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**EVALUATION OF ENVIRONMENTAL MARKETING TERMS
IN THE UNITED STATES**

February 5, 1993

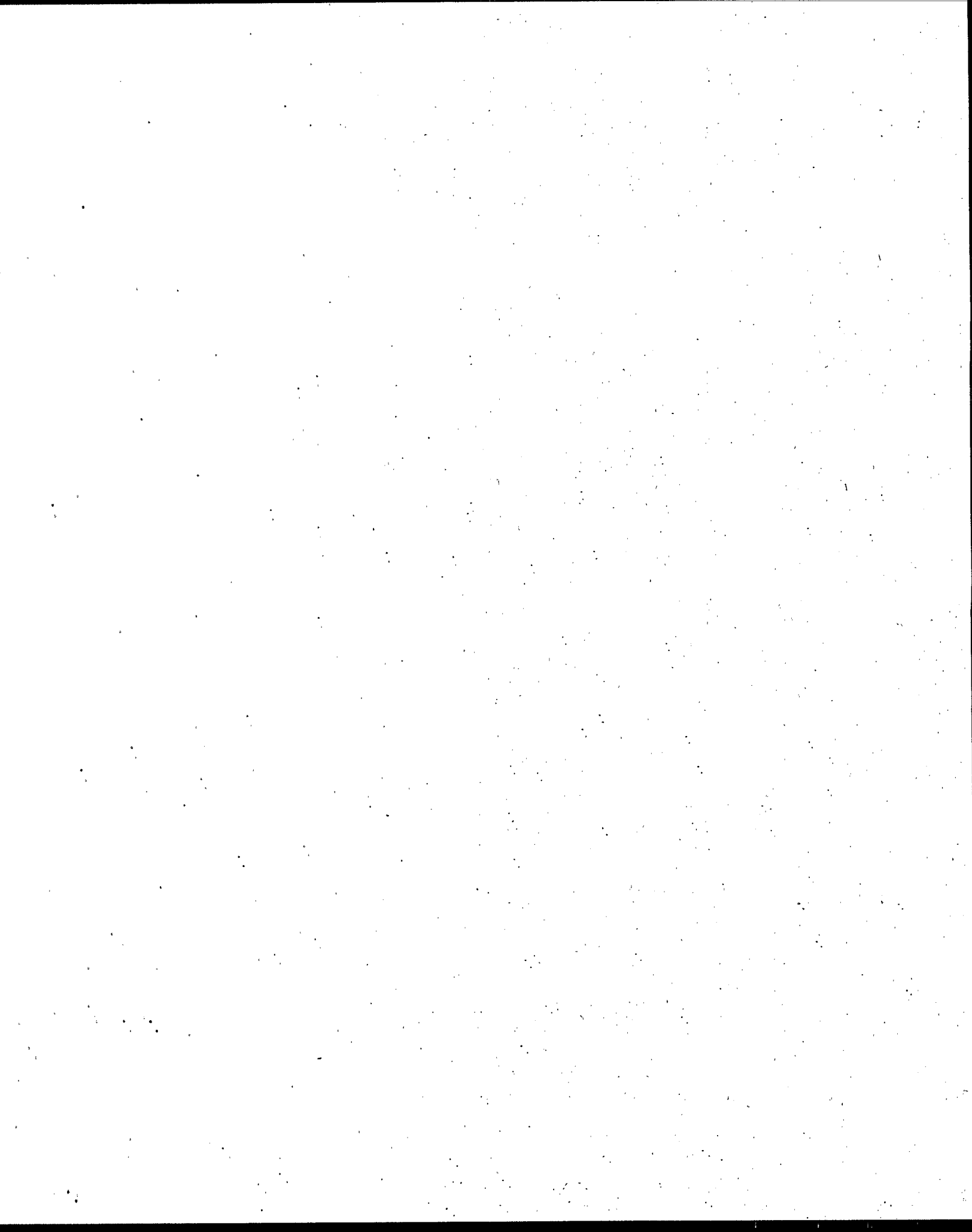
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PREFACE

This report summarizes existing research related to the use of environmental marketing claims in the U.S. It includes chapters on consumer understanding, trends in the use of claims and existing and proposed definitions. It was written to provide comprehensive background research to a wide audience which includes marketers, policy makers, consumer protection officials and the general public. The report is not intended to advocate particular actions or policy positions by the U.S. Environmental Protection Agency or any other group.

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TABLE OF CONTENTS

| | |
|--|----|
| EXECUTIVE SUMMARY | i |
| 1. ISSUES IN ENVIRONMENTAL MARKETING | 1 |
| 1.1 BACKGROUND | 1 |
| 1.2 INTRODUCTION | 2 |
| References | 5 |
| 2. CONSUMER PERCEPTION OF ENVIRONMENTAL CLAIMS | 7 |
| 2.1 INTRODUCTION | 7 |
| 2.2 CONSUMER AWARENESS AND UNDERSTANDING OF ENVIRONMENTAL MARKETING TERMS | 8 |
| 2.3 CONSUMER CONFIDENCE IN ENVIRONMENTAL MARKETING CLAIMS | 22 |
| 2.4 ENVIRONMENTAL PURCHASING HABITS | 24 |
| 2.5 SUMMARY | 25 |
| References | 27 |
| 3. INVENTORY OF ENVIRONMENTAL LABELING AND MARKETING TERMS | 29 |
| 3.1 INTRODUCTION | 29 |
| 3.2 METHODOLOGY | 29 |
| 3.3 RESULTS | 34 |
| 3.4 SUMMARY | 63 |
| References | 67 |
| 4. DISCONTINUATION OR AVOIDANCE OF ENVIRONMENTAL CLAIMS | 69 |
| 4.1 INTRODUCTION | 69 |
| 4.2 VOLUNTARY REMOVAL OF ENVIRONMENTAL LABELS | 71 |
| 4.3 COMPANIES CHOOSING NOT TO MAKE ENVIRONMENTAL CLAIMS | 73 |
| 4.4 CLAIMS WITHDRAWN OR MODIFIED AFTER LEGAL CHALLENGE | 75 |
| 4.5 SUMMARY | 96 |
| References | 98 |

| | |
|---|-----|
| 5. REGULATING ENVIRONMENTAL MARKETING TERMS | 101 |
| 5.1 INTRODUCTION | 101 |
| 5.2 DEFINITIONS OF ENVIRONMENTAL MARKETING TERMS | 113 |
| Contacts | 143 |
| References | 146 |
| Appendix 1. Category Classifications from Productscan Search | 157 |
| Appendix 2. List of Proposed Definitions for Environmental Marketing Terms | 159 |
| Appendix 3. List of Individuals or Organizations Proposing Definitions for Environmental Marketing Terms | 177 |
| Appendix 4: Federal Trade Commission Environmental Marketing Guidelines | 181 |

EXECUTIVE SUMMARY

Since 1989, environmental marketing has emerged as an important issue for consumers, marketers, regulators, and policy makers. Many American consumers, not only the most environmentally conscious, have sought to lessen the environmental impacts of personal purchasing decisions by buying and using products perceived to be less harmful to the environment. Marketers have responded to consumer demand by increasing both environmental marketing claims and new or redesigned "green" consumer products. Policy makers have seen environmental marketing as a means to promote environmental policy goals through market-based incentives.

