserted that campaigners should be indifferent to the motivations that underlie behavioural choices. Much as in the case of selling a product, they should 'go with what works'. Frequently, this may entail encouraging individuals to change their behaviour for reasons of social status or financial self-interest, rather than environmental benefit.

The failure of the marketing approach

Marketing approaches to creating behavioural change may be the most effective way of motivating specific change, on a piecemeal basis. But the evidence presented in this report suggests that such approaches may actually serve to defer, or even undermine, prospects for the more far-reaching and systemic behavioural changes that are needed.

There is little evidence that, in the course of encouraging individuals to adopt simple and painless behavioural changes, this will in turn motivate them to engage in more significant changes. The results of experiments examining the 'foot-in-the-door' approach (the hope that individuals can be led up a virtuous ladder of ever more far-reaching behavioural changes) are fraught with contradictions. Current emphasis

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Polar bear © WWF-Canon / François PIERREL Power plant: © WWF-Canon / Andrew KERR

on 'simple and painless steps' may be a distraction from the approaches that will be needed to create more systemic change. Such emphasis also deflects precious campaign and communication resources from alternative approaches.

Of course, this is not to argue that engaging in simple pro-environmental behaviours such as turning TVs off stand-by or switching from incandescent to compact fluorescent light bulbs is inherently wrong (*en masse*, these behavioural changes can clearly help). But it is to argue that such behaviours are the wrong focus for pro-environmental behavioural change strategies.

Worse, emphasis on the opportunities offered by 'green consumption' distract attention from the fundamental problems inherent to consumerism. This report reviews arguments that the consumption of *ever more* goods and services is an inherent aspect of consumerism, and that the scale of environmental challenges we confront demands a systemic engagement with this problem. While alternative patterns of consumption (for example, car sharing, or keeping and upgrading computers rather than replacing them) are important, these models cannot be properly disseminated, and seem unlikely to lead to change on the scale required, without first engaging the underlying motivations for consumerism.

Car sharing, for example, may not lead to net environmental benefits if the money that an individual saves by selling their own car and joining a car-share scheme is spent on buying into a time-share apartment in Spain. Treasuring objects for longer may not help either, if rather then buying a new computer each year, a consumer upgrades their existing one and spends the money saved on another new electronic product.

This report also argues that, contrary to the assertions of proponents of marketing approaches, the *reasons* for adopting particular behavioural changes have very important implications for the energy and persistence with which these behaviours are pursued.

An individual might be less inclined to spend money saved by selling their car on an additional foreign holiday if they were motivated to part with their car for environmental reasons, as opposed to economic incentives. Similarly, to the extent that specific pro-environmental behaviours may 'spill-over' into other behaviours under some circumstances, such spill-over may be encouraged if initial behavioural changes are adopted for environmental reasons – as opposed, for example, to financial savings.

Lessons from the marketing approach

Despite these criticisms, there are some lessons that should be drawn from marketing approaches to motivating pro-environmental behavioural change.

Proponents of the marketing approach recognise the importance of values in driving behavioural choices – even if they tend to argue that dominant values should be taken as 'given'. This is a crucial point. Firstly, it underscores the recognition that we should not expect information campaigns to create behavioural change. Secondly, it has an important bearing on our understanding of the gap between what people say and what they do.

It has been argued that it is futile to engage values and identity in the course of pursuing pro-environmental behavioural change, because of the so-called 'attitude-behaviour gap'. This is the disparity between the importance that an individual may ascribe to environmental issues when interviewed, and his or her actual behavioural patterns.

This report draws a distinction, however, between attitudes and values, and points to evidence which underscores the importance of engaging values and self-identity as a basis for motivating pro-environmental behavioural change.

Work on marketing approaches to motivating behavioural change also highlights the need to communicate with different people in different ways. This is crucial, but it says nothing about the effects that a communicator may be seeking to achieve with such communication. It need *not* imply that communications should be constrained to work with those motivations which currently dominate within a particular audience. Rather, it may be necessary to work to bring other, latent, motivations to the fore, while of course communicating with different people in different ways.

Proponents of the marketing approach are also right to emphasise the importance of social context. Whether motivating people to buy a smart electricity meter, or to join a local carbon rationing action group (CRAG), social norms and status will be critically important. But again, this need say nothing about the values upon which those norms are based.

Finally, the wider constraints on adopting new behaviour are generally well-recognised by proponents of the marketing approach – and this understanding is critically important. Any campaign to motivate individuals to join a car share scheme will meet with more limited success if these cars are located far from where the target audience live; and any campaign to motivate people to leave their cars at home and commute by train will meet with more limited success if the trains are over-crowded and don't run to time. But, crucially important as such concerns are, there is evidence that the willingness of people to suffer inconvenience and difficulty in engaging in pro-environmental behaviour is related to their motivations for doing so. Values underpinning environmental behaviour will be of critical importance both in motivating individuals to engage

in pro-environmental behaviour where such barriers persist, and in activating public demand for government intervention to remove these barriers.

An alternative approach

This report begins to build an alternative approach to motivating pro-environmental behavioural change. This approach draws not on analogies from marketing, but rather from political strategy. It is supported by recent work that underscores the importance of framing a political project in terms of the values that underpin this – rather than constantly moulding this project to reflect the results of the latest focus-group research. Any successful movement, it is argued, must be unequivocal in articulating what it stands for. But of course, in itself, recognition of the importance of achieving consistency and clarity in the values that underpin environmental campaigning says nothing about *what* those values should be.

Some argue that it will be most effective to frame environmental campaigns in terms of a set of individualistic or even materialistic values – for example, highlighting the personal benefits that can accrue from more efficient energy use, or the social status that might be conferred by ownership of a hybrid car.

But this report presents evidence that appeals to individualism are unlikely to be adequate. Research has found that many people have a more 'inclusive' sense of self-identity – one that may include closer identity with other people, or with other people and nature. These individuals thus tend to value others more in their behavioural choices, and research has repeatedly found that such people tend to care more about environmental problems, favour environmental protection over economic growth, and engage in more pro-environmental behaviour. The issue of how such values are nurtured and 'activated' is critically important.

There is also evidence that materialistic values cannot form the basis for motivating systemic pro-environmental behavioural changes. Importantly, we pursue our self-identity through the products we buy – our material possessions come to define who we see ourselves as being, and who we want to be seen to be. This is a sense of identity which the marketing industry has become adept at manipulating, in order to motivate us to buy particular products as a means of further developing and confirming this identity. And of course, these same marketing techniques are increasingly used to sell 'green' goods and services.

Individuals who engage in behaviour in pursuit of 'intrinsic goals' (of personal growth, emotional intimacy or community involvement) tend to be more highly motivated and more persistent in engaging in this behaviour than individuals motivated by 'extrinsic goals' (for example, of acquisition of material goods, financial success, image and social recognition). Moreover, more materialistic individuals tend to have higher ecological footprints.

This report presents evidence that motivations which are intrinsic are more likely to lead to pro-environmental behaviour. Moreover, this effect is found to be particularly strong for more difficult environmental behaviours – those requiring greater effort.

Conversely, motivations that stem from external motivations (for example, a financial reward for behaviour) or even what are called 'internalised forms of external constraints' (these might include a sense of guilt, or feelings related to self-esteem) are less likely to lead to pro-environmental behaviour. This evidence raises critical questions about whether 'simple and painless steps' urged upon us for reasons of self-interest will contribute to motivating an individual to engage in more significant (and potentially inconvenient or costly) behavioural changes.

So it may be critically important that a campaign to motivate pro-environmental behavioural change should reflect, unequivocally, the values that underpin this campaign. Moreover, the nature of these values themselves may also be of critical importance. Given the scale and urgency of the environmental challenges we confront, these are important assertions, and this report highlights a number of possible practical responses.

However, this report also highlights the relevance of this debate for the future of environmental organisations themselves. The enthusiasm of the private sector to embrace environmental imperatives has raised questions about the continued relevance of environmental organisations. It may be that environmental organisations will indeed become side-lined in the debate, unless they are prepared to reframe their contribution in terms of a set of values that are distinct from those identified with the private sector.

Many will still see the approach outlined in this report as unrealistic. But that perception is changing. Unfortunately, it is changing in part because as our understanding of the severity of the environmental challenges that confront us develops further, current strategies for engaging them seem increasingly inadequate. But WWF is also finding an increasing number of people, not easily pigeon-holed as environmentalists, who are nonetheless embracing a radical change agenda from within their respective sectors. The irony is that the mainstream environmental movement has yet to take on a leading role in responding to this challenge.

1 Introduction

1.1 Post-environmentalism

The environment movement in the UK has come a long way in recent years. Gone are the days when our focus lay on imparting information about environmental problems, in the forlorn hope that this alone would prompt mass pro-environmental behavioural change.

There is renewed awareness of the importance of the values that underpin our behavioural changes, and a willingness to frame exhortations for behavioural change in terms of these values. This has sometimes been a hesitant process, because of an understanding that changing attitudes and changing behaviour are very different processes – the so-called 'attitude-behaviour' gap. But renewed awareness of the importance of values has been encouraged by a debate in the US, catalysed by a paper written by Michael Shellenberger and Ted Nordhaus, *The Death of Environmentalism*, which stresses the imperative to appeal to the vision and values of ordinary people.

This new discourse discourages reliance upon environmental motivations – better, it is argued, to frame solutions in terms of more prevalent demands such that, rather than environmentalists, it is "developers, unions, doctors, and relief organizations [that] take the lead in demanding investments in things like stronger levees as well as clean energy."[1]

Campaigners in the environment movement are becoming increasingly cautious about insisting that people adopt behavioural changes 'for the right reasons' – something that is coming to be seen as an indulgence of old-school moralisers. Accordingly, these campaigners are increasingly opportunistic in tailoring their messages to resonate with the dominant values of the groups that they are targeting.

Targeted individuals are seen as 'consumers', whose primary interests are to acquire products and services that will confer social status (or perhaps save them money). The challenge facing the environment movement is increasingly seen as that of selling the 'right' goods and services. This has even led to urges to 'commoditise' behavioural change – to find a product or service that embodies this behavioural change, and to market this as a proxy for the change itself (for example, to launch marketing campaigns for Wattsons – attractively designed wireless electricity-meters – as an alternative to campaigns directly aimed at achieving reduced domestic electricity use).

That this approach is anathema to so many in the environment movement is simply grist to the mill. A recent review of Shellenberger and Nordhaus's work in the magazine *Wired* is clear:

"What Nordhaus and Shellenberger advocate is what might be called post-environmentalism, an ambitious new philosophy that isn't afraid to put people ahead of nature and to dream big about creating economic growth – neither of which environmentalists have been very good at. Their vision cuts across traditional political divides: It's pro-growth, pro-technology, and *pro-environment."*[2]

This 'have your cake and eat it' environmentalism grafts the techniques of the marketing industry on to a renewed emphasis on underlying values. But these values – of self-interest, and social status conferred through material possessions – are seen, to all intents and purposes, as being inescapably dominant. To engage these values themselves – to attempt to make more salient those that are held tacitly, or to try to legitimise values which are suppressed – is often dismissed as a quixotic exercise.

As might be expected, the emergence of post-environmentalism raises serious questions about the continued relevance of environmental organisations. In emphasising the importance of engaging Prospectors (a large segment of the population, grouped in terms of their values, who particularly seek to define themselves and their relationships through the things that they consume), the leading UK campaign strategist, Chris Rose, asks:

"So who's getting it right? By a process of natural evolution as more and more companies engage with climate related products and services, the commercial sector is likely to give Prospectors what they want… An unanticipated consequence for NGOs could be that they find themselves sidelined as actors in the public 'debate' about responses to climate change."[3]

This report takes a fundamentally different perspective. The marketing approach to promulgating behavioural change, characterised in this report, is doubtless effective at generating piecemeal change where this is at its most painless – particularly where such change is embodied in the purchase of a new product. But in the course of embracing the more systemic and structural changes that are needed they may be at best a distraction, and at worst a procrastination.

This report argues that the environment movement has never had a more important role to play in promoting the values that will come to underpin systemic pro-environmental behavioural change of the type that is urgently needed. Any adequate response to these challenges will require a re-examination of the relationship between people, and between people and the natural environment. The sooner we embark on this re-examination, the quicker we can move to institute the fundamental changes that today's environmental crisis demands.

1. Shellenberger and Nordhaus (2005)
2. Horowitz (2007)
3. Rose *et al* (2007)

1.2 Situating this report in the debate about behavioural change

It is widely recognised that adequate responses to today's environmental challenges will only emerge through concerted change among government, business and citizens (in the case of the latter, as members of their communities, as voters, and as consumers). It is easily seen that the response of government is constrained by both the appetites and demands of voters and the business lobby; the business response is constrained by both consumer choice and the regulatory framework; and the action of citizens is constrained by both the purchasing options that are open to them and the regulatory framework within which they live. Simultaneously, of course, none of these actors need acquiesce passively to the constraints imposed on them – all also bear a leadership responsibility. As the UK Sustainable Consumption Roundtable noted:

"People, business and government each occupy a corner in a triangle of change. No one, or even two groups, can lead on sustainable consumption alone. Different corners lead at different times by doing what they can do best. Until now this has often been accidental. The change might be profound if it were coordinated."[4]

This report is not primarily concerned with how such coordination might be accomplished. However, in reviewing existing strategies for change, it is important to recognise that these are largely fractured according to their focus on one or other of these three groups. The following subsections of this report outline an anatomy of current change strategies, grouped according to their target audiences.

1.2.1 Government policy

Many change strategies focus on attempts to change government policy; indeed, this is where much of WWF's own effort is focused. Engaging with policy-makers is clearly an efficient approach to creating some change. Recommendations may focus on 'choice-editing' (change the legislation such that consumers are no longer offered the choice of less-efficient white goods, for example), or increased taxation on environmentally damaging practices (increase the vehicle excise duty on less-efficient cars, for example).

Often, such change tends to be small and incremental; policy-makers generally have relatively little latitude for manoeuvre – ultimately they are constrained by the demands and appetites (real or imagined) of the electorate.

NGOs that choose to focus their activities on lobbying for policy change, frustrated at the slow pace of such change, may demand greater and more 'commensurate' policy intervention. But such demands carry a risk. If these organisations demand interventions that appear politically unfeasible in the short term, those who call for them may be portrayed as naïve or unhelpfully radical, and find their access to the policy-making process compromised. Striking the balance between making demands on government for more radical change, and being seen to be out-of-touch with the *realpolitik* is a delicate process, and different NGOs achieve this in different ways – depending on how close to the heart of the policy-making process they wish to locate themselves. Navigating this balance is a frequent source of friction, both within and between environmental organisations.

1.2.2 Business opportunity

Another set of change strategies focuses on helping business create and exploit new consumer demand for ethically and environmentally benign products. The change strategies adopted by some NGOs play a role in helping to create this demand – for example, through exposés of the unscrupulous practices of laggards, or heaping accolades on the leaders within a particular sector.

