http://www.gowerpublishing.com/isbn/9780566088087

Longer Lasting Products

Alternatives to the Throwaway Society

Edited by TIM COOPER



Preface

There has long been awareness within industrialized nations that a throwaway culture is environmentally unsustainable and that to move onto a new path of development is inevitable at some future point in time. It has, however, taken a protracted period for this predicament to be properly addressed in depth by academic researchers or those who drive environmental policy: governments, their policy advisers and environmental campaigners. Only recently has a substantial network of researchers interested in exploring product longevity emerged and the policy community's waste agenda shifted from waste management to waste reduction.

My own work in this area began some 17 years ago as a researcher at the New Economics Foundation (NEF), a London-based think tank which has been at the forefront among philosophers, policymakers and practitioners seeking a more environmentally sustainable and socially just model of economic development. Concern at large and ever-rising volumes of household waste had, by the early 1990s, led to considerable attention being given to the potential for increased recycling. Improved waste management was clearly necessary but, in the context of long term sustainability, appeared inadequate: managing postconsumer waste is, after all, acting after much damage has already been done. The response at NEF was to embark on a research project that was intended to reconfigure the waste debate by exploring the possibility of increasing the average life-span of consumer durables and, ultimately, prevent unnecessary waste from being created.

The primary output of this project, a report entitled *Beyond Recycling*, attracted a significant amount of national media coverage when published in 1994. The Secretary of State for the Environment at the time, John Gummer MP, requested and received a personal briefing, a headline in one popular daily newspaper referred to the relatively short life-span of washing machines manufactured in Britain as a 'scandal',¹ while a leading white goods manufacturer, Miele, took the unusual step of citing the NEF report in a national advertising campaign. Nonetheless these signs of interest in product life-spans within influential circles ultimately proved to be a false

¹ Daily Mirror, 29 November 1994.

dawn. The report made no significant impression on subsequent government policy and there was no noticeable shift in the consumer goods sector towards longer-lasting products. Similarly, environmental organizations, while welcoming the report, retained their focus on recycling and did not prioritize the theme of waste reduction through increased product longevity in their campaigning.

Beyond Recycling was published only two years after the Earth Summit in Rio de Janeiro, which in 1992 brought together over 100 world leaders to discuss the state of the planet. Since then, the need for strategies to bring about sustainable development has become far more widely recognized. In particular, the potential implications for industrialized nations have become more apparent. The World Summit on Sustainable Development held in 2002 promoted greater awareness of sustainable production and consumption and since then there has been a substantial growth in expertise in this field: networks and conferences link together hundreds, if not thousands, of researchers with the aim of developing the knowledge and evidence necessary to underpin appropriate government policies.

Meanwhile significant progress has been made within the more specific area of product longevity. One of the aims of this book, to which many of the most significant contemporary thinkers in the field have contributed, is to consolidate the growth in knowledge. Its origins lie in a series of seminars and workshops that brought together several hundred academics, policy specialists and representatives from industry and civil society organizations over a fouryear period and led to the formation of a research network, the Network on Product Life-Spans. During this time it became apparent that many of the ideas, research findings and other forms of knowledge were of relevance to the broader debate on sustainable development and would be of interest to a wider audience: hence this book.

The complex range of issues associated with product life-spans demands a multidisciplinary approach and this is reflected in the contributions. The historical context, design, engineering, marketing, law, politics, consumer behaviour, technology and systems of provision are all covered, although critics will note that other fields, notably human geography, anthropology and economics, are perhaps inadequately represented in the current volume. Contributors are from three continents (North America, Europe and Australasia), highlighting the international significance of the topic, although a majority of chapters are written by authors from the UK, reflecting the origins of the Network. Several, notably those on consumer law, relate specifically to the UK but nonetheless will, it is hoped, be of wider interest.

The primary focus of the book is on consumer durables such as vehicles, kitchen appliances, audio-visual equipment and other domestic electrical products, furniture and floor coverings, hardware, garden tools, clothing and footwear, household textiles, recreational goods and DIY goods, although the reuse of packaging is also addressed. The life-span of buildings, infrastructure and industrial goods are, of course, of considerable environmental (and social) significance, but beyond the scope of this particular book. Even within its limited remit, readers will be mindful of the risk of generalization, both in terms of geographical location and type of product.

The book is structured in five parts. The first of these, **Overview**, comprises an introductory chapter by Tim Cooper, 'The Significance of Product Longevity'. Starting from a premise that sustainable development will only be possible if the throwaway culture is challenged and there is an overall increase in the life-span of consumer products, Cooper provides a conceptual and theoretical overview of the topic, reviewing the influences upon product life-spans, the case for (and against) longer lasting products, and possible implications of increased product longevity for industry and consumers. Noting that product longevity is influenced not only by the intrinsic durability of products but by consumer behaviour, Cooper concludes that progress away from a throwaway culture will require change across society: in public policy, design and marketing, consumer attitudes and behaviour, and socio-cultural norms.