The rise of environmental marketing has occurred in the absence of standardized guidance or regulation of environmental marketing terms at the federal level. Since the beginning of 1991, manufacturers, environmental groups, and consumer protection groups have called for the establishment of national consensus definitions for environmental marketing terms and guidelines for their use. Most actions regulating environmental marketing at the federal, state, and local level have been concerned with issues of truth-in-advertising and consumer fraud. However, on July 28, 1992, the Federal Trade Commission (FTC) issued voluntary guidelines on environmental marketing. In addition to providing general principles for making environmentally-related claims, specific guidance is provided for eight terms: general environmental benefits, degradable/biodegradable/photodegradable, compostable, recyclable, recycled content, source reduction, refillable, and ozone safe/ozone friendly. The FTC's guidance will undoubtedly affect the marketplace, but precisely how cannot be assessed at this time. Further studies will require careful consideration of the dynamic nature of the consumer products marketplace where, in addition to environmental marketing initiatives, activities ranging from product advertising to currency fluctuations affect product performance.

There are three possible effects of the guidelines:

- Introduction of new products into the marketplace, or an increase in new claims for existing products, which meet the FTC guidelines.
- Withdrawal of erroneous claims that could not satisfy FTC guidance.
- Increased use of (trivial) claims that may meet FTC's specific definitions but not the general principles contained in the guidance.

The FTC issued guidelines "to protect consumers and to bolster their confidence in environmental claims, and to reduce manufacturers' uncertainty" about the use of such claims, "thereby encouraging marketers to produce and promote products that are less harmful to the environment." A large percentage of consumers appear to be ill-informed and/or skeptical about the meanings and implications of widely-used environmental marketing terms. Without improved and sustained consumer confidence, consumers are less likely to purchase

environmentally-oriented products. In addition, in the absence of federal definitions and guidelines, several public, private, and independent groups had developed their own definitions, some of which are legally binding within certain jurisdictions. Marketers, therefore, faced a patchwork and sometimes costly marketplace where, they argued, relabeling, legal actions, and negative publicity can create additional costs and cause market share shifts. Furthermore, they stated that such uncertainty may have deterred some from making valid environmental claims altogether. With the FTC guidelines in place, as many marketers requested, the playing field for nationwide marketers has been leveled; that is, it is less variable from state to state. If the FTC actions provide adequate guidance and protection for both marketers and consumers, then the opportunity for society to realize the benefits associated with environmentally preferable products.

This study is a comprehensive examination of the use of environmental marketing terms in the United States as of mid-1992. Topics discussed in the report include: (a) issues involved in the use of environmental marketing terms; (b) consumer understanding of these terms; (c) trends in the use of environmental terms in consumer product labeling and advertising; (d) cases where environmental marketing claims have been avoided or discontinued; and (e) proposed and existing definitions of environmental marketing terms.

This report was prepared in response to a call for federal action by many groups involved in environmental marketing, and is designed to serve two main purposes. For state and federal policy makers seeking to promulgate guidelines or regulations governing environmental marketing terms, it provides an analytical foundation on which to base policy decisions. For those generally interested in environmental marketing, it serves as a comprehensive source of information about the major issues involved. It does not advocate a particular position or course of action. Many of the trends discussed in this report can serve as a baseline against which comparisons can be made in the future. Much of the research was completed prior to the Federal Trade Commission's issuance of guidelines for environmental marketing. Consequently, while the guidelines are included in this report, no data yet exist with which to measure their effects on the marketplace.

Environmental Marketing Issues¹

Environmental marketing differs from other forms of advertising in two important ways. First, consumers who buy goods perceived to be less environmentally harmful base their purchasing decisions not only on inherent product characteristics (such as price and apparent quality), but also because they feel that they are "doing good," either by minimizing their own environmental impacts or by promoting environmentally beneficial activities (e.g., closing the recycling loop by buying products with substantial recycled content). Second, environmental marketing provides incentives for manufacturers to make significant environmental improvements

¹ The term environmental marketing is used in this paper to mean the voluntary use of environmental claims by marketers. In this context, it does not include third-party certification programs or mandatory negative labeling, such as health hazard warning labels.

by providing a competitive advantage to reduce environmental impacts of product manufacture, use, reuse, and eventual disposal. However, the rapid rise in the use of poorly-defined or ambiguous terms used in environmental marketing has created several marketplace disruptions. These disruptions include consumer confusion, legal and other actions against marketers for deceptive advertising, and attempts by several private organizations and government agencies to create standardized definitions and guidelines for the use of the terms that conflict with the FTC guidelines.

Several factors common to environmental attributes exacerbate the confusion over these marketing terms. Environmental claims, such as *ozone-friendly* or *source-reduced*, pertain to characteristics of a product with which a consumer generally has little or no experience or comparative information. Consumers, therefore, cannot evaluate the credibility or value of such claims. In addition, environmental labels often pertain to circumstances over which a marketer has little or no control. For example, the recyclability of a package is thought by many to be dependent upon the availability of the appropriate recycling infrastructure. By promoting a product as *recyclable*, marketers are making a claim over which they have little or no control because they do not provide consumer access to the appropriate recycling infrastructure. Finally, many terms used in environmental labeling are not part of everyday language and are often poorly understood. A lack of common understanding of terms has led to the misperception that environmental claims imply that a product is "good for the environment," even though virtually all consumer products are associated with some adverse environmental impacts. Often possessing a limited understanding of the scientific and policy issues and vocabulary involved, consumers are exceptionally powerless when evaluating environmental claims and are arguably most in need of nationwide, uniform guidance.

Because environmental marketing relates to, and benefits from, consumers' desire to minimize their impacts on the environment, environmental advertising claims must be more than simply truthful in the information they relate. To serve as a policy tool, the claims themselves must reflect real environmental benefits or policy goals recognized by scientists, policy makers, manufacturers, and society. While regulation of environmental marketing terms alone may not increase the purchase of green products, well-conceived definitions and guidance could ensure that the environmental marketing claims made that influence consumer purchasing decisions are truthful, standardized across products, and non-trivial.

Consumer Understanding and Response

After more than two years of heavy exposure to environmental marketing, recent surveys indicate that American consumers are somewhat skeptical and would support governmental regulation of environmental advertising, but are still generally believing of and responding to environmental marketing claims. However, studies also show that (a) many consumers do not understand the specific environmental labeling terms with which they are confronted, and (b) many consumers often do not act on their own assertion that they would preferentially purchase products that are less damaging to the environment.

Surveys examining consumer awareness and understanding of environmental marketing terms indicate that comprehension varies among terms and for the most part is quite low. The terms most commonly used by marketers, such as *recycled* and *biodegradable*, were also the most widely understood by survey respondents. This suggests that consumers have the capacity to learn about the importance of product attributes if exposed to such information (labeling information in conjunction with other educational efforts) over time.

Evidence exists that a significant number of consumers are skeptical or unsure about the veracity of environmental marketing claims. Although they indicate a willingness to selectively purchase or to pay more for products with real environmental benefits, many consumers do not believe that marketers' environmental marketing claims can be trusted. What consumers appear to be lacking is both an adequate understanding of the meanings of environmental claims, and a means of assessing their veracity and significance. Consumer skepticism might be lessened by a credible source of standardized definitions for environmental terms that consumers knew to be true and non-trivial.

Through their purchasing decisions, consumers give producers marketplace feedback about their personal environmental concerns, thereby creating incentives to make real environmental improvements. Consumer perception and their resulting demand helps to drive the development and improvement of a product's environmental attributes. By providing a common language of terms, highly specific federal guidelines would (a) allow consumers to understand what products offer them, and to provide informed feedback (through their purchasing decisions) to producers; and (b) allow marketers to advertise environmental qualities in ways that are clear to consumers, consumer advocates, and regulators.