Reliance on the 'business case for sustainable development' is an effective technique where what have been called 'beautiful coincidences' emerge. These are "marketing and innovation examples where what is right for the environment is also good for a business".[5] Clearly, what is 'good for a business' changes with consumer demand, and the scope to exploit this happy coincidence of the pursuit of profit with environmental benefit seems set to continue to expand. Ultimately, though, the success of this strategy relies on ongoing stimulation of high levels of consumption, coupled with its continuous 'dematerialisation'.[6] Given the huge growth of middle-class demand for goods and services worldwide, this 'dematerialisation' must proceed rapidly. Although it is often portrayed as the only viable approach, the issue of whether it is ultimately sensible to pin our hopes on the possibility of reconciling consumerism with sustainable natural resource use is considered further in Section 2.4. If it is not, we had better begin to develop an alternative approach immediately, because it would take time to unroll the radical change agenda implied by an acceptance that consumerism and sustainability are ultimately inimical.

4. Sustainable Consumption Roundtable (2006)
5. Grant (2007:2)
6. 'Dematerialisation' is used here to mean a shift away from the consumption of goods and services that have a high ecological footprint.

1.2.3 Individual behaviour

Finally, there is a class of strategy that focuses on changing the appetites and demands of individuals. One outline of environmentally significant individual behaviour identifies the following types of engagement:

- **Activism**: active involvement in organisations and political movements.
- **Non-activist support of public policies:** voter choice or financial contributions to organisations with a lobbying role.
- **Influence as employees and members of organisations:** individuals may influence the business model of their employer, or their company's environmental performance.
- **Personal, private-sphere behaviour:** the choice of goods, services and lifestyle.[7]

Although debate on individual behaviour has tended to focus on the last of these categories, many large environmental NGOs have tended to remain ambivalent about the scope for engaging personal, private-sphere behaviour. This ambivalence is understandable: attempts to engage behaviour at this level risk dissipating limited campaign resources in communications that become submerged in the noise of mainstream commercial marketing. Recently, however, new possibilities opened up by internet-based social networking techniques have encouraged more organisations to dip a toe into the water of mass behavioural change.

1.2.4 Who this report is written for

The anatomy of change strategies outlined above is a simplification, and some of the most sophisticated approaches to creating change lie in the areas of confluence between these strategies. For example, there are initiatives to encourage business to lobby government proactively for a tightening of the regulatory environment in which they operate; or there are initiatives to recruit large numbers of active online campaigners to support demands for legislative change.

But it is important to locate this report, and the recommendations that it makes, in this landscape. Although it is critically important to engage with individual behaviour, this need not necessarily imply a focus on personal, private-sphere behaviour. In campaigning to change personal, private-sphere behaviour, environmental organisations are also simultaneously communicating with, among others, voters, entrepreneurs, sales-people, policy-makers, teachers, and journalists.

In addition to those engaged in campaigns to motivate changes in private-sphere behaviour, the questions raised in this report will be of relevance to:

- Leaders and public opinion formers (for example, in government, business, the faiths, and the entertainment industry) who are concerned to use their influence to help tackle environmental challenges.
- Those seeking to influence how public resources are used to effect behavioural change – for example, engaging government organisations charged with motivating behaviour change.
- The marketing industry (in particular, those within the marketing industry who are making important contributions to raising awareness of environmental problems, but see their role as being limited to the promotion of 'green consumption').
- Non-governmental organisations.

Some of these groups are considered further:

Political and business leaders:
There is a clear need for new leadership from our political and business leaders.[8] But will this leadership focus exclusively on the economic dividends that may accrue from a serious response to the environmental challenges that we face, or will it find room to reflect a broader set of values? In taking risks to use their influence to shift public debate, forward-thinking leaders will need to be supported in envisioning the future – most obviously by a broad constituency of public figures and commentators. This report is intended to stimulate debate about the values that might come to underpin this envisioning process.

Government departments specifically charged with motivating behaviour change:
Government is investing public money in communication on environmental issues, with a view to changing public behaviour. These interventions are based on a growing body of research on approaches to motivating pro-environmental behaviour. This report offers a critical reflection on some of that literature.

7. Stern (2005)
8. In the UK at least, there has been a recent erosion of belief in the role of leadership. But this must be rebuilt. As Drew Westen writes of the American situation: "On the one hand, in a representative democracy or a republic such as our own, representatives are supposed to *represent* their constituents – and hence to attend their opinions. On the other hand, leaders have access to information not available to the average citizen and expertise that comes from governing. Thus, they are supposed to lead – including staying one step ahead of, and helping to shape, public opinion." (Westen, 2007: 27). He draws on evidence suggesting that "public opinion follows the lead of party leaders and pundits, with partisans turning to their own leaders for cues on what to think and feel about the central questions of the day where there is no obvious consensus. When 'opinion makers' on their side of the aisle are silent, when only a handful of them are breaking with the current consensus, or when they speak with multiple, inconsistent voices, most people stick with the consensus view." (Westen, 2007: 22). This issue of leadership is not discussed further here.

Progressive business:
WWF is increasingly working with forward-thinking business-people who recognise the inherent difficulties of pursuing ever greater consumption within natural constraints that are themselves becoming ever more apparent. Many are recognising that an alternative to the 'consumerism narrative' is not just needed, but must inevitably emerge in the near future. This report aims to embolden these people to contribute to the debate about the shape that this alternative will take.

Non-governmental organisations:
NGOs face a crisis of identity in a context where concern about environmental issues – at least climate change – is moving centre-stage, but where many of the solutions are coming from the private sector – particularly enterprises that are fleet-of-foot and not unduly risk-averse. It seems clear that NGOs (both environmental and developmental) have a crucial role to play in responding to the challenges we face, and should continue to deploy a range of strategies. One such strategy must surely include challenging other stakeholders to reflect on the values-base from which they approach the environmental crisis. This report is intended to contribute to this debate among NGOs.

For so long as NGOs are content to frame their interventions in terms of the societal values that predominate in public discourse today, they will be of questionable relevance. Rather, this report builds a case that the environment movement should bring an additional a set of values to the debate: values that may not currently predominate in public discourse, but upon which any proportionate future response to the environmental crisis will need to build.

1.3 The environmental challenges we face

This report argues that new ways must be found to pursue the changes that are needed if we are to respond proportionately to the environmental challenges we face. It argues that convenient 'lifestyle' changes are unlikely to lead us to the systemic changes in behaviour that are needed, and that 'green consumerism' is ultimately inadequate as a response.

This is a bold assertion. Given the difficulty of motivating individuals to make even small changes to how they live – often changes that entail minimum inconvenience, or which may actually be in their financial interest – should strategies aimed at pursuing more fundamental change really be contemplated?

It is precisely because the challenge is so great, and the time for action so short, that more systemic solutions are needed. We cannot afford to expend time and resources in the pursuit of marginal changes, unless we have a justifiable conviction that such approaches really do offer the most effective way to create the more fundamental changes that are needed. There is an urgent need for debate about whether we need to replace current strategies, and whether they have a role to play in the short term – during a period of transition to more systemic approaches.

More than this, it seems inevitable that the environmental challenges we confront will soon force substantial changes upon us. It is important that we foresee and rehearse the debates that these changes will open up.

In examining current behavioural change strategies – and building a case for considering alternative strategies – this report focuses largely on climate change. This is the focus currently taken by most recent discussion on strategies for creating pro-environmental behavioural change.

The case for the need to review these strategies rests in important part on the severity of the challenge posed by climate change. But, crucially, it also arises from an understanding of the compound nature of a set of environmental challenges that demand a systemic response. The interconnected nature of the challenges we face further militates against the success of piecemeal strategies focused on specific pieces of behavioural change, or the purchase of particular 'green products'. For this reason, in addition to highlighting the climate change problem, this section also draws attention to some of the other environmental challenges we face; no less pressing for having been recently eclipsed by concern about climate.

1.3.1 Climate change

Such is the pace of the development of climate science that the Intergovernmental Panel on Climate Change (IPCC) Assessment reports – which are produced as the result of exhaustive and time-consuming review of the scientific data – are increasingly surpassed by observed impacts and new science by the time they are published. There is increasing recognition that without rapid and substantial reductions in our greenhouse gas emissions, we are likely to considerably exceed a 2°C rise in global average temperatures.

Climate change is taking effect faster than predicted in many cases. In particular, significant positive feedback mechanisms are taking hold far earlier than expected.[9] Recent modelling predicts that Arctic summer sea ice could be largely lost within five years, and there is a fear that the tipping point for the Greenland ice-sheet may have passed.[10] The IPCC's latest projection for sea-level rise this century is up to 59 centimetres. But, according to NASA climatologist James Hansen, this estimate is based on an incomplete understanding of the dynamics of ice-melt. He suggests that

9. Lenton *et al* (2008)
10. Spratt, D. (2007)

sea-level rises of 3-5 metres are possible this century. Such sea-level rises would have catastrophic consequences for many of the world's most densely populated areas. It seems that we may already be in the early stages of a runaway greenhouse effect.[11]

The current method of accounting for greenhouse gas emissions hugely underestimates the UK's contribution to worldwide emissions. In particular, it does not account for:

- consumption between countries (for example, from aviation and shipping);
- greenhouse gases emitted in the manufacture of goods overseas, imported for UK consumption;
- the additional impact of aviation emissions, compared with equivalent emissions made at ground level.[12]
- consumption on non-UK territory (business trips and foreign holidays);

When estimates for the impacts of these factors are considered, one study conducted by an Oxford economist and member of the UK government's Advisory Panel on Energy and Climate Security found that, while using current accounting methodology UK greenhouse gas emissions have fallen by 15% since 1990, on a consumption basis, a *rise* of 19% is found over the same period.[13] There is widespread agreement that we need reductions of *at least* 80% of UK emissions, based on 1990 levels, by 2050[14]. Some scientists suggest that even this will be inadequate. The scale of this challenge is difficult to overstate.

And yet the emissions reductions attributable to de-industrialisation may be bottoming out, and there may be countervailing trends arising from the growth of the service sector – notably air-conditioning and transport. The UK cannot rely on historical sources of emissions reductions as it looks to securing far larger reductions in future. We will need *far* more radical approaches to reducing greenhouse gas emissions than are currently being contemplated.[15]

11. Cox *et al* (2007)
12. Helm *et al* (2007)
13. Helm *et al* (2007)
14. Blundell *et al* (2008)
15. Two reports produced by WWF and others outline ways in which a radical transformation in the sourcing and use of energy across the global economy are both technically achievable and affordable. See WWF (2007a) and WWF (2007b).
16. World Commission on Dams (2000)
17. Orr (2008)
18. Millennium Ecosystem Assessment (2005: Chapter 7)
19. WWF (2006a)
20. WWF (2006b). The temperate and tropical freshwater living planet indices for 1970-2003 show average trends in 344 species. Species populations declined by about 30% over this period. There is a difference in trends between freshwater birds, which appear to have been relatively stable, and other freshwater species which have declined on average by about 50% over the same period.
21. FAO (2005)
22. Stern (2007)
23. WWF (2003)
24. Millennium Ecosystem Assessment (2005: Chapter 18)
25. Worm *et al* (2006)

1.3.2 Water

In the coming years, economic growth and increased purchasing power, a growing shift toward urbanization, increased population and the unknown effects of climate change are expected to place acute strains on global water resources. Agriculture current accounts for two-thirds of the world's water withdrawals, and is set to increase.[16] This increase in global freshwater demand will manifest itself on a number of levels. At a social level, the already insufficient allocation and availability of clean water will continue to hamper development progress. At an ecosystem level, significant problems of over-abstraction and pollution, in many of the world's most important river basins, will increase.[17]

Some 1.1 billion people lack access to water, and 2.6 billion lack adequate sanitation services[18]; most of these billions are in the poorest countries. More than half of the world's wetlands have been lost in the last century alone. Most of the world's largest rivers are losing their connection to the sea. Only a third of the world's 177 large rivers (1,000km and longer) remain free-flowing, unimpeded by dams or other barriers.[19] Species loss in freshwater ecosystems has been rapid – a decline of more than 50% in freshwater species populations over 30 years.[20]

1.3.3 Forests

Since the early 1950s, an estimated 50% of the world's forest cover has been cleared by humankind. Between 1990 and 2005, the global deforestation rate was estimated to be approximately 13 million hectares per year.[21] Deforestation also contributes massively to climate change; it is the source of 15-20% of global carbon emissions.[22] The IPCC estimates that at least one-third of the world's remaining forests may be adversely affected by changing climate, resulting in forest fragmentation and reduced forest productivity due to changes in temperature and precipitation.[23]

1.3.4. Oceans

The world's oceans are now in a state of global crisis caused by overfishing. More and more people are competing for fewer and fewer fish. The Millennium Ecosystem Assessment finds that "[t]he biomass of some targeted species, such as the larger, higher-valued species and those caught incidentally (the 'bycatch'), has been reduced over much of the world by a factor of 10 relative to levels prior to the onset of industrial fishing".[24] Unless the current situation improves, some models predict the collapse of stocks of all species currently fished by the middle of this century.[25]

1.4 The failure of government, and the compounding effects of 'small steps' campaigns

Governments are guilty of a capitulation of their leadership responsibility in responding to the environmental challenges that we confront. Yet environmental groups risk deflecting pressure for such leadership by urging their supporters to share showers, take the stairs rather than the lift, or buy the latest designer washing line.

As our awareness of the global scale of environmental problems grows, the sense of agency that individuals have to meaningfully address these problems is further eroded.

The question examined here is not whether, cumulatively, marginal changes in an individual household's energy use can contribute to addressing the problem of climate change – in purely numerical terms, they clearly can. But there is a more pressing question about how irresistible public demand for radical regulatory change will emerge, and whether the current emphasis on encouraging marginal individual behavioural changes will facilitate the development of this. Is a focus on marginal private-sphere behavioural change really the best way of deploying these meagre campaign resources?

All too often, the starting point in government responses to the need for regulatory change is to minimise the ambition and impact of a particular policy intervention, and to emphasise the role of private-sphere behavioural change and consumer choice.

Focusing on private-sphere behavioural change may serve as a dangerous distraction from the serious business of getting in place policy frameworks that are sufficiently ambitious to address these environmental challenges systemically.

On the one hand, if the belief that we ought to be able to address problems such as climate change – without this entailing fundamental life-style changes – actually sticks, this may serve to build resistance to the far-reaching government interventions that are actually needed. On the other hand, where this story is recognised as being hopelessly optimistic, it may also be seen as dishonest. And this dishonesty risks fuelling public cynicism, and inaction.

Unfortunately, the UK government seems resigned to focusing on marginal behavioural changes, while simultaneously accepting these as inadequate. In its recent document *A Framework for Pro-environmental Behaviours*, the UK government's Department for Environment, Food and Rural Affairs (Defra) writes that "most of our consumer research points to the need for pro-environmental behaviours to fit within people's current lifestyle, even if one might aim for more fundamental shifts over the longer term". And yet, simultaneously, the ministry recognises that: "[w]e need to demonstrate urgency and magnitude, responding to expectations of commensurate action by government and business."[26]

To re-emphasise: this report does not argue that private-sphere behavioural change is futile. Cumulatively it is important: but only if the danger of it leading to complacency can be avoided, and only in conjunction with ambitious government interventions. For this reason, environmental organisations may do well to reflect carefully on the continued investment of scarce resources in attempting to motivate individuals to make marginal behavioural changes to their lifestyles.

26. Defra (2008: 22)

2 The marketing approach to pro-environmental behavioural change strategies

This section documents an emerging consensus on pro-environmental change strategies, which is referred to henceforth as the 'marketing approach'. It draws on a number of recent reports published by UK-based think-tanks, communication consultancies, and Defra.