The second part comprises six chapters on the theme **Design for Longevity**. Chapter Two, 'Re-evaluating Obsolescence and Planning for It', by Brian Burns, focuses on the end of the product life-span, the point at which 'obsolescence' becomes reality. The end of a product's life, he argues, represents an opportunity to assess the value derived from utilization during its useful life against the costs of manufacture and use and against environmental and social impacts. Contrasting the life expectancy of products such as stainless steel dining forks with products based on fast-changing technologies, Burns explores the state of obsolescence with the aim of supporting more effective and sustainable product development.

Waste may be seen as a symptom of a failed subject/object relationship. In Chapter Three, 'Subject/Object Relationships and Emotionally Durable Design', Jonathan Chapman considers the potential role of design in the creation of longer user:product relationships. Sustainable design methodologies, he argues, have attended almost exclusively to the bodily survival of manufactured objects, to 'after-effects rather than causes'. Chapman proposes strategies for emotionally durable objects, including new, alternative genres of objects, which engage users on deeper levels and over longer, more rewarding, periods of time. This, he suggests, will demand models of sustainable design capable of empowering consumers to transcend the 'superficial urgencies' of conventional consumerism and forge deeper connections with their possessions.

In Chapter Four, 'Defying Obsolescence', Miles Park considers a range of product attributes, consumer behaviours and societal factors associated with prolonged product life-spans in order to identify lessons from design and consumer behaviour that might enable products to defy obsolescence. He presents a collection of examples, mostly drawn from the consumer electronics sector, and notes that these were often informal responses to impending obsolescence and not planned or anticipated by the designer or manufacturer. Park concludes that new and collaborative approaches between designers and users are needed in order to meet the challenge of engaging with obsolescence effectively.

The fact that many products are still functional when discarded means that to understand the determinants of product life-spans it is necessary to investigate replacement decisions. In Chapter Five, 'Understanding Replacement Behaviour and Exploring Design Solutions', Nicole van Nes reports on qualitative and quantitative research aimed at a better understanding of replacement decision making. Van Nes argues that people's motives for replacing goods are diverse but in essence what they want are well-functioning and up-to-date products that meet their changing needs. She suggests that this will require the development of products that are dynamic and flexible and proposes strategies that include designing products for reliability and robustness, repair and maintenance, upgradeability, product attachment and variability, illustrating these through practical examples.

Chapter Six, 'Adjusting our Metabolism', by Alastair Fuad-Luke, discusses the emergence of a new movement of 'slow activists' and its implications for design. Fuad-Luke examines 'slow design' activities and considers how slowing the metabolisms inherent in product:user relationships might generate improved relationships and experiences for the user while helping to create positive social, environmental and economic change. He concludes that slow design and co-design offer fresh approaches for revitalizing thinking about product life-spans and novel ways of designing, making and producing that could encourage new visions of enterprise and improved human flourishing.

In the final chapter of this part, 'Durability, Function and Performance', Walter Stahel explores the potential for product durability and longevity as economic objectives in a 'functional service economy' focused on selling performance. He argues that the traditional industrial economy, is focused on producing goods for sale and in such an economy producers operating in saturated markets may regard durability as an undesirable quality, as it represents an obstacle to replacement sales. By contrast, in a functional service economy product ownership remains with supply-side actors, which will provide an economic incentive to the prevention of waste. Producers will exploit the existing stock of goods in order to make more money with less resource input. Meanwhile the 'consumer' becomes a 'user' as ownership is replaced by stewardship.

The third part of the book, **Public Policy and Product Life-Spans**, reviews the current state of legislation in the United Kingdom relating to product lifespans and considers a range of measures that governments might take in order to encourage product longevity.

In Chapter Eight, 'Durability and the Law', Cowan Ervine explores the contribution which the law makes to the durability of goods. He argues that it has become clearer that durability is a characteristic consumers may expect from goods as a result of an amendment in 1994 of the law relating to the quality standards implied in contracts for the supply of goods. He notes, however, that the limited case law on the reform does not suggest that in practice it has made a dramatic difference. The chapter's main focus is the role of contract law in relation to durability, although Ervine also addresses the role of tort law and safety legislation.

In Chapter Nine, 'The Law on Guarantees and Repair Work', Christian Twigg-Flesner analyses the law relating to guarantees and repair work. Although recent legal changes have the effect of introducing repair as a consumer right, its availability is restricted and consumers are more likely to be given a replacement or refund when goods are faulty. If a product is under a guarantee consumers may ask for a repair, but there is no legal requirement to provide a guarantee nor to include repair as one of the remedies offered. Twigg-Flesner argues that obtaining repair is made difficult by the absence of any legal requirement on a retailer or manufacturer to stock spare parts or

to make available appropriate servicing facilities. He concludes that the law on repair work is unsatisfactory and examines the approach taken in other jurisdictions in considering possible ways forward.