Certain other nationwide actions, such as consistent review of claims, enforcement actions where warranted, development of a third-party eco-labeling program, negative labeling of products with hazardous constituents, or other forms of extensive consumer education, have been suggested by some as potential ways to increase consumer awareness of the environmental consequences of their purchasing decisions.

Use of Environmental Marketing Terms

Judging by advertising and trade press coverage, environmental marketing appears to be an important trend to marketers. However, there have been few studies to quantify environmental marketing activity. One measure of activity in this field is the number and type of environmental claims being made for non-durable consumer packaged goods. Research using a database of new grocery store product introductions indicates that the use of environmental marketing claims has indeed increased rapidly in recent years. In 1989, 5.9 percent of new products had environmental claims. This increased to 10.1 percent in 1990 and 12.3 percent in 1991. The first six months of 1992 has shown a slight decline in most types of claims, falling to 11.4 percent of new product introductions.

Toxicity-related claims (i.e., no synthetic chemicals used in production or as an ingredient) — typically for food or laundry products — account for the greatest number of claims, and have steadily increased in the last three and a half years. Solid waste claims, such as *recycled* and *recyclable*, *degradable*, and *source reduced*, peaked in 1991 and have fallen in the first half of 1992, primarily due to declines in recycling claims. The study also quantifies claims relating to pollution, wildlife conservation, stratospheric ozone depletion, and energy efficiency.

Anecdotal evidence indicates that a slight decline in new environmental marketing claims in early 1992 may be due to the chaotic nature of regulations affecting environmental marketing. Marketers have been quoted as saying that the growing "hodge-podge" of state regulations and varying definitions are increasingly difficult and expensive to comply with, and are discouraging them from making any environmental marketing claims. Also, although consumers have consistently expressed their interest in environmental issues, some marketers are not convinced of consumers' willingness to buy environmentally-oriented products. Market analysts cite the recent decline in sales of specific environmentally-oriented products as evidence of waning consumer interest, although this trend may be a reflection of an economic recession and/or consumer confusion over claims, rather than a lack of interest on the part of consumers. No other evidence could be found to substantiate anecdotal reports of declining performance of environmentally-oriented products. Some marketers have predicted that the issuance of FTC guidelines will "jump-start" environmental marketing activity.

Avoidance or Discontinuation of Environmental Marketing Claims

Clearly there is a gap between the perception of marketers making environmental claims for their products and the understanding of consumers. Although marketers may consider their claims to be truthful and accurate, consumers frequently infer additional meaning from environmental claims based on their individual understanding of environmental issues. Environmental marketing claims often contain inherent ambiguities that make truth-in-advertising issues less clear-cut than in other forms of marketing. Because the implication "better for the environment" underlies virtually all environmental marketing claims, even factually correct claims may be seen as misleading consumers who do not understand their implications or context.

Policing of environmental marketing claims has resulted in a total of almost 50 cases against marketers since 1990 by the Federal Trade Commission, state Attorneys General, the New York Department of Consumer Affairs, and the Better Business Bureau's National Advertising Division. Each of these regulatory bodies differ in their interpretations of what constitutes misleading environmental advertising. The Better Business Bureau's National Advertising Division and the Federal Trade Commission have focused on conspicuously false or unsubstantiated claims. The Attorneys General Task Force, in addition to challenging false or trivial claims, have concentrated on context-specific terms, such as *biodegradable*, *compostable*, and *recyclable*. The New York City Department of Consumer Affairs has taken

the strictest interpretation of false advertising law, arguing that even factually correct environmental claims are deceptive if they contain insufficient information.

There is evidence that increasing numbers of marketers are dropping or not making environmental claims due to the lack of consensus as to which environmental terms can be legitimately used for their products. As might be expected, some marketers are dropping claims over which other companies have been sued. Others are wary of making new environmental marketing claims when they have been challenged on previous ones.

For the most part, the increased hesitancy of marketers in making environmental claims has been a positive consequence of the policing actions taken by consumer protection agencies and the FTC. Most of the claims that have been discontinued have been those that consumer advocates consider to be deceptive in some way. However, in those cases where legitimate, truthful claims are avoided due to regulatory uncertainty, consumers lose information that could influence their purchasing decisions; and marketers lose the marketplace benefits of making environmental improvements. Faced with multiple (and changing) definitions for each term and the increasing scrutiny of claims, several major consumer product companies recently stated that they will stop making environmental claims altogether. Some of the same marketers state that they will continue to make environmental improvements to their products; however, these efforts may wane without marketplace rewards for doing so.

Early reactions to the FTC guidelines by marketers have been optimistic, with a few qualifications. Because FTC guidelines do not preempt state and local regulations, the "patchwork" of state and local regulations is still in effect, unless those agencies repeal their laws in deference to the FTC guides. Paul Petrucci, senior counsel for Kraft General Foods, expressed his concern to *Advertising Age* about states proceeding with their own regulations, "While I don't think states are going to recede, I do hope they will look to the FTC guidelines for their own actions and defer to them." California Assemblyman Byron Sher, author of the California law on environmental marketing claims, was quoted as saying that when the FTC comes up with national standardized definitions, "we'll defer to them."

Regulating Environmental Marketing Terms

Prior to the FTC guidelines, many state governments and private organizations responded to uncertainty in the marketplace and to the lack of clear, uniform guidance by developing their own definitions and guidelines for environmental advertising. To date, all the proposals seeking to define or regulate environmental marketing claims contain the assumption that the use of environmental claims by marketers is voluntary. Marketers choosing not to make environmental claims would not be affected by the standards or guidelines; only those marketers that use environmental claims would be encouraged or required to follow national guidelines or regulations. This differs from mandatory negative labeling (e.g., health advisories on cigarettes), where marketers do not have the choice of whether or not to use the label. While California and Vermont have mandatory negative environmental labeling programs, and EPA has proposed a warning label for products made with or containing ozone-depleting substances,

all the proposals discussed in this paper involve voluntary labeling of positive environmental attributes by marketers.

State actions pertaining to environmental marketing have focused mainly on three areas: measures that prohibit unfair and deceptive advertising of environmental claims, legislation that restricts advertising of the recyclability of plastics, and measures that permit the establishment of environmental logo programs. Consumer and environmental groups have focused both on truth-in-advertising issues and the establishment of specific standards for the use of certain terms. For the most part, they have rallied behind the recommendations outlined in the *Green Report II*, issued by a task force of state Attorneys General. Industry groups have focused mainly on guidelines for truth-in-advertising, and have been strong in their support of the National Food Processors Association petition to the FTC. Minnesota Attorney General Hubert Humphrey III, leader of the state Attorneys General task force, called the FTC guidelines "kind of a victory. I see a lot of familiar language in there."

While the various proposals differ in their specifics, there has been near-universal consensus that the *status quo* was unworkable and that there was a need for definitive federal guidelines governing the use of environmental terms in advertising. The consensus among state agencies, consumer advocates, and industry representatives has been that vague, general terms should be either avoided, qualified, or banned, because they cannot be substantiated scientifically. Unless all terms used in environmental labeling have inherent, understandable meanings, even those that are well-defined will be potentially misleading. Beyond these basic agreements, however, there has been a major division of opinion as to what purpose national guidelines should serve and how specific they should be.