In particular, this approach is characterised in the following ways:

- Reliance is placed on 'small steps', often in the expectation that these will lead individuals to engage in more significant behavioural changes.
- Particular emphasis is placed on marketing green products or services ('green consumption').
- Reliance is placed on the 'commodification' of behaviours that are not otherwise directly associated with a particular product – such that a good or service becomes a *proxy* for the desired behavioural change.[27]
- Reliance is placed on audience segmentation; either by socio-economic criteria, or according to the *motivations* underlying willingness to engage in behavioural change.
- Of these motivations, particular emphasis is placed on the role of self-interest as a motivation for behavioural change.
- As a corollary to market segmentation, the emerging consensus must necessarily insist on the irrelevance of the *reason* that an individual adopts a piece of behavioural change – the emphasis is on using what appeals to a particular audience segment – irrespective of whether or not attention is drawn to the *environmental* imperatives for behavioural change.

The approach outlined above shares many characteristics with social marketing approaches to motivating behavioural change. However, the delineation between 'social marketing' and 'commercial marketing' is not always clear – particularly in the light of recent suggestions that behavioural changes should be 'commoditised' (see Section 2.8). There is also a debate about the role of market segmentation in social marketing strategies (see Section 2.6). These strategies sometimes rely on market segmentation according to socio-economic grouping. However, it has been suggested that the segmentation approaches of commercial marketing agencies (which tend to focus on underlying psychological motivations) may provide a more effective approach.[28]

For these reasons, the emerging consensus outlined above is referred to, throughout this report, as the 'marketing approach' to motivating pro-environmental behavioural change.

2.1 Compact fluorescent light bulbs today, marching on Parliament tomorrow

A key element in the marketing approach is that steps should be simple and painless. In part, proponents of this approach point to the cumulative benefits of large numbers of people engaging in small changes. The additive importance of widespread adoption of marginal changes cannot be casually dismissed. But ultimately, it must be demonstrated that such changes will promote (rather than inhibit) the adoption of the more fundamental behavioural changes and government interventions that are needed.

There is an assumption that, by encouraging individuals to make small steps to reduce their carbon footprint, they will subsequently become motivated to embark on larger steps; that their initial commitment to undertake small lifestyle changes will 'spill over' into other more significant changes. So, for example, Defra recommend that "[w]e need to promote a range of behaviours as entry points in helping different groups to make their lifestyles more sustainable – including catalytic (or 'wedge') behaviours if identified through research".[29] Another report recommends that environmental organisations "introduce 'green starter kit' advice by starting people off with easy actions with obvious paybacks or pleasant effects that fit into existing routines, before building up to the more difficult ones".[30]

The idea that small behavioural changes will lead to larger ones builds on research conducted on the 'foot-in-the-door' strategy, which has been investigated mainly through experiments based on door-step requests. Researchers have found that by asking experimental subjects to comply with a small initial request, they are then more likely to consent to a larger subsequent (and usually related) request. The application of the results of foot-in-the-door research to strategies for creating pro-environmental behavioural change is a highly contested issue.

It seems clear that the foot-in-the-door strategy can work under some circumstances, but results are highly inconsistent, and the effect may be small, undetectable, or even operate in the reverse direction.[31] This reverse effect is called 'negative spill over'. It may arise, for example, if individuals tend to 'rest

27. For example, see the discussion on the Wattson electricity meter (Section 1.1 above and considered in more detail in Section 2.8).
28. Social marketing approaches "seek to change consumer behaviour without understanding motivation. The work of the UK Energy Savings Trust and much of the 'sustainable development' community – government and NGO efforts – makes this mistake. Social policy theory and social-economic segmentation tells you little or nothing of any use about why people do or don't behave in particular ways… The government would do well to consider the lessons of what works in campaign design and in commerce (where psychological rather than economic analysis rules in sales and marketing), and combine that with what social marketing has to offer" (Rose, 2006)
29. Defra (2008: 22)
30. Hounsham (2006:143). The assumption that small initial behavioural changes will 'spill-over' into more significant ones is frequently left implicit, perhaps because of an uncertainty about the empirical basis for this. Another example is from Do The Green Thing, an internet-based site that encourages subscribers to take small steps such as using the stairs rather than the lift. "Green Thing's basic principle is to tempt people to do one delightful thing a month and so build up a programme of green behaviour one easy step at a time." (www.dothegreenthing.com/faq). It is unfair to single out these instances, however. WWF itself has relied tacitly upon the effectiveness of a 'spill-over' effect in some of its own campaigning.
31. Berger (1999), Thøgersen (1999)

on their laurels' – or actively seek to undertake simple and painless pro-environmental behaviour in order to ease their conscience in avoiding more costly or difficult behaviours.[32]

One panel study, conducted in Denmark over a two-year period, examined whether consumers who engaged in pro-environmental behaviour in one category of behaviour (for example, recycling) are more likely to engage in another area (for example cycling to work) at a later point in time. The results were ambiguous, leading the authors of the study to conclude:

"[T]he panel analysis did find signs of transfer of environmentally-friendly conduct between behavioural categories, but only in a few of the possible instances and, as expected, only transfers of modest size. The panel analysis also identified a few negative cross-lagged effects [negative spill over]… Such effects may indicate that the performance of an environmental-friendly behaviour reduces the propensity to behave environmentally friendly in other areas."[33]

Of particular controversy is whether or not foot-in-the-door can work for larger environmental behaviour changes. There is a lack of empirical evidence here, leading Paul Stern, Director of the US National Academy of Sciences' Committee on the Human Dimensions of Global Change, to comment: "foot-in-the-door has no track record of inducing major environmentally significant behaviour… [published studies] provide evidence that these theories work in some situations, but I don't believe they provide evidence that they work for the big environmental behaviours".[34] Whether this lack of evidence reflects the absence of an effect for big environmental behaviours, or the difficulty of detecting this, is not clear. It is possible that this lack of empirical evidence arises in part from the difficulty of studying difficult or expensive behavioural changes – by their nature, they are infrequent.[35]

Against this background, it seems ill-advised to draw any firm conclusions about the significance of 'foot-in-the-door' strategies for large pro-environmental behavioural changes. Certainly, given that the 'foot-in-the-door' effect seems to form the central plank of many change strategies that rely on encouraging individuals to make small steps, in the expectation that these will lead to the adoption of more significant behaviour change, we should be clear that there is little supporting evidence for the efficacy of this approach.

But even if campaigners are to persist in relying on the 'foot-in-the-door' strategy to encourage larger pro-environmental behavioural changes, this requires *that they actually make requests for more significant behavioural changes* of this kind. Exclusive reliance on small steps is not the full foot-in-the-door strategy. As one researcher puts it: "[I]f people are never asked to do the progressively larger behaviour changes, they may not do them, regardless of whether they have been asked to do smaller behaviours."[36]

2.2 Green consumption and appeals to materialism

Many pro-environmental behaviour-change strategies point to the social status derived from ownership of particular products. Solitaire Townsend, the founder of FUTERRA, a communications consultancy which advises the UK government on its Climate Communications Strategy, is quoted as saying: "You can't stop people wanting status symbols, but you can make them aspire to different ones."[37]

It is clear that social status conferred on particular products is an important motivator for many of our choices as consumers.[35] But it is far from clear that, exploited as a source of motivation for pro-environmental behavioural change, this will contribute to reducing (as opposed to exacerbating) the environmental problems associated with consumerism. Townsend herself neatly illustrates the problem in an anecdote that she relays in a BBC Radio interview. It's worth quoting in full:

"If I change my light bulbs and put cavity wall insulation on my home and turn all my lights off when I go to bed and half fill my kettle, it's not something that's going to give me any social status, it's not something which my neighbours can see; whereas if I put a wind turbine on my house or a solar panel on my house or park a Toyota Prius outside my front door, it's a social proof action. Now that doesn't necessarily mean that you did it for climate change. One of my friends has got a solar panel on the north-facing roof of her house. When I pointed out to her that's not necessarily the best place in the UK in order to be generating energy, she pointed out to me that I wasn't understanding why she'd done it. The north facing part of her house is the part that faces the street."[39]

32. Thøgersen and Ölander (2003)
33. Thøgersen and Ölander (2003)
34. Paul Stern, post on 'Conservation Psychology' list-serve, 13 November 2007
35. In responding to this critique of foot-in-the-door (FITD), and conceding that there is an absence of research relating to large pro-environmental behaviours, one researcher, who is more up-beat about the potential value of the strategy, points to other examples of FITD phenomena resulting in very costly behaviours: "For example, cult leaders like Jim Jones nearly always suck people in with small requests that progressively escalate, eventually resulting in major lifestyle changes and even horrific events like mass suicides" (Amara Brook, post on 'Conservation Psychology' list-serve, 7 November, 2007).
36. Amara Brook, post on 'Conservation Psychology' list-serve, 7 November, 2007
37. Rogers (2007)
38. Belk (1988)
39. BBC (2007)

There are two points that should be drawn from Townsend's anecdote, which are of more general significance.

The first point is that the attractiveness of being seen to have a solar panel on one's roof, or a hybrid car parked in the drive, need not have anything directly to do with a desire to reduce one's carbon footprint. This is important, because while advertising campaigns linking celebrities to hybrid cars may be good ways to increase the social status associated with these vehicles (and therefore drive up sales of that model) they may not motivate the owners of such cars to want to address their carbon footprint in a more systemic way. This is a fundamental problem with many marketing approaches to creating pro-environmental behavioural change, and it is discussed further in Section 2.9.

The second point is that in this instance, the net result of the pursuit of social status was to compromise the reduction in carbon footprint achieved by the individual who installs the solar panels on her roof (assuming these are less efficient on a north-facing roof).

There will be instances under which social stigma associated with particular products or behaviours drive a reduction in consumption. But these reductions in consumption will tend to arise from product substitution, rather than outright rejection. If it becomes socially unacceptable to drive an SUV, people may replace these with a hybrid, and their annual fuel consumption seems likely to fall. But they are still buying a car – and possibly still buying a new car every year or two, as newer (perhaps more efficient, but certainly well-marketed) models become available. It is far more difficult to foresee that social status will provide the basis to persuade these consumers to part with their cars, take the bus to work, and join car clubs for those few occasions when they cannot use public transport. Indeed, some authors, in reviewing change strategies recognise this: "[t]he car is less about transport and more about a sense of freedom, convenience and personal identity. It is… a status symbol, a means of social bonding (particularly for men), a cocoon, a lover, a best friend and a refuge… [C]ar clubs might never become truly mainstream because a borrowed car cannot fulfil many of these personal identity requirements."[40]

This section has criticised appeals to social status, derived from material acquisitions, as a source of motivation for driving pro-environmental behavioural change. This should not be taken as a failure to recognise the crucial importance of social context in the dissemination and reinforcement of such behaviours. Irrespective of the motivations to which appeal is made in the course of driving pro-environmental behavioural change, it is clear that social context will play a critically important role. Even among 'deep ecologists', for example, social context is of critical importance in validating and maintaining their chosen lifestyles.[41]

2.3 Green consumption and consumerism

As might be anticipated, there is considerable business enthusiasm for the commercial opportunities that 'green marketing' might offer[42]: Terry Leahy, the CEO of Tesco, one of the world's largest retailers, recently urged that:

"In the early part of this century we must now achieve a new revolution in green consumption. The barriers are familiar. People talk about green choices, but for millions of people a lack of information and affordability limit this choice. We will not tackle the challenge of climate change by enlisting only the few… The green movement must become a mass movement in green consumption."[43]

Similarly, Sue Welland, Founder and Creative director of The Carbon Neutral Company writes that "[o]ne of the most powerful levers we have to address climate change is the power of consumer choice…".[44]

There is an important distinction to be drawn between consumption and consumerism. Clearly, those living in a future society which is effectively minimising its ecological footprint will continue to consume. But there is a powerful argument that, within such a society, we will have to find ways to tackle the problems of consumerism – the drive to consume ever more goods and services; a need that may emanate from basic human propensities, but which is exploited and exacerbated by highly refined influencing techniques developed by the marketing industry.

The growth of consumerism has been possible because material goods contribute importantly to the construction of our self-identities, and they do so in ways that must extend beyond their mere practical utility. So, for example, a car

40. Hounsham (2006: 135)
41. Zavestoski (2003)
42. For example, TGI (Target Group Index), "a global network of single-source market research surveys providing invaluable, comparable consumer insights for over 50 countries across 6 continents" conducted a recent study of green marketing opportunities. It found that "there is a great opportunity for marketing green products to the masses, and numerous examples of products that have moved into the mainstream due to their practical consumer benefits as well as their 'green-ness'." (TGI, 2007: 20). The report suggests that "[a]s consumer interest in the sustainability of our planet continues to gain momentum, green marketing presents sizeable opportunities for industry." (p.31). The study identified a group of consumers that it calls 'Eco-Adopters'. "These are consumers who demonstrate not just an environmentally-conscientious mindset, but also the willingness to put these beliefs into action… In each of the US, Britain and France, we selected behaviours that allowed us to focus very specifically on the most environmentally conscientious consumers. The behaviours included: Membership of an environmental organisation, Donations to wildlife charities, Purchase of Green Products, Interest in 'green' articles in the press…" (p.11). But on more significant indicators of pro-environmental behaviour, a different picture emerged. The survey found that "Eco-Adopters in Britain and the US are as likely as the average person to own a car, and to spend up to eight hours travelling in it every week." They are also far more enthusiastic flyers than the national average. "[O]ver half of Eco-Adopters in Britain flew in the past year… and 14%… have taken a domestic flight in the past year." (p.16)
43. Terry Leahy at a joint Forum for the Future and Tesco event in central London, 18 January 2007: see www.tesco.com/climatechange/speech.asp
44. TGI (2007: Foreword)

has significance that extends beyond its value as an object that enables one to get from A to B quickly, and relatively comfortably. Rather, as described in the last section, the cars we drive have addition 'symbolic' meaning: they represent some part of who we consider ourselves to be. As Tim Jackson puts it, in a modern Western society, "the symbolic project of the self is mainly pursued through the consumption of material goods imbued with symbolic meaning."[45]

"No purely functional account of material consumption is going to be able to deliver a robust model for influencing consumption patterns or changing consumer behaviour: because functionality is not the point *(or at least not exclusively the point). We consume not just to nourish ourselves or protect ourselves from the elements or maintain a living. We consume in order to identify ourselves with a social group, to position ourselves within that group, to distinguish ourselves with respect to other social groups, to communicate allegiance to certain ideals. To differentiate ourselves from certain other ideals. We consume in order to communicate. Through consumption we communicate not only with each other but with our past, with our ideals, with our fears and with our aspirations. We consume in pursuit of meaning."*[46]

In itself, this does not necessarily pull the rug from beneath 'green consumption' as a means of addressing the environmental crisis. But there is a critical question, relating to the role of consumerism in driving green consumption, and the risk that this will continue to lead to *ever more* consumption.

Those who pin their hopes on the efficacy of green consumption must hope that consuming "to communicate allegiance to certain ideals" can actually entail us consuming *less*, or making do with what we have. Perhaps those ideals can amount to something like 'less is more'. Is such a hope justified?