The next chapter, 'Policies for Longevity', by Tim Cooper, addresses possible options for governments to promote increased product longevity, most of them applicable to any industrialized nation. The case for public policy intervention to optimize product life-spans is based on potential benefits to the economy, the environment and consumer satisfaction. Cooper argues that the policy measures necessary to transform a throwaway culture have not been introduced because it has hitherto been politically expedient for governments to succumb to the electorate's apparent desire for more (and newer) consumer goods. He presents a framework within which to assess specific measures to encourage longer lasting products and, drawing upon policies advocated by past and present critics of planned obsolescence, proposes a range of potential regulatory, market-based and voluntary measures.

The fourth part comprises three chapters on **Marketing Longer Lasting Products**. Chapter Eleven, 'Rethinking Marketing', by Ken Peattie, sets the context by proposing that the quest to develop longer lasting products will demand changes in how people think about marketing. Although marketing has been under pressure to become more environmentally orientated, materially efficient and sustainable for most of the last 20 years, the conventional marketing paradigm has proven resilient, acting as a barrier to change. In order to progress towards a more sustainable economy, it is necessary to address systems of consumption and production, which are driven in part by the management discipline of marketing. Peattie concludes that what is needed is a new, sustainable marketing paradigm.

In order to select products with life-spans that are environmentally optimal and appropriate for their requirements, shoppers need to be adequately informed about the design life of their prospective purchases. The findings of a research study that assessed the quality of information on product life-spans available in retail environments are presented in Chapter Twelve, 'Marketing Durability', by Tim Cooper and Kirsty Christer. The study included visits to retail outlets that revealed few specific examples of life-span labelling but uncovered a variety of means by which consumers might predict the durability of products. A review of information available on the design life of 10 types of product was undertaken and an assessment made of the potential value of lifespan labels. Cooper and Christer's conclusion is that the quality of information on product life-spans currently available is inadequate. They propose a range of measures to address this, including an increase in life-span labelling.

As consumer societies have evolved over the past century, many products have been sold less on the basis of their functional characteristics alone and more on the strength of an image, association or lifestyle preference. A shift towards longer lasting products would demand a reappraisal of this trend and require marketers to identify strategies by which to promote products on the basis of durability. Chapter Thirteen, 'Can Durability Provide a Strong Marketing Platform?', by Dorothy Mackenzie, Tim Cooper and Kenisha Garnett, presents a range of marketing platforms through which the durability of products could be highlighted as a positive attribute. These would need to be attractive to consumers in order to add to brand strength. The authors identify some potential risks and opportunities in adopting such a strategy.

The fifth and final part addresses **Product Use and Reuse** from a variety of perspectives. In Chapter Fourteen, 'Consumer Influences on Product Life-Spans', Siân Evans and Tim Cooper present results from research on the influence of consumer behaviour on the life-span of three types of household product: everyday footwear, large household appliances and upholstered chairs. Their findings demonstrate that consumers exert considerable influence upon product life-spans but reveal substantial differences in behaviour between the three types of product and across the different stages of consumption. Evans and Cooper classify factors affecting consumer behaviour and create a theoretical framework within which to explore the influence of consumers in order to identify barriers to optimizing product life-spans from a consumer perspective and propose possible solutions.

In contrast with the previous chapter, Chapter Fifteen, 'Product Life Cycle Management through IT', by Matthew Simon, focuses on the potential role of technology in optimizing product life-spans. Simon describes a research project which sought to explore some technical, economic and social aspects of life cycle management, an element of producer responsibility, and draw conclusions on its future. Life cycle management enables producers of electrical and electronic products to intervene to educate users, persuade them to behave in a particular way, monitor products and their usage, advise consumers on positive action and receive their feedback. Results from two project trials are used to illustrate the potential value of product life cycle information, both for understanding user behaviour and aiding repair and design.

The focus of Chapter Sixteen, 'There are Times and Places', by Janet Shipton and Tom Fisher, is on the reuse of packaging by consumers. Shipton and Fisher use the findings of a research study to explore how ideas, actions and objects together result in the reuse of packaging items. Their study identifies examples of when and where this happens in people's homes and draws out the principles behind reuse practices. These principles are then tested in practice as the basis for packaging design that may facilitate extending the life of packaging and thus reduce domestic waste.

The final chapter, 'Extending Product Life-Spans', by Anthony Curran, provides an overview of household bulky waste disposal and reuse activities in the UK and, specifically, the contribution made by furniture and appliance reuse to extending product life-spans. Curran considers different methods for discarding bulky household items and assesses the potential to increase the number of items diverted for reuse, with particular reference to the role of furniture and appliance reuse projects in the voluntary and community sector. He highlights the social dimension to reuse, noting that, while reuse helps to tackle increasing waste generation and virgin resource consumption, these environmental benefits are often regarded within the sector as secondary to the social benefits to volunteers employed by reuse organizations and low income households provided with essential furniture and appliances.