A central argument in this debate is whether or not to go beyond truth-in-advertising guidelines to use environmental labeling as an environmental policy tool. Proponents of voluntary guidelines argue that national guidelines coupled with industry self-regulation are sufficient to allow manufacturers to benefit from their actions without confusing or misleading consumers. Advocates of stronger governmental involvement argue that environmental labels inherently impact environmental policy by affecting consumer purchasing decisions, and should therefore be allowed only on products that damage the environment to a lesser degree.

To further public policy discussions regarding the role of environmental marketing in the U.S., the Environmental Protection Agency, along with others interested in environmental marketing, will continue to investigate developments that affect both the U.S. marketplace and environmental quality. One example of such research might be a retrospective analysis of how the FTC guidelines affect the use of environmental marketing terms. Other relevant developments include changes in general economic conditions and the impact of third party labeling programs, both domestic and foreign. This report provides a comprehensive summary of the use of environmental marketing terms in the U.S. prior to July 1992 when the FTC guidelines were issued. As such, it can be used as a baseline of information for public and private policy makers to use in pursuing environmental quality improvements through marketplace mechanisms.

1. ISSUES IN ENVIRONMENTAL MARKETING

1.1 BACKGROUND

The latter half of the 1980s saw steadily increasing news coverage of environmental stories. Global issues such as acid rain, global climate change, and stratospheric ozone depletion, national news stories, such as the Exxon Valdez oil spill and the odyssey of the Islip (NY) garbage barge that could not offload, and local stories have increased public awareness and concern about environmental issues facing the United States. One consequence of such increased public concern has been a consumer effort to lessen the environmental impacts of personal purchasing decisions by buying and using products perceived to be less environmentally harmful.

Manufacturers and marketers² have responded to consumer demand by (a) labeling particular products and packaging with environmental attributes, (b) advertising such environmental attributes, (c) introducing new products, and (d) redesigning existing products and packaging.³ According to research undertaken for the present study, the percentage of new products marketed in the United States whose packages, labels or advertising contained environmental claims increased from 5.9 percent in 1989 to 11.4 percent in the first half of 1992.⁴ A previous U.S. EPA study also indicates that, through late 1990, the sales performance of such environmentally-oriented products was improving dramatically. (3)

Since the beginning of 1991 there have been a number of calls for federal-level action to ensure that environmental marketing results in real environmental benefits. The Federal Trade Commission responded in July of 1992 to petitions from manufacturers, environmental groups, and consumer protection groups by establishing national guidelines for environmental marketing terms. (1) The guidelines, while they are not legally binding regulations, "provide guidance to marketers in conforming with legal requirements." (2) They do not preempt any other regulations on environmental marketing, but it is hoped that state and local jurisdictions will follow the lead set by these first comprehensive federal guidelines.

Ideally, environmental marketing can be used to further environmental policy goals by encouraging consumers to buy and use less harmful products. For environmental marketing to be used as a policy tool, however, the claims (a) must be truthful, and (b) must reflect the environmental policy goals currently being promoted by environmental scientists, policy makers, and other knowledgeable members of society. Regulation of environmental marketing terms

² For the purposes of this report, the term "marketers" refers to those responsible for product distribution, advertising, and sales. The term "manufacturers" refers to those responsible for the production and packaging of a product. They may in fact be the same company.

³ Use of the term "product" in this report will refer to both the product and the package unless otherwise specified.

⁴ Marketing Intelligence Service, Ltd., maintains a database of new product introductions for domestic packaged goods markets. For a further description see Chapter 3, Section 3.2.1.

alone may or may not increase the purchase of green products. However, well-conceived regulations could ensure that those environmental marketing claims that are made and do influence consumer purchasing decisions are truthful, standardized across products, and non-trivial.

This report examines the issues surrounding environmental marketing in the United States. It reviews consumer understanding of environmental marketing terms, their use and trends; instances where claims were discontinued, and catalogs various groups' definitions and guidance for the use of the terms. The Agency expects that this report will be used by others as a comprehensive summary of existing research. The Agency does not advocate any particular federal action to clarify environmental claims.

1.2 INTRODUCTION

Environmental marketing differs from other forms of advertising in two important ways. Consumers are buying goods perceived to be less environmentally harmful, basing their purchasing decisions both on inherent product characteristics (such as price and quality), and because they feel that they are "doing good," either by minimizing their own environmental impacts or by promoting environmentally beneficial activities (e.g., closing the recycling loop by purchasing products with substantial recycled content). In addition, environmental marketing provides incentives for manufacturers to achieve significant environmental improvements, such as toxics use reduction and recycling, by competing on the basis of environmental impacts of product manufacture, use, reuse, and eventual disposal.

Several factors common to environmental attributes exacerbate the confusion over these marketing terms. Advertising claims covering easily-discernible attributes of a product, such as *soft* or *tasty*, are readily evaluated by a consumer, who can judge the validity of claims using his or her own experience. Conversely, environmental claims, such as *ozone-friendly* or *source-reduced*, pertain to characteristics of a product with which a consumer generally has little or no experience or comparative information, and who therefore cannot evaluate the credibility or value of the claim. Even if a consumer understands the meaning of a term such as *biodegradable*, he or she may not be able to evaluate whether the characteristic is necessarily a beneficial attribute in the context of their own personal environmental priorities or those of society. In addition, some general environmental marketing claims, such as *earth friendly* or *safe for the environment* are virtually unsubstantiable, and wide consensus exists that they are inherently deceptive and should not be used to promote products.

Environmental labels pertain to more than just the inherent qualities of the product being promoted; they also reflect the context in which a product is sold and used. One widely used context-specific term is the word *recyclable*. For a material to be recycled, the infrastructure to collect the material and the technology to recycle it must exist, and such an infrastructure must be used by consumers. By promoting a product as *recyclable*, marketers make claims over which they have little or no control, because they do not control a consumer's access to the appropriate recycling infrastructure. Nor do they control a consumer's interest in using

recycling opportunities. For this reason, several critics have suggested providing very specific guidelines for, or banning the use of, context-dependent terms such as *recyclable*, *degradable*, and *compostable*.

Finally, many terms used in environmental labeling, such as *photodegradable*, are not normally used by consumers and are often poorly understood. Some terms used in environmental statutes, such as *home scrap*, are defined differently by regulators and in their common usage, and are thought to be unsuitable for use in advertising. A lack of standardized definitions and use has led to the perception of environmental claims as being equivalent to "good for the environment," even though virtually all consumer products are associated with some adverse environmental impacts. Consumers who possess a limited understanding of the scientific and policy issues and vocabulary involved are exceptionally powerless when evaluating environmental claims and are arguably most in need of nation-wide, uniform guidance. Since environmental marketing relates to, and benefits from, consumers' desire to improve society and their impacts on the environment, then, as the Environmental Action Foundation argues, environmental advertising claims must not only be truthful in the information they relate to be of value, but the claims themselves must reflect real environmental benefits or policy goals recognized by scientists, policy makers, and society.

The environmental marketing claims currently used to describe products and packaging range from vague, general terms such as *earth-friendly*, or *natural*, to more specific claims such as *contains no chlorofluorocarbons*, or *made with x percent postconsumer recycled materials*. Despite the growing confusion over the use of such terms, the use of environmental marketing claims grew at an impressive rate between 1989 and 1992 and has only recently begun to level off. The total number of products with environmental claims increased from 5.9 percent of new product introductions⁵ to 10.5 percent to 12.3 percent between 1989 and 1991, declining slightly to 11.4 percent in the first half of 1992. In general, environmental marketing claims for all types of products increased throughout this period, with environmental claims made for health and beauty aids and laundry and cleaning products increasing threefold in the three and a half year span.