Unfortunately, it may be that our preoccupation with material objects as mechanisms for us to establish meaning necessarily entails that we will continually consume *more* stuff, for so long as we find meaning in this way. In *The Loss of Happiness in Market Democracies*, Robert Lane writes: "…advertising must use dissatisfaction to achieve its purpose", and he shows that this aspect of consumer culture dates back to Edward Bernays in the 1930s. Bernays "understood that the appetite of our present materialism depends upon stirring up our wants – but not satisfying them."[47]

Many perspectives support the viewpoint that there is something inherent about the urge to consume that leads us to want to consume *ever more*. For example, Grant McCracken argues that consumer goods serve as bridges to our hopes and ideals. He suggests that, both as communities and as individuals, we must develop strategies to cope with the discrepancy between how we find society in reality, and our hope that an alternative society is possible.[48]

One such strategy, he argues, is the displacement of these ideals – allowing us to sustain hope that we might at some point, achieve the ideal social life we seek. Hence, we may remove these ideals "from daily life and transport them to another cultural universe, there to be kept within reach but out of danger" – somewhere that they cannot be contradicted and that they avoid the undue scrutiny that could declare them ultimately unattainable. Examples of places to which ideals can be moved in this way include an historical 'golden age' in which life is imagined to conform to our ideals, or a utopian future. Alternatively, this displacement may occur spatially – by reference to a distant country (whose inhabitants live an idyllic pastoral existence, perhaps), or to the lives of others (celebrities, for example).

It is essential, however, that we – both collectively and individually – have access to these displaced meanings; they are, after all, what give us hope. But this access must be achieved without risking undue scrutiny: it was to remove them from such scrutiny that these meanings were displaced in the first place. How is this delicate process negotiated? What bridges can we find to our displaced meanings that simultaneously provide us with this access, while safeguarding them against undue scrutiny?

The prospect of ownership of particular goods offers such a bridge. In prospect, a convertible sports car, for example, offers the anticipation not just of the car itself, but an entire idealised way of life – freedom, sexual attractiveness, the adulation of others. Certainly, marketing strategies encourage the perception that the car stands for such an ideal. The apparent possibility that the car can confer this way of life offers substance to this ideal, making it seem more plausible, and more easily within grasp. The ideal of this lifestyle, however, is not tested – unless, of course, the car is eventually bought. Then, the ideal becomes vulnerable to contradiction (what happens if life isn't found to be as anticipated?). Here, the individual "simply discredits the object obtained as a bridge to displaced meaning and transfers this role to an object not yet in his or her possession". This is easily achieved: "for most consumers there is always another, higher level of consumption to which they might aspire… [serving] as a guarantee of safe refuge for displaced meaning."

"When goods serve as bridges to displaced meaning they help perpetually to enlarge the individual's tastes and preferences and prevent the attainment of a 'sufficiency' of goods. They are, to this extent, an essential part of the Western consumer system and the reluctance of this system ever to allow that 'enough is enough'."[49]

45. Jackson (2004b)
46. Jackson (2002)
47. Lane (2001), cited in: Shah (2005)
48. McCracken (2006)
49. McCracken (2006)

Consumerism, it seems, may involve a "high *turnover* of goods, not merely a high level of their acquisition" [50] McCracken argues that there is an intimate connection between consumer goods and hope. "The things we want must always be just beyond us, always just out of reach. For goods to serve the cause of hope, they must be in inexhaustible supply. We must always have new goods to make our bridges if hope is to spring eternal." [51]

If it is true that there is something about the *process* of acquiring the goods that perpetuates consumption, this seems to suggest that the problems of consumerism will only be properly addressed by re-assessing the contribution that consumer goods make to our quality of life. This argument is examined further in Section 3.4.

2.4 Decoupling growth and environmental impact

The dominant view among governments is that sustainable consumption must be pursued through the increased consumption of more sustainable products, thus preserving the legitimacy of government pursuit of economic growth, while seeking to reduce the environmental impact of this. For example, the UK government's approach to sustainable consumption and production is aimed at "[b]reaking the link between economic growth and environmental pollution"[52] and "achieving economic growth whilst respecting environmental limits".[53]

But as Tim Jackson points out, "it would be entirely possible, under this framing of the problem, to have a growing number of ethical and green consumers buying more and more 'sustainable' products produced by increasingly efficient production processes, and yet for the absolute scale of resource consumption – and the associated environmental impacts – to continue to grow... Simplistic appeals to reduce material consumption while maintaining economic growth risk charges of naivety or even disingenuousness." [54] Indeed, this perspective is supported by studies on the energy-intensivity of economic growth. For example, the Royal Commission on Environmental Pollution writes:

"There will continue to be very large gains in energy efficiency and resource efficiency but on current trends we find no reason to believe that these improvements can counteract the tendency for energy consumption to grow." [55]

If, as some theories of consumerism contend, the psychological basis for our urge to consume is inseparable from an urge to continually *increase* our levels of material consumption, then strategies that attempt to encourage us to simply *change* the types of things that we consume may fall far short of creating the changes needed. This problem wouldn't arise if the consumption demands of a growing global population could be met equitably and sustainably through the provision of ever more, more sustainable, goods and services. If, in perpetuity, the reduction in our ecological footprint (attributable to the provision of more sustainable goods and services) more than compensated for the increase in ecological footprint (attributable to both an increasing number of consumers, and the increasing *per capita* demand for goods and services) then we could perhaps afford to be complacent about the problem of consumerism.

Any behavioural change strategy that is premised on providing incentives for the consumption of more (albeit more sustainable) goods and services, must grapple with these issues.

The de-industrialisation of developed economies, and a shift to a services-based economy are often cited as mechanisms by which these changes can be effected. A shift to a more services-orientated economy will reduce he greenhouse gas intensity per unit GDP, but it is far from clear that this will lead to a reduction in greenhouse gas emissions in absolute terms. For example, in recent decades the share of manufactured goods as a component in US GDP has been exceeded by the share of service-orientated industries. In absolute terms, however, the production of manufactured goods has continued to increase.[56]

In the UK, CO_2 emissions fell in the 1970s and 1980s, partly as a result of a contraction of manufacturing output. But the economy continued to grow, and with it, the import of manufactured goods from elsewhere. The production of these goods, for consumption in the UK, entails production of CO_2 in their country of manufacture. A study led by the economist Dieter Helm, a member of the UK government's Advisory Panel on Energy and Climate Security, finds that UK "de-industrialisation may not have delivered a real saving at the global level, instead displacing those emissions

50. Campbell (2006: 284), emphasis in original.
51. McCracken (2006: 274). McCracken (1988) also develops another theory as to why our demand for consumer goods may be insatiable, which he calls the 'Diderot effect'. The French philosopher Denis Diderot was given a new dressing gown. The replacement of his old dressing gown with a new one leaves him dissatisfied with his other possessions, such that he gradually replaces each of them in order to try to maintain a "consistency in his complement" of consumer goods; his desk looks tatty alongside his new dressing gown, and he replaces it. Then he replaces his wall-hanging, which now seems threadbare, and so on. McCracken suggests that we ensure each of these purchases meets a slightly higher standard than the previous one, "drawing the complements ever higher", and ensuring that we continue to consume.
52. DTI (2007)
53. Defra (2007)
54. Jackson (2006: 5)
55. Royal Commission on Environmental Pollution (2000), cited in: Herring and Roy (2007)
56. Suh (2004)

abroad". Indeed, the study finds that "[b]y 2006, the trade deficit in greenhouse gases was… around 50% of domestic UK greenhouse gas emissions", and that the UK has "an increasing propensity to import from more greenhouse gas-intensive economies… The overall position is that the greenhouse gas trade deficit has increased six-fold [between 1990 and 2006]."[57]

This report does not examine these issues further, other than to note the huge dimensions of the task in hand if we are to reduce natural resource use, on the scale and in the time-frame that is needed, under the imposed constraint of continued economic growth. That the 'decoupling' argument is so deeply embedded in establishment responses to the environmental crisis makes it difficult to critically assess. Yet the credibility of this response to the environmental challenges we face demands closer scrutiny.

2.5 Marketing less: sharing and treasuring

All too often, contributions by marketing experts to the sustainable consumption debate stop short of grappling with the problems of motivating reduced consumption (as opposed simply to the consumption of more 'green' goods). One recent and more thoughtful contribution to this debate is John Grant's *The Green Marketing Manifesto*. Grant is unequivocal about the scale of the challenge we face: he writes that "our lifestyles need to change *beyond recognition*".[58] Because he is clear about the scale of the changes that are needed, he foresees radical changes to our consumption patterns – including the need to consume less. Challenging consumption, he suggests, can be approached in two ways: through sharing, and through treasuring.

Sharing offers an alternative to ownership. For example, Grant recognises that selling more hybrid cars is not enough. Rather, he suggests, we need to move to a situation where we rent, lend, share or co-own our car with others.

Treasuring offers another route to challenging consumption. For example, Grant suggests that we should learn to treasure – and upgrade – our existing computers rather than regularly replacing them, treasure a personalised mobile phone rather than giving it up for a newer model, or invest in a pair of expensive and personalised trainers that are made to last, and which we will want to keep for a long time.

Unfortunately, without systemic engagement with the motivations that underlie these behaviours, both these strategies are likely to fall far short of what is needed. Although Grant doesn't make this distinction, his proposals are of two types: one strategy is premised on soaking up as much of a person's wealth as possible by encouraging them to spend it on as little stuff as possible; the other is on the direct environmental benefits of consuming less.

2.5.1 Strategies for buying less

2.5.1.1 Spending more

One approach that Grant outlines is to encourage a consumer to spend *more* – either on higher priced alternatives to things they already consume, or as a result of acquiring new appetites for environmentally benign goods and services.

"If our money was tied up in a few big budget items, we would buy classics that don't go out of style, we would treasure them and take great care of them and we would derive status from their ownership."[59]

For example, Grant highlights Nike iD trainers which the consumer designs from a palette of soles. Alternatively, individuals could be encouraged to spend money on things with minimal environmental impact (Grant gives the example of the collector of broken laser-pointers, which would otherwise end up in landfill!). Either approach leaves the consumer with less money to spend on other goods and services, and may therefore lead to a reduction in ecological footprint.

One problem with this approach is that consumers will be reluctant to pay a premium for a good in direct proportion to an increase in its life-expectancy. For example, few consumers would pay twice as much for a pair of running shoes built to last twice as long. Having bought the more durable shoes they may either: (i) use them until they wear out, reducing their overall consumption of running shoes, but leaving them with more money to spend on other things that they couldn't otherwise have bought, or, (ii) bore of them as quickly as they would a cheaper pair, and buy a new pair anyway.

The second of these possibilities will require them to spend more, overall, on running shoes. This may mean that they spend less on other goods (with good or bad environmental impact, depending upon where these savings are made). Or it may drive them to work harder, or borrow more, to finance the increased costs of their more expensive consumption patterns – with negative personal, social and environmental consequences (see Section 3.4 for discussion about the problems of materialism, and the inherent link between materialism and resistance to pro-environmental behavioural change).

57. Helm (2007)
58. Grant (2007); emphasis in original
59. Grant (2007: 262-263)

Either way, the problem with this approach is that it needn't necessarily do anything to encourage people to embrace less materialistic sources of meaning. Until the problem of over-consumption is addressed at this more fundamental psychological level, the approaches that Grant suggests will be akin to squeezing a balloon; reducing consumption in one area, whilst it burgeons elsewhere.

2.5.1.2 Spending less

Other approaches to promoting sustainable consumption through sharing and treasuring lead a consumer to spend *less*. This might be by selling one's car and joining a car share scheme, or by borrowing power-tools from a tool library (rather than acquiring them oneself). Such approaches are often promoted on the grounds that they help an individual *save money*.

However, if this is in turn to lead an individual to consume less overall, account must be taken of the rebound effect (see Section 2.9.1). If I save money by joining a car share, or upgrading rather than replacing my computer, it is important that I don't simply spend this on some other environmentally damaging good or service.

The inherent difficulty of addressing the environmental problems arising from private car use, without first confronting the underlying psychological needs that drive our appetite for consumption, is perfectly illustrated by the problems arising from 'fractional living'. Fractional living works because it presents a highly efficient mechanism to pursue these psychological needs. Unfortunately, the environmental impacts may be negative.

Proponents of 'fractional living' urge consumers to transcend an insistence that they own the goods they use. Rather, they highlight the attractiveness of rental or co-ownership. But this is not about frugality. In the words of one prominent advocate of fractional living, it's a "more efficient means of ownership that allows you to get more of the things you really want"[60]. The Fractional Life website, for example, highlights the possibilities:

"Using Fractional Life, you can decide, for instance, to cost-effectively own a quarter share in an exotic holiday home abroad, have access to your favourite yacht eight weeks a year, spend a selection of days behind the wheel of some of the most desirable cars in the world, have the latest handbag on your shoulder and even own a part-share in a nightclub!"[61]

60. Dan Nissanoff, the author of *FutureShop*, in an interview on the BBC Radio 4 programme *You and Yours*, broadcast on 24.12.07
61. www.fractionallife.com
62. Grant (2007: 247)
63. Grant (2007: 262)

Unless these individuals sell their vehicles because they are motivated to reduce their material consumption, it seems unlikely that this will lead to an overall reduction in environmental impact.

2.5.2 The need for a new myth

The ideas that Grant outlines in his book are important; they go far beyond an orthodox 'green marketing' approach. Moreover, 'sharing' and 'treasuring' will surely be things that people will naturally come to do far more of in a future, more sustainable, economy. But it seems clear that approaches to addressing the problems of consumption must first engage the underlying motives that drive consumerism.

Indeed, Grant recognises that "[w]e need quite powerful counter-myths to help sharing schemes to become normal and intuitive."[62] Much the same will be true of attempts to encourage the consumption of "a few good things" rather than a "superfluity of crap commodities".[63] If such counter-myths are to be promulgated, the motivations to which marketers appeal will be critically important.

As will be discussed elsewhere (see Section 2.9), there is evidence that the reasons people adopt more sustainable consumption patterns (or adopt pro-environmental behavioural changes generally) are important. It seems that these reasons have a bearing on the extent to which more sustainable behaviours spill over into other lifestyle choices, and they are likely to influence the energy and persistence with which these changes are adopted.

It is at this level – in terms of the values that motivate our behavioural choices – that work on sustainable consumption must come to focus. What is not yet clear, however, is whether there is any role that marketing can usefully play in the emergence of these counter-myths. WWF-UK is currently hosting a series of forums, drawing together marketers and psychologists, to ask what these counter-myths might look like, and whether, in the course of their promulgation, there is any role for the sophisticated influencing techniques that marketers use.