A conspicuous gap exists between the perception of marketers making environmental claims for their products and consumer understanding. In addition, a number of regulatory agencies have stepped in to provide a myriad of guidelines for use of such claims. Before the release of FTC environmental marketing guidelines, many national marketers reacted to the confusion resulting from an absence of clear national guidelines by removing or avoiding environmental claims. These companies decided that the risk of legal action by state and local agencies enforcing consumer protection laws as well as the ensuing negative publicity was not worth the possible competitive advantage of making the environmental claim. Some marketers dropped terms over which other corporations have been sued. Others have been wary of making new claims when they have been challenged on previous environmental marketing claims.

⁵ New product releases include reformulations or repackaging of existing products.

Several have decided not to advertise real environmental improvements in their processes or products, preferring to wait for a safer regulatory arena. Chapter 4 discusses cases in which marketers have removed or avoided environmental labels on their products.

In the first section of Chapter 5 the various U.S. programs that have developed definitions and/or guidance for use of environmental marketing terms are reviewed. The most significant difference among these programs is the distinction between guidelines promoting truth-in-advertising and those using environmental labeling as a means to achieve environmental policy goals. Proponents feel that environmental marketing guidance incorporating sound scientific analysis, and reflecting the national environmental agenda, would reward manufacturers for reducing the environmental burden of the manufacture, use and reuse, and disposal of their products. These definitions are summarized and discussed in Section 5.2 and are presented in detail in Appendix 2.

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2. CONSUMER PERCEPTION OF ENVIRONMENTAL CLAIMS

2.1 INTRODUCTION

American consumers are increasingly concerned about environmental issues. As indicated in a recent survey performed by the Roper Organization, public concern about the environment has grown faster over the last several years than concern about any other national issue.⁶ (21) Marketers have responded to this increased awareness and concern by dramatically enlarging the number of environmental claims placed on consumer product labels between 1989 and early 1992 (see discussion in Chapter 3).

A recent *Advertising Age* survey paints a picture of somewhat skeptical consumers who want government to regulate environmental advertising, but who still generally believe in and respond to marketing claims. Of the 1,004 U.S. adults surveyed, 52 percent paid less attention to environmental claims, citing the profusion of new claims being made as the reason. Eighty percent felt that the state or federal government should regulate environmental marketing claims as opposed to industry self-regulation. (4) However, the majority of respondents (77 percent) felt that environmental advertising claims are very or somewhat believable, 73 percent said that environmental marketing claims sometimes or very often influenced their purchasing decisions, and 60 percent said they were more likely to buy a product because of its environmental claims today than they were three years ago. (4)

However, studies also show that (a) many consumers do not understand the specific environmental labeling terms they encounter, and (b) consumers often do not follow-through on their own assertion that they would preferentially purchase products that are less damaging to the environment. (1,5,14) When asked if they would be willing to pay a price premium to buy products with environmental attributes, consumers typically answered yes. Far fewer respond affirmatively when asked whether they consciously have purchased (at a price premium or otherwise) environmentally preferable products. (1,20)

The discrepancy between consumer attitudes and behavior has several possible explanations. Although the majority of consumers voice strong support for environmental preservation, studies have indicated that the immediate issues of short-term economics (price) tend to override environmental concerns when consumers are faced with actual purchasing decisions. (6) Second, the recent and rapid proliferation of environmental marketing terms, combined with the lack of standardized definitions, may be exacerbating consumer confusion and skepticism. Finally, consumers may want to do the right thing, but many do not feel that they can trust the sincerity of the environmental claims that companies are making. (9) In the *Green*

⁶ This trend did not hold true among Americans in 1991, when concerns about the recession and the Gulf War overshadowed those about the environment (Leo Burnett Worldwide, Inc. Press Release, 1992). The results of more recent surveys indicate, however, that public support for environmental concerns is continuing to grow (*Advertising Age*, June 29, 1992, p. S-2).

Report of 1990, the Task Force of State Attorneys General expressed fear that "if consumers began to feel that their genuine interest in the environment was being exploited, consumers would no longer seek out or demand products that are less damaging to the environment. If this [occurs], the environmental improvements that could be achieved by consumers purchasing more environmentally benign products would be lost." (3)

This chapter focuses on consumer perception and understanding of environmental marketing terms and the effect that environmental marketing claims have on consumer attitudes and buying habits. Environmental marketing claims must be both technically accurate and understandable and credible to be meaningful to consumers. Any action aimed at decreasing current marketplace confusion must therefore take consumer understanding of environmental marketing terms into account. Three related topics are addressed in the following sections:

- Consumer awareness and understanding of environmental marketing terms;
- Consumer confidence in environmental marketing claims; and
- Environmental purchasing habits.

2.2 CONSUMER AWARENESS AND UNDERSTANDING OF ENVIRONMENTAL MARKETING TERMS

Consumer awareness of broad environmental issues does not always coincide with their understanding of specific environmental marketing terms. Although generally concerned about the state of the environment, consumers often are unable to define commonly used environmental marketing terms or phrases correctly. In addition, their level of understanding of different environmental terms varies widely. The following section briefly addresses the results of research on the general environmental attitudes of separate demographic segments.

2.2.1 Consumer Segmentation

Consumer studies generally categorize survey respondents according to the way they answer questions about environmental issues. Recent research supports the correlation between wealth, education, and a stronger awareness and comprehension of environmental labeling terminology. In particular, two surveys indicated that respondents with different educational and income profiles tended to have very different levels of understanding of, and reaction to, environmental marketing terms. Table 2.1 summarizes consumer segment definitions according to different levels of environmental awareness and activity.

According to some surveys, however, the correlation that exists between demographics and environmental awareness does not extend to consumers' buying habits. One editorial states, "Despite the many attempts to categorize green consumers, there continues to be much confusion about precisely who they are, what they are doing (or not doing), and why." (12) Nonetheless, 4 of the 5 surveys characterized approximately 20 percent of the population as being "highly concerned" about the environment, and all of the surveys characterized between 4 and 30 percent

as "not concerned." Market surveys performed by retailers such as Seventh Generation and Earth Care paper products support these ratios. They reveal that a small percentage of the U.S. market consists of a group of committed consumers who actively seek out less environmentally-harmful products, while most consumers buy green products only when the price and the quality are roughly equivalent to those of the conventional products. (19)

2.2.2 Consumer Understanding of Environmental Marketing Terms

Publicly available information about consumer understanding of and response to specific green labeling terms is scarce. The summary results of survey data on consumer attitudes regarding environmental issues are often reported in marketing and advertising publications, but the detailed survey results are almost exclusively proprietary. In addition, the surveys that are publicly available tend to focus more on consumer perception of global environmental issues and company environmental reputations, and less on consumer understanding of individual labeling terms and consumer buying habits with respect to specific environmental marketing claims.