2.6 Market segmentation

The use of marketing techniques to create pro-environmental behavioural change extends far beyond marketing green goods and services. Even where no goods or services are involved, behavioural change is seen as something that must be 'sold' to the target audience: "[W]e have to approach positive climate behaviours in the same way as marketeers approach acts of buying and consuming… *It amounts to treating climate-friendly everyday activity as a brand that can be sold.* This is not necessarily a familiar or comfortable

proposition for those engaged in campaigning or public sector work, but it is, we believe, the route to mass behaviour change."[64]

In line with commercial marketing techniques, the 'marketing approach' outlined at the start of Section 2 therefore pursues behavioural change through a process of targeting specific audience segments. For example, in advising the UK government on ways in which climate change mitigation might be linked to 'a positive desire', the communications consultancy FUTERRA writes: "Traditional marketing theory emphasises the need to make the product or service one is trying to 'sell' relevant to the target audience, and capable of meeting a very specific need."[65] Similarly, a joint publication by Demos and Green Alliance makes this point, suggesting that one of the steps that should be followed in any public influencing campaign is to start with a specific demographic: "Commercial marketing campaigns always start out with a very specific demographic in mind. They understand that different sorts of people will respond to different messages, and target their campaigns accordingly."[66]

Audience segmentation is increasingly being based on a set of psychological rather than socio-economic criteria (although some agencies – and the UK government itself – are proving slow to catch up with this trend).[67] Thus researchers from IPPR write: "The history of commercial marketing points to another important pre-condition [for effective behavioural change] – the imperative to know and segment one's audience, not only along socio-economic lines, but also by psychological motivations."[68] Finally, a review of change strategies suggests: "Campaigns to encourage and persuade the public to adopt green behaviours must be framed in terms that make sense to them, according to their own values and motivations."[69]

One such approach to mapping the values that underlie behaviour is known as 'values-modes analysis' and has been referred to as a 'focus group of the entire country'.[70] This is a sophisticated technique for audience segmentation, that has been developed particularly for use in an environmental context, and that has undoubted value in generating specific behavioural changes. In essence, the approach defines three main segments of the public, corresponding to three values-modes. These three modes – each of which is further subdivided – are defined as: Settlers (predominantly security driven), Prospectors (outer-directed or esteem-driven individuals) and Pioneers (who are inner directed).[71]

Proponents of values-modes analysis advocate an appeal to the specific psychological needs of the target audience: "[T]he task is not, as is often assumed, to 'make people care about climate change' but to provide them with actions which mitigate climate change by meeting their psychological needs – in the Prospectors' case, the need to acquire and display symbols of success."[72] These psychological needs vary between groups, such that different groups "may elect to do the same thing but for very different 'reasons' because they are meeting different needs."[73] Consequently:

"An appeal for living to stay within global limits for instance, has natural resonance with pioneers but is an invitation to 'think globally' and is thus an anathema to settlers. Prospectors may dismiss this as 'do gooding': an invitation to lose time which is in pursuit of success, by wasting it on benefiting others. Unless there's something significant in it for them, they're probably not going to join a campaign or act."[74]

This approach may work well in a piecemeal fashion. Where Prospectors are motivated by conspicuous consumption, it may help to sell more solar panels or hybrid cars. But it seems less clear that this approach will engender public appetite for radical changes in how we live – and a commensurate popular acceptance of, or demand for, far-reaching policy change.

The values-modes approach places particular emphasis on engaging Prospectors (outer-directed or esteem-driven individuals). This group is resistant to the traditional exhortations for behavioural change based upon environmental concern and moral imperative – approaches that may work better for Pioneers. Moreover, it is this group

64. Eraut and Segnit (2006); emphasis in original
65. FUTERRA (2005: 26)
66. Collins *et al* (2003: 47)
67. See also the introductory paragraphs in Section 2.
68. Retallack *et al* (2007: 15)
69. Hounsham (2006: 136)
70. Rose and Dade (2007). Rose (2004) writes of values-mode mapping: "As this system segments people according not to their lifestyle or shopping behaviour, class or wealth, but by psychological needs, it is directly relevant to campaigns, which stand or fall on motivation… [I]t can be used at any level from the individual, to the entire population, and is in effect a regularly updated focus group of the entire country."
71. Values-modes mapping segments in a way that is broadly consistent with Maslow's 'hierarchy of needs'. In line with this, Rose and Dade (2007) write that "**Settlers** are: socially conservative, concerned with the local, known, identity, belonging, and prefer trusted channels and known behaviours. They are wary of change and espouse discipline, are acquiescent, keeping to the rules and wanting a lead from authority. **Prospectors** want to acquire and display the symbols of success in everything they do. They want to make their lives better and be seen to succeed. They are a higher energy more fun seeking group. They are early adopters but not innovators, which involves social risk that they avoid. **Pioneers** are society's scouts, testing and innovating, and always questioning. They are attracted not so much to signs of success but what is 'interesting' including 'issues'. Some of them are strongly ethical believing that to make the world a better place they must be better people. Others are more relaxed and holistic and some are into 'doing their own thing'. They are most at ease with change and most global in outlook of all the groups."
72. Cultural Dynamics Strategy and Marketing Ltd and Campaign Strategy Ltd (2005)
73. Rose *et al* (2005)
74. Rose *et al* (2005)

that includes some of the most voracious consumers; these are people who "often love shopping – not just to get things but the whole process of being there and being seen to shop".[75] This group is further segmented. For example, among the Prospectors, the 'Now People' "need instant choices, and bounded uncomplicated offers which bring immediate rewards of recognition that reflect their own straightforward and success oriented world view. They seek the esteem of others and are systematic about it."[76]

But don't expect the Now People to consume less: They "are a significant part of the motor of our economy… This does not mean they are 'anti-environmental' *but they are most definitely anti-abstinence, anti-giving stuff up*".[77] Prospectors often come to adopt the behaviour of Pioneers, if this becomes fashionable (this effect helped to boost sales of the Prius, for example). But if they are "to make that jump, the behaviour often needs to be commodified" (see Section 2.8 below).

Some of the implications, and probable limitations, of this approach to motivating pro-environmental behavioural change are discussed in the next three sections.

2.7 Self-interest

One theme to emerge from a consideration of the values that underlie pro-environmental behavioural choices is the importance of self-interest. Thus, it is asserted that the most effective approaches to generating pro-environmental behavioural change will be based on appeals to self-interest. For example, one set of principles for environmental organisations suggests that:

"An accurate basic assumption might be that most people are essentially selfish, which is a natural human reaction and indeed a natural evolutionary process for any animal. Quality of life for oneself and one's dependants is always a key driving force for anyone. Any benefits from environmental behaviour, and there should be benefits from every environmental behaviour, must be tangible, immediate and specific to the person carrying out the behaviour. Benefits at the society level are unlikely to be a significant driver of change; benefits should be as localised as possible."[78]

This theme – of immediate personal self-interest – pervades many current pro-environment behaviour change strategies, but there is a systemic problem with this approach. An individual's contribution to exacerbating the environmental challenges that we face may have no discernible impact on the scale of that problem. The more globalised the problems we face, the more this is true.[79]

In addressing localised environmental problems, the self-interest to which a campaigner might appeal could be the quality of an individual's immediate environment. The motivation for behavioural change (the aesthetic appeal of a local area) then coincides with the call to action (for example, 'Don't drop litter!'). But in the case of a disparate challenge like climate change, the quality of an individual's own environment is not perceptibly improved as a result of action they may take to reduce greenhouse gas emissions arising from their own activities. (I may be acutely concerned about the impact of climate change on my local environment, but I also know that even radical changes in my own lifestyle will have no discernible affect in ameliorating these impacts.) In relying on self-interest as a motivation for personal action to help tackle a problem such as climate change, this self-interest must therefore be seen to arise from some other 'spin-off' benefit arising from the different behaviour. (For example, this might be financial savings as a result of reduced energy consumption, or the social status that accrues from driving a hybrid car).

The problem is that, as will be discussed in Section 2.9.2, such 'spin-off' benefits may not help to consolidate an individual's self-concept as being 'someone who tries to reduce my environmental impact'. Indeed, it may reinforce self-concepts that are inimical to environmental action in other ways (e.g. 'I like to save money where I can' may be environmentally beneficial in terms of domestic energy use, but could work in the opposite direction when it comes to paying more to travel by train than by aircraft).

2.8 Commodifying behaviour changes

As mentioned in Section 2.6, approaches to motivating pro-environmental behavioural change that are based on green consumption are sometimes extended beyond the marketing of particular products and services, to seek the 'commodification' of a particular behavioural change. For example:

"Pioneers may have thought about climate change and decided to take their own action on it for example by going around the house turning appliances off standby, reducing flying or switching to green electricity, or joining (quite likely starting) a campaign. The Wattson [an attractively designed electricity meter that shows current energy usage

75. Rose *et al* (2007). Elsewhere, Rose writes: "Because they are politically, commercially and socially important, and because they are rarely engaged by either public sector communications efforts or NGO campaigns, there is wide interest in communicating with 'Prospectors', the esteem-driven slice of the population (40% in the UK, more in the USA)." (Rose, 2007)
76. Rose *et al* (2007)
77. Rose *et al*(2007); emphasis added
78. Hounsham (2006: 139)
79. This set of beliefs has been called 'global helplessness beliefs'. Pelletier *et al* (1999) "propose that individuals have global helplessness beliefs when they are daunted by the enormity and the severity of the environmental situation… People who are in this state are unable to see how their contribution could bring about favourable outcomes on a large scale, and they eschew involvement in environmentally conscious actions."

and an annualised cost] takes that behaviour and turns it into a product." [80]

Pioneers may buy Wattsons because they are motivated to reduce their energy use, and believe that this would be a useful tool to help them achieve this. Prospectors, on the other hand, buy a Wattson because it has become a desirable product, and they want to be seen with one in the hallway. Will Prospectors, in buying a Wattson because they want to be seen to have one, rather than because they want to reduce their power use, become motivated to switch off more appliances? (Certainly, while the device itself might be something that they would like their house-guests to see, it is difficult to envision this desire alone leading to reduced energy use.)

But even if these individuals were led to reduce their energy consumption, there is a more fundamental problem here, relating to the issue of *why* they are motivated to do so. The marketing approach to behavioural change is built around appeals to the values that the target audience currently expresses, as revealed by market research. Proponents of this approach must therefore remain indifferent about the reasons that lead individuals to change behaviour.

2.9 Do the *reasons* for behaviour change matter?

Advocates of the marketing approach argue that undue emphasis is placed on getting people to change their behaviour for the 'right' reasons. Better that we get on with exploiting whatever motivations that we find actually work to generate behaviour change. The proponents of this approach assert that "People don't actually have to do the right thing for the right reasons" [81], or suggest that appeals for behaviour change should "use non-environmental motivations" [82]. Similarly, advocates of the values-modes approach highlight the dangers of some Prospectors being put off an action because it is advocated by 'Concerned Ethicals', a subset of Pioneers. "This is a particular risk," they write, "because Concerned Ethicals espouse the idea that to make the world a better place, one needs to become a better person. Consequently it seems important to them that 'people do this for the right reason', a recipe for interrogating others about their motives." [83]

In practice, the motives that lead individuals to change their behaviour are important. As soon as it is conceded that the reasons matter, the strength of the marketing approach as a mechanism for helping to create systemic change begins to unravel. The best way of persuading an outer-directed person to buy a clothes line may be to highlight the social status that a new Brabantia model will confer. But this is unlikely to lead this individual to choose to spend money on socially inconspicuous measures like loft insulation. Where 'beautiful coincidences' between (for example) social status and environmental benefit emerge, the marketing approach may work, in piecemeal fashion – but in many cases social status (or another motivation) and environmental benefit will diverge.

There are several reasons why the motivations for behavioural change are crucially important. Three are considered here:

- The rebound effect
- The foot-in-the-door procedure (revisited)
- Self-determination theory

2.9.1 The rebound effect

It has been accepted in this report that the 'marketing approach' to behavioural change may well provide a highly effective way of encouraging individuals to adopt a specific behaviour, particularly where this entails minimal inconvenience. But it is not good enough that people should change their incandescent light bulbs for energy-efficient alternatives if they put the money that they save on their electricity bill towards buying more electrical appliances (so-called 'direct rebound'), or, for that matter, towards a weekend flight to Madrid (so-called 'in-direct rebound'). Calculating the scale of direct and indirect rebound is both critically important and notoriously difficult.

The literature on the rebound effect and its potential scale is not reviewed here – other than to note in passing that it presents an important challenge for the politically expedient emphasis on 'decoupling' economic growth from environment impacts, as a strategy for meeting the sustainability challenges we face. As one recent study has noted:

"Rebound effects tend to be almost universally ignored in official analyses of the potential energy savings from energy efficiency improvements… For example, the Stern Review of the economics of climate change overlooks rebound effects altogether…, while the Fourth Assessment Report from the Intergovernmental Panel on Climate Change simply notes that the literature is divided on the magnitude of this effect." [84]

The critical question in the current context is whether the *motivations* of an individual to adopt efficiency measures have an impact on the size of the rebound effect.

Returning to the example of compact fluorescent light bulbs, the direct rebound effect has been put in these terms:

80. Rose *et al* (2007)
81. Hounsham (2006)
82. Defra (2008: 23)
83. Rose and Dade (2007)
84. Sorrell (2007)

"For instance when we replace a 75W incandescent bulb with an 18W compact fluorescent bulb… we would expect over time a 75% energy saving. However, this seldom happens. Many consumers, realising that the light now costs less to run, are less concerned about switching it off, indeed they may leave it on all night, for example for increased safety or security." [85]

If an individual is encouraged to switch to compact fluorescent bulbs in pursuit of environmental responsibility (rather than cost savings, for example), will this have an effect on their motivation to ensure that they do not, through other behavioural choices, erode the environmental dividend that they have achieved?

2.9.2 Foot-in-the-door

The basis for assuming that, by encouraging individuals to make small changes to the way they live, this is likely to lead to the adoption of more radical changes was examined in Section 2.1 above. Here, it was argued that there is little empirical evidence to justify premising strategies for generating big behavioural changes on this assumption.

This section turns to ask whether, to the extent that the 'foot-in-the-door' strategy may work, particularly for small behavioural changes, the *motivations* for behavioural change are important.

In the foot-in-the-door literature, which does not focus on pro-environmental behaviour, there is some evidence that the motivations to which campaigners appeal in the course of the first 'request' may have some bearing on the likelihood of a 'spill-over effect' being achieved. Extending this result to an environmental case, the reasons why, for example, someone buys organic food may have important implications for whether or not this will subsequently increase their motivation to recycle.

If, for example, this first request is premised upon the financial savings that might be made, or the social status associated with the acquisition of a 'fashionable' product, then this may reduce the probability of compliance with a subsequent request, now made on more explicit environmental grounds.

That this may be the case has been explained in terms of 'self-perception theory'. Accordingly, it is suggested that the subjects of foot-in-the-door experiments infer their *attitudes* from their *behaviours*. Thus observing that they engage in one set of behaviour (the initial, smaller request), they are more likely to infer that they are positively predisposed to a set of attitudes that leave them more likely to engage in the larger and subsequent request. As a result of complying with the initial request, when confronted with the second request "[p] articipants say to themselves something like, 'I believe I am the kind of person who supports these kinds of causes, because I did so the other day.'"[86] It is not clear how specific, or general, this change in attitude might be, but the foot-in-the-door effect has been found to be stronger when the initial and subsequent requests are of a similar nature.[87]

In applying this theory to pro-environmental behavioural change, it can be speculated that if the initial request (e.g. to install energy-efficient light-bulbs) is framed in a way that does not draw attention to its environmental benefit, then this will do little to contribute to an individual's sense that they are 'the type of person who cares for the environment'. They may therefore be less likely to respond positively to a subsequent request to adopt another pro-environmental behaviour for environmental reasons.

Finally, one study has examined whether there is a correlation between the general values or ethical norms that an individual possesses and the likelihood that 'spill-over' between pro-environmental behaviours will take place. Such a correlation was indeed found, with higher incidences of 'spill-over' of pro-environmental behaviours amongst those individuals who record higher levels of self-transcendence, or who hold strong personal norms about environment-friendly behaviour.[88] This study suggests that, to the extent that the 'spill-over' effect is of any significance, the values that motivate individuals to engage in pro-environmental behavioural change are of importance.