Three known sources of survey research have recently addressed consumer comprehension of commonly used environmental marketing terms. Environmental Research Associates, Inc. (ERA) follows the changing levels of consumer response to five common environmental marketing terms in its *Environmental Report*. On a quarterly basis, ERA generates the Report for the Council on Plastics and Packaging in the Environment (COPPE). Second, Brenda Cude of the University of Illinois at Urbana-Champaign surveyed Illinois residents in 1990-1991 to determine the level of consumer comprehension of environmental marketing terminology. A third study was performed by the Gallup organization on behalf of Dow Chemical Company. Collectively, these studies focused on seven categories of environmental terms:

- Degradable/Biodegradable
- Compostable
- Recyclable
- Recycled
- Ozone Friendly/No CFCs
- Environmentally Friendly/Environmentally Safe
- Source Reduction⁷

⁷ Note that the toxicity-related terms were not addressed by Cude or ERA. This is a significant omission, since 37 percent of all environmental claims made in 1991 fell into the toxicity-related category (see Chapter 3). Toxicity, often used in reference to the health risks associated with human exposure to a product, may also apply to ecosystem impacts.

Table 2.1. Environmental Consumer Segmentation

| Survey Organization | Degree of Awareness and Activity | | | |
|---|---|--|---|--|
| | Highest | Strong | Moderate | Not Active |
| Environmental Research Associates | Very Concerned (59%) ^a | Somewhat Concerned (37%) | Not Very Concerned (3%) | Not at All Concerned (1%) |
| Green Market Alert | Visionary Greens: committed greens (5-15%) | Maybe-Greens: swing group (55-80%) | | Hard-Core Browns: adamant non-environmentalists (15-30%) |
| JWT Greenwatch (J. Walter Thompson) | Greener-than-Greens: make many sacrifices for the environment (24%) | Greens: concerned about the environment but make only some sacrifices (59%) | Light Greens: concerned but not willing to make any personal sacrifices (15%) | Ungreens: don't care about the environment (3%) |
| Kaagan Research Associates | Young White Collar: most environmentally conscious, affinity for environmental groups, at odds with corporate America (22%) | Substantial Means: strong believers in (and practitioners of) individual environmental responsibility, more vocal on abstract and global environmental debates (15%) | Older White Collar: Self-satisfied with personal environmental efforts and optimistic about the future (14%) Blue Collar: Lack the belief that individual effort can make a difference, believe that industry and government will pick up the slack (24%) | Limited Means: Lacking the educational background to grasp the complexity of some environmental issues, or the incomes to make discretionary pro-environmental purchases; environmentalism not a high priority (18%) |
| The Roper Organization | True-Blue Greens and Greenback Greens: earn more, have more education, politically liberal, and tend to be female (22%) | Sprouts: well-educated, wealthy, "swing" group (26%) | Grouzers: high school education or less, income below \$25,000, rationalized indifference (24%) | Basic Browns: most socially and economically disadvantaged, virtual absence of environmental consciousness or activity (28%) |
| ^a Percentage of survey sample. | | | | |

The surveys indicate that comprehension, although generally quite low, varied among terms. *Recycled* and *biodegradable*, the terms most commonly used by marketers, were also the most widely understood by survey respondents. The correlation between frequency of use and consumer understanding suggests that consumers may be more knowledgeable about product attributes and their importance if exposed to this information over time. The results of each survey are discussed in detail below.

Environmental Report

The Fall 1990 issue of the *Environmental Report* is based on telephone interviews with 1,000 adults age 18 and over who were randomly selected from all 50 states. ERA conducted the interviews, averaging 27 minutes in length, between October 14 and November 1, 1990. (9)

Interviewers asked respondents to define five environmental terms commonly used in the media, on packaging, or in advertising: *recyclable*, *biodegradable*, *environmentally friendly*, *source reduction*, and *green labeling*. Those claiming to know one or more terms were then required to accurately define the term before they were officially recorded as understanding the phrase.⁸ (9)

While most knew the general meaning of the term *recyclable*, fewer adults could correctly (i.e., within ERA's parameters) define other phrases (See Figure 2.1):

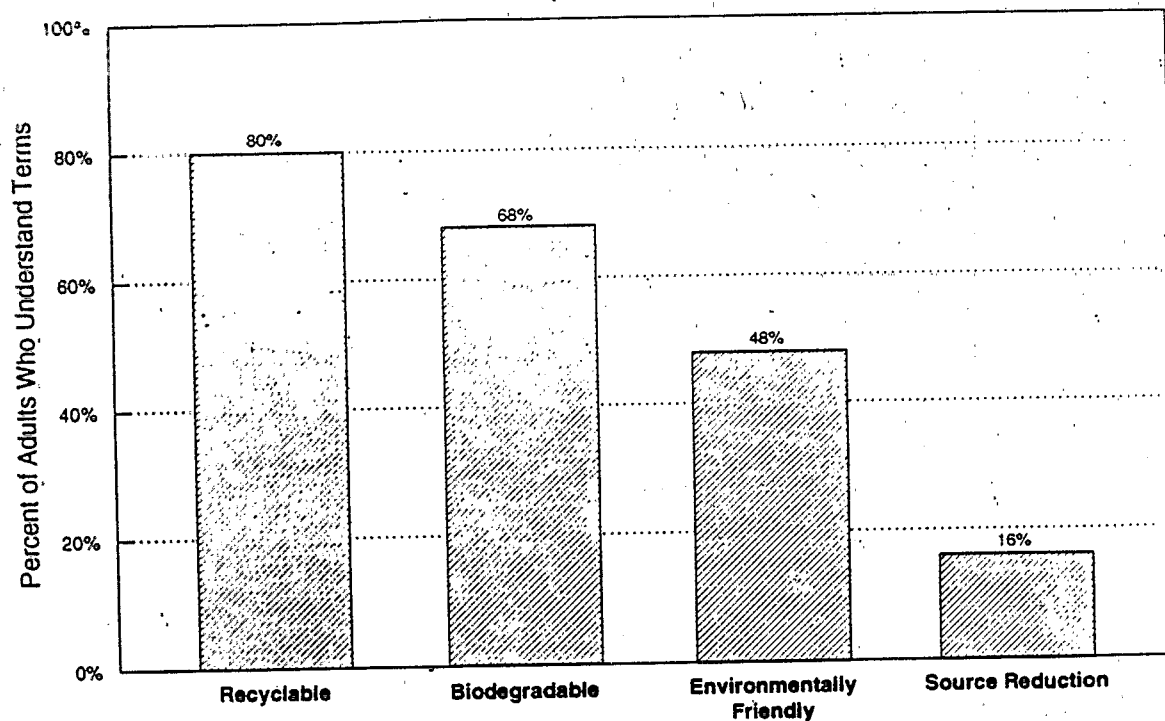
- 32 percent did not know what *biodegradable* meant.
- Fewer than half could give a definition for the terms *environmentally friendly*, or *source reduction*.

ERA also performed a separate analysis of responses given by a subset they describe as "environmentally concerned shoppers." *The Environmental Report* defines these shoppers as those reporting having either purchased or avoided a product in the past three months because of environmental concern about the product, product packaging, or the environmental record of the company manufacturing the product. Furthermore, to be considered an environmentally concerned shopper, the consumer also had to identify the actual name of the product or company. (9)

Despite their relatively strong concern about the effect of buying decisions on the environment, environmentally concerned shoppers appeared to be only slightly more knowledgeable about the definitions of green labeling terms than the survey sample as a whole.

⁸ The list of ERA's acceptable definitions for each term was not made publicly available. For this reason, no assessment is made of the specific criteria ERA used to determine the "accuracy" of consumer definitions. In addition, no standardized definitions for any of the terms exist.