2.9.3 The type of goals that motivate us

There is evidence from research in self-determination theory that when an activity is pursued to uphold a set of 'intrinsic' values (for example, personal growth, emotional intimacy, or community involvement), this leads to more energetic and persistent engagement than when the activity is pursued to uphold a set of 'extrinsic' values (for example, acquisition of material goods, financial success, physical attractiveness, image and social recognition). This may be an important result for pro-environmental behavioural change strategies – possibly pointing to the importance of the values underlying a behavioural change in determining how energetic and

85. Herring and Roy (2007)
86. There is debate about the importance of the self-perception theory explanation for foot-in-the-door effects. For discussion, see Berger (1999), Cialdini and Goldstein (2004), and Guadagno *et al* (2001)
87. Note, though, that there is evidence some individuals tend to exhibit a lower than normal 'preference for consistency'. It has been shown that a shift in self-image among such individuals, resulting from compliance with the initial request, actually *lowered* the likelihood of their compliance with the subsequent request. In one study, a third of participants exhibited low levels of 'preference for consistency', leading to this reversal of the foot-in-the-door effect (see Guadagno *et al*, 2001)
88. Thøgersen and Ölander (2003)

persistent an individual is in engaging in this new behaviour. This research, which draws on self-determination theory, is explored further in Section 3.5 below.

2.10 Lessons from marketing approaches

Notwithstanding the foregoing critique of pro-environmental behavioural change strategies based on marketing techniques, these approaches do convey some crucial lessons. Four are discussed here: the recognition of the importance of values in driving behavioural change, the need to tailor messages to particular audiences, the importance of social context, and the importance of making change easy wherever possible.

2.10.1 The importance of values, and the attitude-behaviour gap

Work on values-modes reminds us that *values drive behaviour, which drives opinion*. "Behaviour is generally a strong determinant of opinion… This is why one cannot drive behaviour with information based on opinion", and "…[W]e adopt 'views' which explain or are consonant with our behaviours, even if the topic appears to be one of 'simple fact'. The reasons we do this… all boil down to being driven by values."[89] This leads to the recognition that "we need to start with people, and the motivations that drive behaviours"[90]. We should not start with "the issues knowledge which may have informed our need to reach these people – an error which dogs much 'behavioural change' work".[91]

This is a crucial point – not just because of the insistence that we should not expect information campaigns to drive behavioural change, but also because there is a perception that the attitude-behaviour gap renders consideration of the values underlying behavioural choices unimportant.

The problem of the attitude-behaviour gap is returned to below (see Section 3.2).

2.10.1.2 Tailoring messages to specific audiences

Second, work on marketing approaches to motivating pro-environmental behavioural change highlights the need to communicate with different people in different ways. "Many campaigns fail because they present a proposition in terms that 'work' for one part of the population but not others."[92]

We should recognise the "futility of treating 'the public' as a group or thinking that any one tactic applies to 'people'."[93]

This is important, but it says nothing about the effects that a communicator may be seeking to achieve with such communication. It need not imply that communications should be constrained to work with individuals' motivations as revealed by market research – it may be necessary to work to bring other, latent, motivations to the fore, while working to do so by communicating with different people in different ways.

2.10.3 The importance of social context

The foregoing critique of marketing approaches to creating pro-environmental behavioural change is not intended to deflect attention from the importance of social context in adopting and persevering with different behaviours. Whether motivating people to buy a smart electricity meter, or to join a local carbon rationing action group (CRAG) social norms and status will be critically important. But clearly, this need say nothing about the values upon which those norms are based.

2.10.4 The importance of making it easy: contextual factors

It is also crucially important to make pro-environmental behaviour as easy as possible – to improve the opportunity and remove the barriers to behavioural change. Clearly, the development of an efficient and affordable rail service will have far greater impact in encouraging travel by rail than any marketing exercise – irrespective of the incentives upon which this might focus.

"…far from being able to exercise free choice about what to consume and what not to consume, people often find themselves 'locked in' to consumption patterns that are unsustainable… 'Lock in' occurs in part through perverse incentive structures – economic constraints, institutional barriers, or inequalities in access that actively encourage unsustainable behaviours."[94]

Situational constraints and contextual factors are of critical significance in driving pro-environmental behavioural change. Nevertheless, personal motivations are important. First, when contextual factors are weak, motivational factors are likely to be the strongest influence on behaviour.[92] But more importantly, government incentives or legislation to drive such change are made more likely by public acceptance of, or even demand for, these measures. Focus on 'simple steps' does not seem likely to lead to the more systemic shift in public acceptance, and indeed activism, that will be needed to create the irresistible demand and political space for radical regulatory change.

89. Rose and Dade (2007)
90. Rose *et al* (2007)
91. Rose and Dade (2007)
92. Rose *et al* (2005)
93. Rose *et al* (2007)
94. SDC (2006: 6)
95. Stern (2005)

3 Towards an alternative approach

3.1 From marketing strategies to political strategies, and from weathercocks to signposts

The promotion of political programmes offers an alternative set of analogies for the environmental movement, which point in a very different direction to that taken by marketing approaches to creating behavioural change. Most important, they depart from the perspective that strategists must reframe their messages to fit with the values frameworks of the individuals with whom they are communicating.

Successful political movements recognise the dangers of tailoring political messages to appeal to the values of specific audiences. They recognise this because they are not simply concerned to 'sell a product'; they are concerned to establish and foster loyalty to a political programme. This section focuses on the recent work of two American academics who have built powerful cases for political parties to build their campaigns on an unequivocal statement of underlying values.

Here is what George Lakoff, a cognitive scientist, has to say about the Democrats' short-sighted reliance on the 'marketing metaphor' in the context of their political campaigning in the run-up to the 2004 US Presidential election:

"There is a metaphor that political campaigns are marketing campaigns where the candidate is the product and the candidate's positions on issues are the features and qualities of the product. This leads to the conclusion that polling should determine which issues a candidate should run on… You make a list of the top issues, and those are the issues you run on. You also do market segmentation… It does not work. *Sometimes it can be useful, and in fact, the Republicans use it in addition to their real practice. But their real practice is this: they say what they idealistically believe."* [96]

Lakoff and others are unequivocal on this: "… the real reason for their [Republican] success, is this: they say what they idealistically believe. They say it; they talk to their base using the frames of their base." [97] Thus, a successful movement must "have a clearly articulated moral vision, with values rather than mere interests determining its political direction." [98] The psychologist and political advisor, Drew Westen, writes: "[A]s soon as voters perceive you as turning to opinion polls instead of your internal polls – your emotions, and particularly your moral emotions – they will see you as weak, waffling, pandering, and unprincipled. And they will be right." [99]

There is more that recent political science can teach the environmental movement. Whereas 'post-environmentalists' are increasingly appealing to self-interest as the value most likely to motivate pro-environmental behavioural choice, political scientists recognise the limitations of this. Lakoff reflects on the failure of repeated and – in his view – misguided Democrat attempts to appeal to voters' self-interest in the run-up to the 2004 US Presidential election:

"People do not necessarily vote in their self-interest. They vote their identity. They vote their values. They vote for who they identify with… It is important to understand this point. It is a serious mistake to assume that people are simply always voting in their self-interest." [100]

Again, this is a perspective echoed by Drew Westen:

"[P]eople's material self-interests often show surprisingly little connection to their voting patterns. When people's material interests do affect their attitudes towards specific policies, it is usually when their interests coincide with their broader values or social attitudes." [101]

Westen argues that "the first question a candidate should ask on any issue should always be, 'In light of my values and the best available evidence, what do I believe is right?'" [102] The monopoly that the US political right currently enjoys on issues of value, he suggests, must be challenged. Indeed, he highlights polling evidence that if, during the 2004 Presidential election, "the Democrats had made poverty a moral issue, they might well have gained considerable ground with the American public. It wouldn't be difficult to preach a message about poverty to Americans, including those who tilt rightward…" [103]

Perhaps, in considering the problem of 'lack of agency' arising in the case of campaigns to encourage personal action on global environmental problems such as climate change, the analogy with voting behaviour may be more appropriate than the analogy with consumer choice. Certainly, of the 126 million people who went to the trouble of voting in the 2004 US Presidential election (64% of those eligible)[104], few could have done so expecting that their vote would be critical in shaping an electoral outcome.

96. Lakoff (2004: 20) emphasis added. More recently still, Drew Westen has made a similar point in examining the reasons for the success of the Reagan campaigns in 1980 and 1984. "… people were drawn to Reagan because they identified with him, liked his emphasis on values over policy, trusted him, and found him authentic in his beliefs. It didn't matter that they disagreed with most of his policy positions." (Westen, 2007: 13)
97. Lakoff (2004)
98. Lakoff (2004: 74)
99. Westen (2008: 15)
100. Lakoff (2004: 19)
101. Westen (2007: 120)
102. Westen (2007: 420)
103. Westen (2007: 409)
104. www.census.gov/Press-Release/www/releases/archives/voting/004986.html

It is ironic that while many environmentalists are jumping on the 'marketing bandwagon', many brand managers in the private sector are jumping off – because they, like successful politicians, recognise that the *reasons* consumers buy a particular brand are very important if they are to build lasting loyalty to their products. As one branding expert writes: "The humanity has been driven out of most branding programmes, replaced by an ever-growing list of clever-sounding jargon and 'tools' designed to manipulate rather than engage with consumers. It seems to me that the cleverer these tools seem to be, the more trust is compromised and real human value destroyed… Without authentic communication among the human beings inside and around brands, little of worth can be achieved. With authenticity, the unique creative abilities of human beings can be released to create real value."[105] Of course, this raises a potential paradox with which some thinkers within the marketing industry are beginning to wrestle: If advertising is increasingly used to attempt to persuade consumers that a *certain product* will help them discover the true, authentic person that they really are, then isn't this tantamount to a perversion of the trust that brand managers are seeking?

The remainder of this report focuses on the imperative for environmental organisations to be unequivocal in articulating the values that underpin their work. It also points to a large body of empirical evidence that underscores the importance of engaging at the level of values and self-identity in the course of motivating pro-environmental behavioural change. This evidence is drawn from a number of investigative programmes, across both psychology and sociology. Much of this research is recent, and although consistent in pointing to the importance of values and self-identity in motivating pro-environmental behavioural change, there is no unified account of the mechanisms underlying such change. Nor is such an account likely to emerge in the near future; as Tim Jackson writes in reviewing the evidence on behaviour change:

"Human motivations are so multifaceted that about the only thing one can say with absolute certainty is that it is virtually impossible to derive universal causal models with which to construct behaviour change policies in different domains… In this context, a coherent and widely supported conceptual insight can provide as much value as a very limited piece of empirical work involving quantitative evidence of topical behaviours."[106]

3.2 The attitude-behaviour gap

There is an important objection to attempts to motivate pro-environmental behavioural change by engaging individuals at the level of their values. Repeatedly, research has shown that there is no necessary correlation between individuals holding a particular attitude towards a piece of behaviour, and actually engaging in that behaviour. This has been referred to as the 'attitude-behaviour gap'.

Intuitively, one would expect concern for environmental problems to be a strong predictor of pro-environmental behaviour. That is, one would expect people who are concerned about environmental problems, or who have a positive attitude toward the natural environment, to be more likely to engage in pro-environmental behaviour. However, the findings from a large body of research have not revealed a straightforward effect. While studies have shown that environmental attitudes tend to be positively correlated with a range of specific behaviours, the relationships are often weak.[107]

The attitude-behaviour gap is frequently deployed as an argument against a focus upon values in the course of motivating behavioural change. But the perspective that the attitude-behaviour gap undermines the case for engaging values in this way may arise from confusion between 'values' and 'attitudes'. Values have been defined as "transsituational goals, varying in importance, that serve as guiding principles in the life of a person or other social entity".[108] By comparison with attitudes, "values are seen as more central to the self, transcend objects and situations, and determine attitudes and behaviour".[109]

There is a great deal of experimental evidence that pro-environmental behaviour is related to certain values.[110] There is also evidence that this relationship arises predominantly from values influencing behaviour (rather than vice-versa). But this is not to say that behaviour is easily changed by engaging values, or that past behaviour isn't of critical importance in determining future behaviour; there is a great deal of 'behavioural inertia' created by forces that are independent of (or at least not related in a simple way to) values.[111] The difficulty of breaking bad habits has received a great deal of attention in this regard, for example.

105. Moore (2003)
106. Jackson (2004b: 4)
107. Fransson & Garling (1999); Bamberg (2003); Bamberg & Moser (2007); Oskamp & Schultz (2005), Stets and Biga (2003)
108. Schwartz (1994)
109. Stets and Biga (2003)
110. For example, see Schultz and Zelezny (1999) and Schultz and Zelezny (2003)
111. Thøgersen *et al* (2002)

3.3 Self-identity

3.3.1 Attitudes, values and identity

Section 3.2 highlighted the attitude-behaviour gap: the weak relationship between pro-environmental attitudes and pro-environmental behaviour. Clearly, human behaviour cannot be understood by examining attitudes alone. Section 3.2 also introduced the idea of values, as distinct from attitudes, and highlighted evidence that these may be important determinants of pro-environmental behaviour.

There is another, related, factor that must be considered in examining the motivations for pro-environmental behaviour: identity. Identity has been defined as "a set of meanings attached to the self that serves as a standard or reference that guides behaviour"[112]. Identity serves as an important motivator for behaviour, because "people act in ways to verify their identity meanings".[113]

Our values and our sense of identity are related. As one social psychologist writes: "While it may be values that provide standards or goals that serve to guide action, it is the self-concept that contains the values used to compare the desirability of outcomes of our possible courses of action."[114] This has led to the examination of the extent to which our sense of self incorporates the natural environment.

3.3.2 Environmental identity

There is a growing body of evidence that our identities are not formed exclusively through social interaction, but are also shaped by our relationship with the natural world. Thus, "[m] erely by existing as an important symbolic, physical, and political reference point that is encountered in books, stories, public debates, and experiences, the natural environment serves to inform people about who they are."[115] Environmental identity has been assessed 'explicitly' by asking respondents to think about how they view themselves in relationship to the environment – the extent to which an individual includes nature within their concept of who they are. They might be asked, for example, to identify where they would place themselves on a spectrum between seeing themselves as 'in competition with' and 'in cooperation with' the natural environment.[116] Environmental identity has also been assessed 'implicitly' by using reaction times to assess the nonconscious association between self and nature.[117]

The development of aspects of our identity arising from the relationship we have with the natural world is of course bound up in a social context. Thus, "[e]nvironmental identities inevitably contain a social component because they depend on, and ultimately contribute to, social meaning. How we understand ourselves in nature is infused with shared, culturally influenced understandings of what nature is – what is to be revered, reviled, or utilized… In sum, one's social orientation leads to ways to position oneself environmentally, while one's environmental orientation leads to ways to position oneself socially."[118] This is an important understanding for behavioural change strategies because "[i]n trying to understand people's reactions to environmental issues, we need to understand that positions are taken and behaviours engaged in, not just because of an assessment of costs and benefits, but partly because of the associations between these positions and behaviours and group affiliations."[119]

3.3.3 Altruism, self-transcendence, and pro-environmental behaviour

As discussed in Sections 3.2 and 3.3.1, there is evidence that values and identity are important in determining behaviour. Research has found that some individuals have a more 'inclusive' sense of self-identity – one that may include closer identity with other people, or with other people and nature. These individuals thus tend to value others more in their behavioural choices; they have a higher level of 'self-transcendence'. Research has repeatedly found that individuals who show higher levels of self-transcendence also tend to care more about environmental problems, favour environmental protection over economic growth, and engage in more pro-environmental behaviour.[120] Although it is difficult to change behaviour once it has become habitual, it has also been found that, in the face of such 'behavioural inertia', a more 'inclusive' set of value priorities are more strongly associated with increases in pro-environmental behaviour.[121]

The role of environmental identity in pro-environmental behavioural change is the subject of a forthcoming WWF report, as part of WWF-UK's Change Strategies Project. This report will also further explore the relationship between values and identity.