Figure 2.1: Percent of Adults Who Understand Terms
(ERA: Fall, 1990)



Source: Environmental Research Associates, 1990

- 27 percent of environmentally concerned shoppers could not define correctly the term *biodegradable*;
- 83 percent did not understand *source reduction*;
- 53 percent did not understand the term *environmentally friendly*.

ERA concluded that even the most concerned segments of the consumer population are confused by environmental labeling terminology. ERA expressed surprise that so few respondents understood terms that "are used every day by manufacturers, packaging companies, retailers, the media, and environmental groups." (9)

The ERA survey runs into several problems due to its choice and definitions of terms. Some of the items in ERA's list of terms (a) are inherently vague, (b) require a context for

better understanding. (c) are typically used in the technical arena rather than in the marketplace, and/or (d) lack standardized definitions accepted by environmental professionals.⁹

Consumers were asked questions about the general technical definitions of the terms but were not asked to elaborate on the context or infrastructure required to make some of these terms valid. For example, when asked to define the claim *recyclable* in terms of a product's capacity to be recycled, respondents were not probed to determine whether they understood that products can be recycled only if the consumer has access to local recycling collection and reprocessing facilities. Thus, respondents described as "understanding" the general meaning of a labeling term may not have understood all of the conditions necessary to achieve the environmental benefits connected with the claim. With its simplified criteria for determining consumers' understanding of environmental labeling terminology, ERA's methodology may therefore produce results that overstate the true level of consumer comprehension of these terms.

In addition, consumer understanding may be misrepresented because some of the terms chosen by ERA are vague. For example, a problematic claim like *environmentally friendly* may confuse a respondent who understands more widely-used and better-defined terms. *Environmentally friendly* has no precise or widely accepted definition. Regulatory agencies and consumer advocates have recommended that such general, ambiguous terms be avoided or banned. In fact, product manufacturers and marketers themselves increasingly avoid the use of *environmentally friendly* in describing product attributes because the claim has no technical merit.¹⁰ As one illustration of the demise of such nondescript terminology, the 3M Corporation now states in its Environmental Policy that marketing "slogans or symbols that make broad environmental claims, such as *safe for the environment* or *environmentally friendly* should be avoided. Such claims are ambiguous and impossible to document." It should therefore not be surprising that consumers cannot provide a narrow definition for such terms that lack technical substance.

Source Reduced is a broadly defined term that refers to pollution prevention or solid waste reduction in the design, purchasing, and disposal phases of the product life cycle. The term is not a good indicator of general consumer understanding because it is rarely used by marketers. Less than 1 percent of all environmental marketing claims (from 1989 through 1991) included the term *source reduced* (see Chapter 3). It is not unexpected that since only limited numbers of consumers have had exposure to this term that only 16 percent of the general adult population appears to understand the term's meaning.

⁹ Nearly all environmental marketing claims have a degree of ambiguity or lack of clarity associated with them, due to the listed reasons. However, some claims are more understandable than others, e.g., *contains x percent recycled content* versus *environmentally friendly*.

¹⁰ *Friendliness* also implies that a product is beneficial for the environment (i.e., the use of the product actually improves environmental quality), a standard that few if any products can meet.

Recyclable and *Biodegradable* are the only commonly used environmental marketing terms that appear to be representative measures of consumer understanding. *Biodegradable* (13 percent) and *recyclable* (20 percent) collectively accounted for one-third of all environmental claims made in 1991. The ERA results indicate that a large percentage of respondents understood these two terms: among all shoppers, 68 percent correctly defined the term *biodegradable*, as compared with 74 percent of the "environmentally-concerned" shoppers. For the term *recyclable*, 80 percent of all consumers and 81 percent of environmentally concerned shoppers defined the term accurately. Nonetheless, consumers who comprehend the general meaning of these terms may not be aware of the other conditions (e.g., existence of collection systems or actions on the part of the consumer) required to recycle a product or have it biodegrade. Consumers may be misled into believing that the act of preferentially buying recyclable or biodegradable products (as opposed to substitute products without these attributes) automatically reduces environmental degradation.

University of Illinois Surveys

Data were collected by faculty and staff of the University of Illinois Cooperative Extension Service in 1990 and 1991 concerning the level of consumer understanding of the following terms:

- Degradable/Biodegradable
- Compostable
- Recyclable
- Recycled
- No CFCs
- Safe for the Environment
- Environmentally Friendly

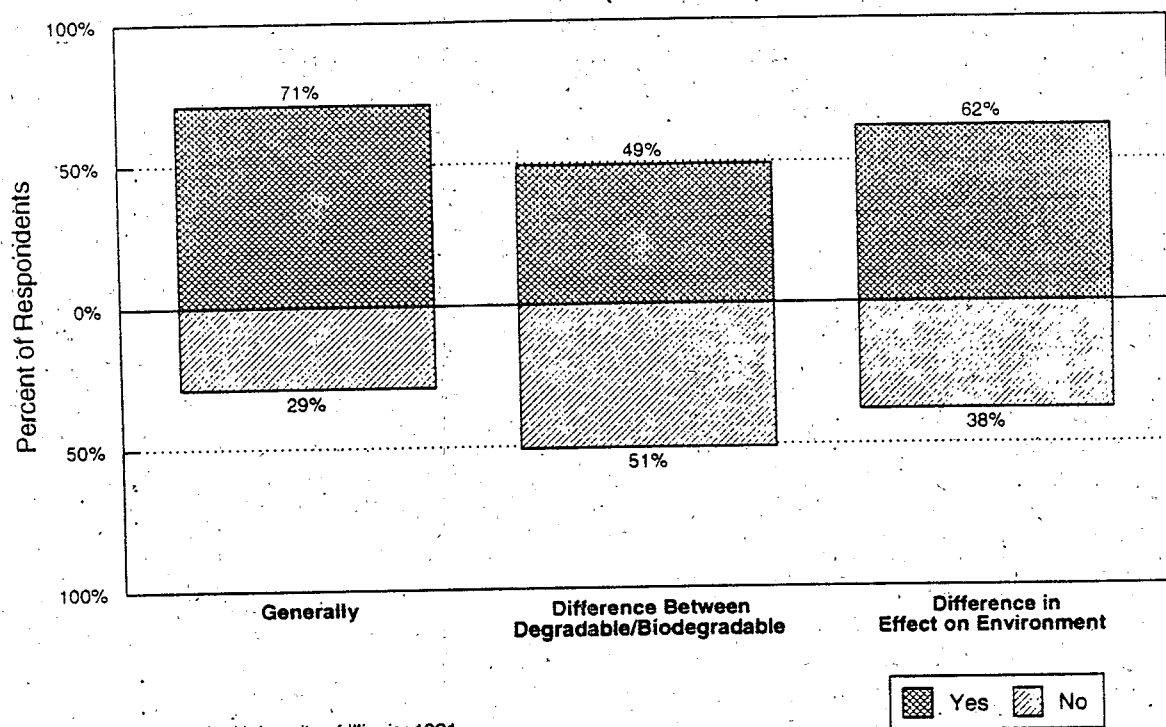
Data on the terms *degradable* and *biodegradable* were collected in surveys distributed to 516 Illinois consumers in October 1990. Data on the remaining terms were collected in June 1991 through four surveys distributed to a total of 1,177 consumers in 32 Illinois counties. The respondents were primarily rural, middle-aged women. All questions were open-ended. (5)

Because the survey was performed on a demographically narrow segment of the United States population, its results cannot be projected to the entire U.S. population. (11) Nonetheless, the University of Illinois findings suggest that "conventional environmental labeling language is doing a poor job of delivering its intended messages." (11)

Degradable The question was posed: "What does it mean to say that a plastic is *degradable*?" Twenty-nine percent of the respondents reported not knowing how to define the term. When asked more specifically, "How is a *biodegradable* plastic different from other *degradable* plastics (if at all)?" over 40 percent of the respondents did not know the difference. Another 11 percent believed that biodegradable plastics degrade faster than those that are simply *degradable*. Only two percent of the respondents said that bacterial action was important in the

degradation of biodegradable plastics. Many consumers (38 percent) also did not know how degradable plastics are different from other plastics in terms of their effects on the environment. (5) (See Figure 2.2.)