112. Stets and Biga (2003)
113. Stets and Biga (2003)
114. Zavestoski (2001)
115. Clayton and Opotow (2003: 9)
116. Stets and Biga (2003)
117. These approaches to assessing environmental identity are discussed in full in a forthcoming WWF-UK report.
118. Clayton and Opotow (2003: 10)
119. Clayton (2003: 59)
120. Schultz and Zelezny (1999), Schultz and Zelezny (2003), Schultz *et al* (2004)
121 . Thøgersen and Ölander (2002)

3.3.4 Identity and consumerism

The idea that as consumers we come to identify ourselves in important part through the products we buy was introduced in Section 2.3, and is developed further here.

As discussed above, our sense of identity reflects the way we differentiate ourselves from what we are not, in part as a result of a social process: "we form a sense of ourselves based on the information we receive about ourselves from others"[122]. Far from being stable, identity is contingent upon social context, and changes over time.

Our sense of identity has long been manipulated as a mechanism to promote particular behavioural choices. The marketing industry has long recognised the possibilities of exploiting our tendencies to shape our self-identities through what we consume, in order to sell us particular products.[123]

It has been argued that the objects which we love are connected to the self both by helping to express the self (that is, enabling a person to make their preferences and impulses visible to others), and also by changing the self into a new and more desired form.[124] This has led one researcher to write: "… consumers want to create a unified, coherent… identity but face difficulties owing to their mobility, abundance of lifestyle options, and exposure to a variety of subcultures, each with competing norms and symbolic systems."[125]

Thus, "[o]ur fragile sense of self needs support, and this we get by having and possessing things because, to a large degree, we are what we have and possess"[126]. The marketing industry recognises that, by buying things, we can give meaning to our lives, and wrest some sense of identity from this increasingly chaotic social context.

We can morph and adapt this constantly evolving narrative about who we are, precisely because it is composed so importantly of the things we buy and can throw away or replace: "Aggregate identities, loosely arranged of the purchasable, not-too-lasting, easily detachable and utterly replaceable tokens currently available in the shops seem to be exactly what one needs to meet the challenges of contemporary living."[127]

If we accept that no adequate response to the environmental challenges we face can fail to engage current patterns of consumption, then we must consider how best to respond to the control that marketers exert over the significance that we attach to these symbolic resources – the things that we buy. Three possibilities present themselves:

- Play marketers at their own game – using symbolic meanings to encourage us to buy products with lower environmental impact.
- Restrict the freedom that marketers currently enjoy in shaping the symbolic significance that we attach to material possessions.
- Strengthen alternative narratives that are used to develop a sense of identity.

Each possibility is now considered further.

3.3.4.1 Playing marketerat their own game

This response is employed by 'green marketing' strategies. Previous sections of this report have built an argument that, while this approach may work for painless and piecemeal behavioural change, it is unlikely to present an adequate response to the challenges we confront.

3.3.4.2 Restricting the freedom of marketers

Proponents of this response campaign for greater constraints to be imposed on the marketing industry. For example, it has been argued that "[a]symmetries of power and resources in the relationship between advertisers and their target audiences suggest the need for much stronger public control of commercial media."[128] This view has led, for example, to calls for 'health' warnings on advertisements for cars, analogous to those found on advertisements for cigarettes,[129] or restrictions on advertising that targets children.

3.3.4.3 Strengthening alternatives about who we are

The third option stems from the conviction, articulated by Tim Jackson, that "the transition to a sustainable society cannot hope to proceed without the emergence or re-emergence of some kinds of meaning structures that lie outside the consumer realm: 'communities of meaning' that can support the kind of essential social, psychological and spiritual functioning that has been handed over almost entirely in modern society to the symbolic role of consumer goods."[130] Or, as another researcher puts it:

"If much of our behaviour aims at preserving our self-conceptions (such as consuming greater amounts of more and more expensive material goods) and this tends to result in environmentally-detrimental outcomes, then exploring instances in which the self-concept is preserved through alternatives to environmentally detrimental forms of consumption is essential."[131]

122. Clayton and Opotow (2003: 5)
123. Belk (1988)
124. Ahuvia (2005: 180)
125. Ahuvia (2005: 182)
126. Tuan (1980)
127. Baumann (1998), cited in: Jackson (2004: 12)
128. Jackson (2004a)
129. "SUVs are as dangerous to health as tobacco and should be made to carry similar warnings" (Simms, 2004)
130. Jackson (2004a)
131. Zavestoski (2001)

What might these alternative meaning structures be? What is the role of environmental organisations in helping to develop them? These questions are addressed in the sections below.

3.4 Beyond materialism

Elsewhere, this report has highlighted the inherent contradictions in attempting to market less consumptive lifestyles using techniques developed for selling products and services. This is not to suggest that less consumptive lifestyles cannot have mass appeal; simply that this appeal is unlikely to arise from dependence on a set of materialistic values.

Studies have shown that individuals reporting higher subjective well-being (sometimes referred to as 'happiness') also exhibit more pro-environmental behaviour, and that this compatibility of subjective well-being and pro-environmental behaviour is mediated by 'intrinsic' values (which are oriented towards personal growth, relationships, and community involvement).[132]

Clearly, an understanding that pro-environmental behaviour and well-being may be complementary will not arise from a perspective that promotes the pursuit of happiness through the acquisition of material objects. Simultaneously, however, it is also unlikely to emerge from a perspective that persists in equating pro-environmental behaviour with self-sacrifice.

Pro-environmental behavioural choices are frequently equated with self-sacrifice, construed as forgoing material goods. This has led marketing approaches to motivating pro-environmental change to emphasise the importance of disavowing this link; insisting that environmental care need not imply consuming less, but merely differently.
But this approach does nothing to begin to dismantle the more systemic problems arising from the misplaced perception that happiness is best pursued through the acquisition of material objects.

The insight offered by research into materialism is that the internalisation of intrinsic values contributes to greater well-being, while simultaneously reducing our material consumption. Hence, resistance to extrinsic values (that is, values aligned with acquisition of material goods, financial success, physical attractiveness, image, or social recognition) need not imply self-sacrifice.

This further underscores the importance of considering the values underlying a behavioural change. As was discussed in the context of 'fractional living', whether or not selling one's car and joining a car-club leads to environmental benefits will depend on whether there are indirect rebound effects; whether this is done with a view to acquiring new fractional shares in holiday villas or yachts, or whether it is done in an attempt to simplify one's life.

There is a great deal of evidence that an intrinsic value orientation leads to higher levels of well-being, and that such orientations also lead to greater engagement with pro-environmental behaviour. Some studies have also shown that such a value orientation predicts better ecological stewardship in resource dilemma tasks.[133] In explaining the relationship between intrinsic values and lower ecological footprint, two researchers write:

"Intrinsic values are, by their very nature, not dependent on material goods for their fulfilment; thus, energy invested in intrinsic pursuits may mean less energy devoted to some of the consumption-based activities reflected in the ecological footprint analysis… For example, people holding more intrinsic values are unlikely to be very interested in large 'trophy' homes or gas-guzzling vehicles that often reflect ostentatious displays of wealth of image enhancement. Further, the focus on community that is a component of an intrinsic value orientation might lead individuals to try to decrease the ecological impacts of their behaviour so as to benefit future human generations as well as other species."[134]

Conversely, more materialistic individuals exhibit lower subjective well-being, are more likely to exhibit a range of psychological ills including depression and narcissism, have higher rates of drug and alcohol abuse, and report more headaches.[135] They care less for other people and are less empathetic and more manipulative, less cooperative and more competitive. It is hardly surprising, therefore, that they also tend to care less about protecting the environment, having a world of beauty, or connecting with nature.
They show a lower level of biophilia (love for living things) and have a higher ecological footprint.[136]

One strategy for dealing with the environmental implications of materialism is therefore to work to increase the likelihood of individuals prioritising intrinsic values. Clearly, the marketing industry, which currently often advertises products as proxies for material values, has a critical role to play here (see Section 4.6 below).

132. Brown and Kasser (2005)
133. Sheldon and McGregor (2000)
134. Brown and Kasser (2005)
135. Kasser and Ryan (1993); Richins and Dawson (1992); Brown and Kasser (2005); Kasser (2006). There is at least one problem with this critique of materialism as a response to high ecological footprint. Research has shown that the pursuit of life-experiences tends to leave people happier than the pursuit of material possessions. It has been suggested that this is because experiences are more open to positive reinterpretation; experiences are less prone to disadvantageous comparisons; and experiences are more likely to foster successful relationships. This leads to the possibility that increasing experiential consumption increases happiness, whereas pursuing materialistic goals does not (Van Boven, 2005). The problem is, of course, that many experiences are associated with a high ecological footprint (a flight to Thailand, for example)
136. Kasser (2006: 203)

3.5 Self-determination theory and pro-environmental behavioural change

Self-determination theory distinguishes between the *motives* for engaging in a particular behaviour, and the *types of goals* that an individual pursues through this behaviour.

3.5.1 Motives – the 'why' of behaviour

An individual might be motivated to engage in a certain behaviour because they *want to* – that is, as a result of choice. Alternatively, they may feel that they *have to* engage in this behaviour, because of some pressure (whether exerted internally or externally – perhaps legal coercion, or guilt, for example). This has been referred to as the 'why' of behaviour.

To take the example of educational achievement, researchers have found – as might be expected – that the perceived usefulness of a particular exercise to a student is an important source of academic motivation.[137]

3.5.2 Types of goals – the 'what' of behaviour

In addition to the 'why' of behaviour, discussed above, self-determination theory also examines the *types of goals* people pursue through their behaviour. An individual will be more motivated to engage in a learning exercise if he or she believes that this is useful to them. But the type of goal for which the individual believes that it will be useful is also important – for example, studies show that an individual will engage more persistently in a learning activity if this is believed to lead to an improvement in the world, as opposed to personal financial success.

Self-determination theory distinguishes two types of goal: 'intrinsic' and 'extrinsic' goals. As discussed in Section 3.4, intrinsic goals include personal growth, emotional intimacy or community involvement – they are goals that are inherently rewarding to pursue. Extrinsic goals include acquisition of material goods, financial success, physical attractiveness, image and social recognition. Unlike the intrinsic goals, their pursuit does not lead directly to the satisfaction of innate psychological needs (such as belonging) – rather, the satisfaction they confer is contingent upon the responses of others.[138]

3.5.3 The effects of promoting some types of goal

Recently, this work has been extended to look at the effects of intrinsic versus extrinsic *goal promotion*. That is, to examine the effect of the way in which a particular goal is framed socially. So, for example, framing a set of exercise activities in terms of an intrinsic goal (such as focusing on the health benefits) resulted in more persistent engagement in these activities over the long term, as compared to when these activities were framed in terms of an extrinsic goal (for example, drawing attention to the benefits for physical attractiveness).[139] Telling participants in a study that an exercise will help in the pursuit of an extrinsic value is found to undermine their ongoing voluntary persistence at the activity, as compared with when participants are told that the activity serves an intrinsic value:

"[I]ntrinsic goal framing (relative to extrinsic goal framing and no-goal framing) produces deeper engagement in learning activities, better conceptual learning, and higher persistence at learning activities."[140]

Clearly, if these results are found to hold for engagement with pro-environmental behaviour, they may have profound implications for the way in which environmental campaigns are framed – and would seem to point to the disadvantages of framing such campaigns in terms of extrinsic values such as social status or financial benefit. Better, perhaps, to frame campaigns in terms of intrinsic values – a sense of connectedness with the natural world, or empathy for people in a drought-stricken country or for future generations.

3.5.4 Pro-environmental behaviour and the 'why' and 'what' of behaviour

Some studies suggest that the 'why' of behaviour and the 'what' of behaviour are related. Accordingly, motivations for pro-environmental behaviour are viewed as lying on a continuum of 'self-determination'. Thus intrinsic motivation represents the height of self-determination; followed by various classes of extrinsic behaviour; followed by amotivation[141], representing the lowest level of self-determination because it implies the loss of personal

137. Vansteenkiste *et al* (2004)
138. Vansteenkiste *et al* (2004)
139. Vansteenkiste *et al* (2007a)
140. Vansteenkiste *et al* (2006). Note, however, that while this was true for 'conceptual or deep-level' learning, in the case of rote learning (where participants were only required to superficially process the learning material) the negative impact of extrinsic versus intrinsic goal framing was not observed. This leads these researchers to suggest that, when individuals adopt an extrinsic, as opposed to intrinsic goal, "the activity would be approached in a rather superficial, rigid and narrowly focused way, because doing well on the activity would only be seen as a route to the attainment of intrinsic goals."(Vansteenkiste *et al*, 2007a)
141. Amotivation occurs when individuals are unable to perceive the motives underlying their actions; they may carry out an activity, but their involvement is mechanical.

control.[142] Studies have shown that the higher the level of self-determination associated with a particular motivation, the more likely it is to be associated with pro-environmental behaviour. Moreover, as the pro-environmental behaviour becomes more difficult, this relationship becomes stronger.[143] *In other words, motivations that are intrinsic or which arise from an individual's sense of self are more likely to lead to pro-environmental behaviour, and this effect is found to be particularly strong for more difficult environmental behaviours. Conversely, motivations that stem from external constraints (e.g. rewards for behaviour) or internalised forms of external constraints (e.g. feelings related to self-esteem) are less likely to lead to pro-environmental behaviour.* As one set of authors write:

"Difficult environmental behaviours are less likely to be performed than easy behaviours, regardless of self-determination levels. However, when self-determination is high, the decrease in behaviour occurrence is likely to be of lesser magnitude than when self-determination is low." [144]

Clearly, this is of importance for the motivations that are employed to encourage pro-environmental behaviour. For easy behavioural choices, appeals based upon motivations that have a low-level of self-determination (for example, based on financial incentive, guilt or appeals to self-esteem) may be sufficient. But as the choices become more difficult, reliance must increasingly be placed on appeals to motivations with a higher level of self-determination. Thus, the inadequacy of financial incentive, guilt or self-esteem as sources of motivation only become fully apparent as the behavioural choice becomes more difficult.

3.5.5 'Lock-in': Might an appeal to extrinsic values reinforce a focus on small steps?

It is interesting to reflect on the marketing approach to motivating pro-environmental behavioural change in this light. As noted above (Section 2), the marketing approach emphasises *both* the need to focus on self-interest (a set of predominantly extrinsic goals), *and* the need to focus on simple and painless steps. Now it can be seen that these two elements are perhaps mutually reinforcing – leading to campaign focus becoming 'locked-in' on small behavioural changes.

While campaigns remain focused on appeals to extrinsic goals, it will be correspondingly more difficult to motivate individuals to adopt significant behavioural changes; such behavioural change will be seen as 'out-of-reach', and emphasis will remain on simple and painless steps. Thus, any insistence that campaign focus should be maintained on simple and easy behavioural changes may in part stem from the added difficulty of motivating more fundamental behavioural changes without invoking higher levels of self-determination.

The practical consequences of this might be that for an easy behavioural change (like changing light bulbs), the motivations that are used are not all that important (at least from the perspective of achieving compliance with *that particular* demand). Individuals can be encouraged to change their light bulbs through appeals to financial savings, invocations of guilt, or even the self-esteem invoked through celebrity endorsement.

However, such appeals to extrinsic goals will be less effective when it comes to motivating someone to choose to fly less. For a more difficult behavioural change like this, appeal must be made to more intrinsic motivations or a person's self identity; for example, external regulations (which might include emerging social expectations about conscientious and agreeable behaviour) must be integrated into a person's sense of self, typically in the form of important personal values. Thus, a person may come to feel that "taking care of the environment is an integral part of my life".

3.5.6 Introjection and guilt

The last section highlighted the importance of the integration of 'external regulations' into a person's sense of self. Where this internalisation process is incomplete, a value or regulatory process might be partially assimilated, but not accepted as one's own. This has been termed 'introjection', and is characterised by attempts to avoid guilt or anxiety, and to maintain self-esteem.[145] Studies have demonstrated that attitudes and behaviours are more fragile when based on

142. Green-Demers *et al.* (1997) categorised four types of extrinsic motives. In order of increasing self-determination, these are: external regulation, introjected regulation, identified regulation and integrated regulation. They write: "External regulation refers to behaviours that are entirely controlled by external constraints, such as rewards or punishments. It represents the lowest level of self-determination amongst extrinsic behaviours… A behaviour motivated by introjected regulation is prompted by internalised forms of external constraints, such as feelings of guilt and anxiety, or feelings related to self-esteem… regulation of behaviour is said to be identified when the behaviour is freely undertaken because its outcomes are congruent with one's goals and values… Identified regulation occurs when the behaviour is valued to such an extent that it becomes a part of a person's self-concept. Integration is the highest possible level of self-determination because the congruency between behaviour and the person's self-concept maximises the perception of free-choice."
143. In this study, 'difficulty' refers to "the amount of effort required to perform the behaviour. That is, the extent to which one will accept to invest time, energy, and similar personal resources to successfully carry out the desired action." (Green-Demers et al, 1997: 159)
144. Green-Demers *et al* (1997)
145. Koestner *et al* (2001)

values that are merely introjected, rather than integrated. They lead to a feeling that one *ought* to do something, rather than that one *wants* to do something.

Research has also focused on the ways in which a self-determined orientation towards pro-environmental behaviour develops. It has been found to be promoted by the interests and engagement of both parents and peers, and to be correlated with a more general tendency to pursue intrinsic goals – such as self-development and community involvement. It is negatively correlated with extrinsic aspirations (financial success, social recognition and attractiveness), and it has been found to be significantly related to the stability of positive environmental attitudes over time.[146]

This perspective seems to be corroborated by the testimonies given on a website by individuals who have pledged to stop flying.[147] Testimonies overwhelmingly refer to motivations that have a higher level of self-determination (for example, the connection that those taking the pledge feel with nature, concern about future generations). They do not significantly feature reasons like avoiding airport queues.

3.5.7 Is focus on 'things you can do' misplaced?

There is a widespread assumption within environment organisations that any communication which highlights the impacts of environmental degradation should simultaneously serve to highlight some things that an individual can do to mitigate this degradation. Previous sections of this report have drawn attention to some of the problems inherent to the 'simple things you can do' approach to motivating pro-environmental behavioural change.

But the results of studies in self-determination theory suggest that it may be better to avoid focus on 'things you can do' at all (whether these are small or large). Better, perhaps, to urge the audience for a particular communication to begin to think for themselves about what they can do. Prompting such reflection may facilitate the integration of these external regulations into a person's sense of self. Individuals may then be more motivated in the behaviour choices they make, and engage in these changes more persistently. WWF is working with psychologists and communication experts to explore ways in which this might be approached.

146. Villacorta *et al* (2003)
147. See www.lowflyzone.org
148. Linda Lear in: Carson (1962 [1999]: Afterword)
149. Carson, (1962 [1999]: 121)
150. Shellenberger and Nordhaus (2005)
151. Rose *et al* (2007)

3.6 Values and the future of environmental NGOs

Rachel Carson's publication of *Silent Spring* in 1962 is often taken to mark the birth of the modern environment movement. At the time, her critique led US President John F Kennedy that he ordered his Science Advisory Committee to examine the subject of pesticide misuse.

What made *Silent Spring* so influential? It makes little mention of economic imperatives. Indeed, the book that was so instrumental in galvanising public opinion against the effects of pesticides on wildlife – which has been feted as a catalyst for the modern environmental movement – stresses our visceral connection with nature, and deplores "the cultural tendency to see the nature world [sic] as little more than an aggregate of impersonal commodities"[148]. Carson ponders the cost-benefit analysis of the use of pesticides to protect against insect damage to crops in anything but economic terms:

"Who has placed in one pan of the scales the leaves [of agricultural crops] that might have been eaten by the beetles and in the other the pitiful heaps of many-hued feathers, the lifeless remains of the birds that fell before the unselective bludgeon of insecticidal poisons? Who has decided – who has the right to decide – for the countless legions of people who were not consulted that the supreme value is a world without insects, even though it be a sterile world ungraced by the curving wing of a bird in flight? The decision is that of an authoritarian temporarily entrusted with power; he has made it during a moment of inattention by millions to whom beauty and the ordered world of nature still have a meaning that is deep and imperative."[149]

Section 1.1 of this report drew attention to arguments, made by advocates of 'post-environmentalism', that environmental organisations are increasingly irrelevant to the environmental debate, and even that this irrelevance may be positive.
For example: "That the environmental community has chosen to sit on the sidelines is probably a good thing."[150]

In the same spirit, proponents of marketing approaches to creating pro-environmental behavioural change look to the power of the profit motive, raising questions about the continued relevance of NGOs: "So who's getting it right? By a process of natural evolution as more and more companies engage with climate related products and services, the commercial sector is likely to give Prospectors what they want… An unanticipated consequence for NGOs could be that they find themselves sidelined as actors in the public 'debate' about responses to climate change."[151] So long as the price paid for mainstreaming environmental concern into public policy debate is to reframe the environmental debate in terms of the values that currently predominate within this

debate, it seems likely that the relevance of environmental NGOs will indeed wane.

This report has made the case that this approach does not offer the scope that is needed to address the challenges we face. Rather, there is an urgent need to introduce a broader set of values into public policy debate. Those environmental organisations that respond to this challenge might simultaneously establish fresh relevance in public debate on the environment, in addition to increasing the ultimate effectiveness of their campaigning.

3.7 Do we have time to engage at the level of values?

This report invites one riposte above all others: that in view of the urgent need to build public and political support for fundamental changes in the way we live, to engage the values-base underpinning such a response is a bridge too far. Engaging such values requires time, and time is one thing that we do not have. There are several responses to this.

3.7.1 Public debate on values is set to intensify

Growing public awareness of the impacts of environmental problems is already prompting reflection on the values that underpin unsustainable exploitation of the environment. It seems certain that as the impacts of climate change become ever more dramatically apparent, fundamental questions will be increasingly asked about the values that underpin our economic trajectories. The environment movement may play a critical role in precipitating and shaping this debate, when it comes to the fore. The sooner these debates are rehearsed, the more easily they will be channelled in positive directions, as public concern about these issues intensifies.

3.7.2 There is already appetite for this debate in public life

It is WWF's experience that many public figures are privately voicing concerns that the 'business case for sustainable development' and 'decoupling of economic growth from environmental degradation' will not offer sufficiently far-reaching responses to the challenges we face. Often, these voices are submerged by dominant establishment discourse. If this situation is to change – if these individuals are to be emboldened to help open up public debate on these issues – then mainstream environmental organisations can play a critical supporting role. WWF is working with the RSA (Royal Society for the encouragement of Arts, Manufactures & Commerce) in the UK to examine some of the barriers to the emergence of more open public debate on these issues – and to examine the possible role of civil society in helping to circumvent these.

3.7.3 We must do what is necessary

This report opened with a quote from Winston Churchill: "It is no use saying, 'We are doing our best'. You have got to succeed in doing what is necessary." Churchillian rhetoric is often invoked in the fight against climate change, and the urge to shift our response on to a 'war footing'. The special challenge that climate change presents is that it may proceed through a series of positive feedback mechanisms that rule out the possibility of responding through incremental steps over a long period of time. So we had better be sure that any strategies we deploy to tackle this problem measure up to the challenge of effecting the systemic changes that are needed. This report has attempted to build the case that the dominant marketing approach currently adopted falls far short of what is necessary.

4 Eight practical steps

Drawing on the discussion above, this section makes some suggestions for practical steps that environmental organisations might take in the course of engaging the values that underpin current responses to the environmental crisis (whether these are the responses of the public, government or business). These suggestions are offered as a starting point for further debate.

4.1 Achieve greater clarity on the values that motivate the environment movement

There is often little consistency in the values that the environment movement reflects: frequently, different values-bases are deployed in engaging with different audiences. In conducting a dialogue with supporters, emphasis is often placed on the aesthetic value of the natural world, or the moral imperative to safeguard this for future generations. But in lobbying politicians and business leaders, recourse is frequently made to the economic case for sustainable natural resource use. The environment movement should strive for greater clarity and consistency on the values that it brings to public discourse. In the words of George Lakoff: "Know your values, and frame the debate."[152] (See Section 3.1)

4.2 Emphasise intrinsic goals in environmental communications

There are instances where a convergence between self-interest and environmental interest allows the imperative for pro-environmental behavioural change to be framed in terms of the former. This may be an effective mechanism for motivating specific pieces of behavioural change on a piecemeal basis, and where this convergence of environmental interest and self-interest arises. But, as this report has shown, it is unlikely to support the emergence of systemic pro-environmental behavioural changes. Better to frame these communications in terms of a set of intrinsic goals. To do so will simultaneously serve to increase the legitimacy of public debate framed in terms of such goals, and may well lead to more energetic and persistent audience engagement with environmental issues (see Section 3.5).

4.3 Begin to deploy a broader vocabulary of values in policy debates

Advertising agencies fully understand the power of encouraging people to identify with the goods that they are trying to sell, and frequently speak of an 'irrational' love for an object which drives consumers to spend disproportionate amounts of money, going far beyond what might otherwise be spent on the basis of an objective assessment of a product's characteristics.

The environment movement, however, tends to retreat from working with emotional attachment to the environment – particularly in policy discourse (where arguments are frequently based exclusively on economic calculus or enlightened business interest, even if they are tacitly underpinned by a set of more qualitative political considerations). Policy debates should not be decided on the basis of economic calculus alone, and the environment movement can help to infuse such debates with a broader set of values.

4.4 Find common ground with development agencies on these values

The mainstream environment movement is often accused – sometimes justifiably – of insensitivity to the needs of the poor, especially the poor in developing countries. Perhaps in part because of this criticism, mainstream environment organisations have largely accepted the primacy of economic indicators for human development. Many such organisations – WWF included – have then sought to highlight the concern that economic development will be frustrated unless environmental constraints are recognised and accommodated in economic development programmes. This is important work, but there is no consensus on the 'right' development pathways. Debate about such pathways is highly contested – particularly in developing countries – and these disputes are exacerbated further by a growing understanding of the possible impacts of climate change.

There is another approach that mainstream environmental organisations engaged in development work should explore. This relates to a broader understanding of human needs, or 'varieties of unfreedom', seen not just in economic terms.[153] It offers the possibility of beginning to draw together the debate about subjective well-being (or happiness) in the north, and criteria for development in the south. It is a process which, because of its political sensitivity, environment organisations based in the north may not seek to lead; but they should nonetheless actively support its emergence.

152. Lakoff (2004)
153. See for example, Max-Neef (1992) or Sen (1999). Sen writes: "An adequate conception of development must go much beyond the accumulation of wealth and the growth of gross national product and other income-related variables. Without ignoring the importance of economic growth, we must look well beyond it… [I]t is simply not adequate to take as our basic objective just the maximisation of income or wealth… Development has to be more concerned with enhancing the lives we lead and the freedoms we enjoy." (Sen, 1999: 14).

4.5 Help responsible businesses think beyond 'the business case for sustainable development'

Increasing numbers of senior business people are recognising the limitations of green consumption as a response to the environmental crisis, and the ultimate imperative for society to consume less rather than differently.

This recognition opens them to a new set of challenges; and in grappling with these they seek conceptual or practical support. There is a role here for environmental organisations to work through these challenges with those business people who genuinely grasp the imperative to move beyond the 'green growth' model.

As this report outlines, recourse to consuming greener products, buying fewer and more expensive products, or sharing products, will not be sufficient. Moving beyond these models will require the creative engagement of people in business, NGOs, and marketing agencies.

4.6 Highlight the way in which the marketing industry works to manipulate our motivations

If we are to be motivated to consume less, as opposed to simply consuming differently, this will require engagement with the psychological motivations that drive consumerism, and the processes by which we come to identify ourselves.

Much might be achieved simply by highlighting the strategies deployed by the marketing industry to promote the sale of particular goods or services as proxies for intrinsic values, when the inherent characteristics of these goods actually bear no relationship to these values (a convertible car, for example, does not confer freedom). Environment organisations could work to uncover the subtleties of such marketing strategies and the way that they seek to manipulate our imagination.

There is a corollary to this. If the environment movement is to be serious about engaging the root causes of consumption, then it cannot endorse the use of techniques of motivational manipulation when it comes to promoting 'green' goods and services. These, too, must be marketed honestly.

4.7 Work to support and embolden public figures in the course of articulating intrinsic values in public discourse

Many public figures express private frustration at the difficulty of creating space for public debate about the full range of human values that they feel should be brought to bear in addressing the environmental crisis. They find such debate forestalled by narrow preoccupation with economic performance, or media cynicism.

Environmental organisations should work to find ways to embolden and support those public figures that attempt to open up such debate. This could be through the provision of politically 'safe' platforms upon which such figures can begin to reflect more openly on the need for a broader set of values, or by offering clear public support when individuals with leadership responsibilities make such utterances.

4.8 Identify and promote mechanisms to make public affinity for nature more salient

The public has a huge appetite for contact with nature – from potted plants in offices, to lunchtime strolls in our municipal parks, to holidays in rural and coastal areas. The UK has some of the world's most frequented National Parks. Seldom, though, are visitors to our municipal parks, national parks, nature reserves, or zoos, prompted to reflect on the psychological need that this contact with nature helps to address. By drawing attention to this need – for example, by highlighting evidence that time spent in natural surroundings is important for psychological well-being, or prompting people to reflect on why they like to spend time outdoors – pro-environmental values might be made more salient.

Contribute to this debate

WWF hopes that this report will contribute to catalysing debate on the assumptions that underpin current strategies for motivating pro-environmental behavioural change. Any contributions to this debate will be warmly welcomed. Ideally, you are encouraged to contribute your thoughts to a WWF blog set up as a forum for this debate; please visit valuingnature.org.

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· conserving the world's biological diversity
· ensuring that the use of renewable natural resources is sustainable
· reducing pollution and wasteful consumption

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