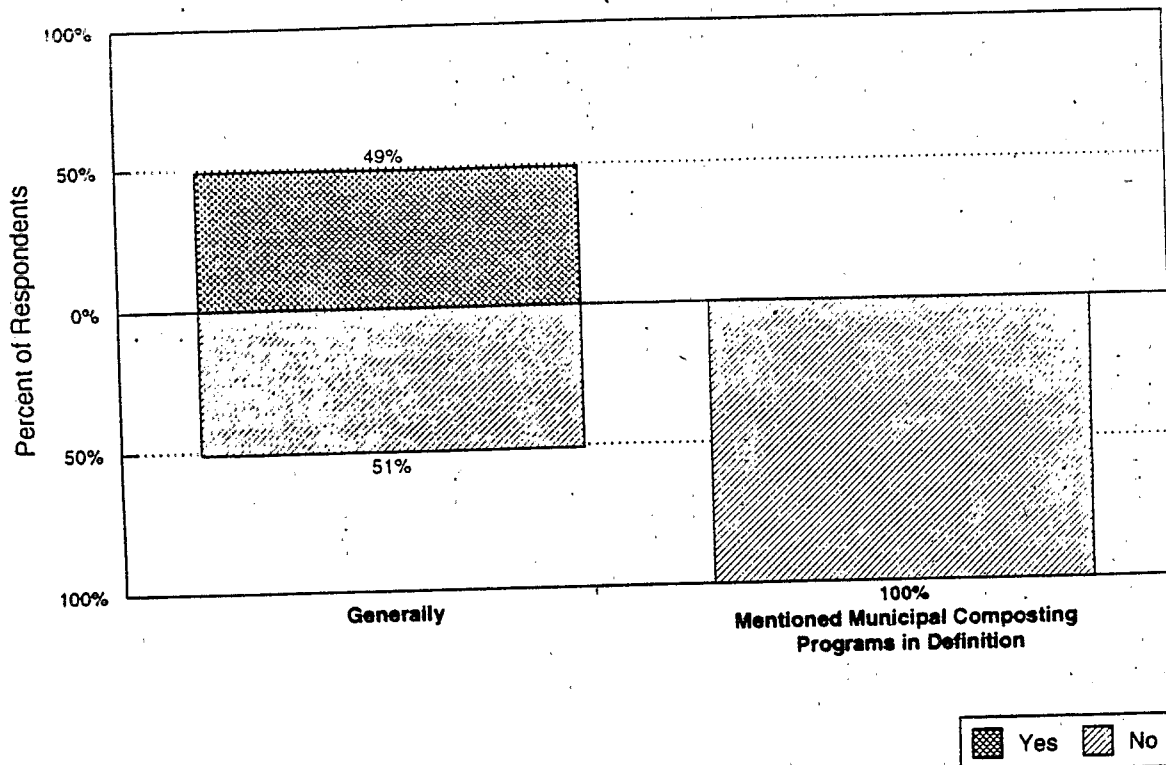
Figure 2.2: Percent of Consumers Who Understand "Biodegradable"
(1990-1991)



Source: Cude, Brenda, University of Illinois, 1991.

Compostable Interviewers asked respondents what the term *compostable* means when found on a product label. Forty-nine percent of the respondents provided a correct definition that included phrases such as "can put it on a compost pile" and "will decompose when composted." Although most respondents understood that they needed to put the material in a compost pile to be composted, no respondents mentioned municipal composting programs in their definitions. (5) (See Figure 2.3.) It is likely that the response of urban residents (without ready access to backyard composting) would differ.

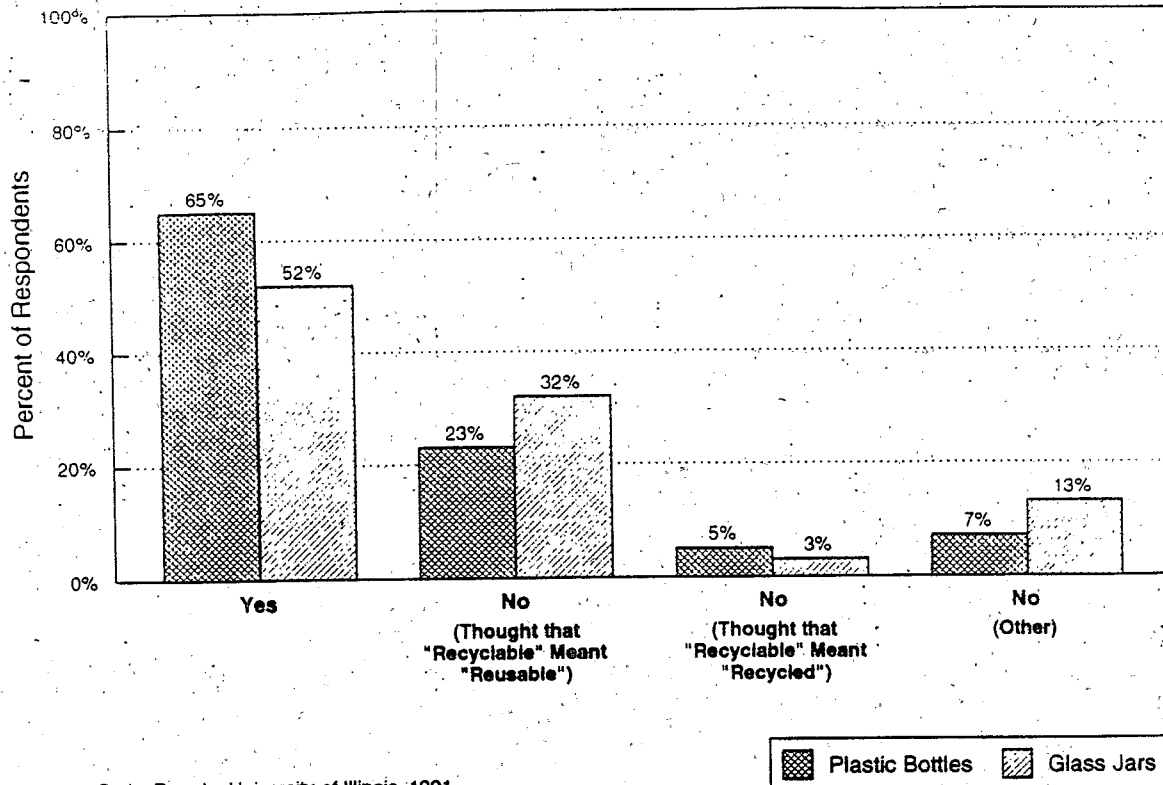
Figure 2.3: Percent of Consumers Who Understand "Compostable"
(1990-1991)



Source: Cude, Brenda, University of Illinois, 1991.

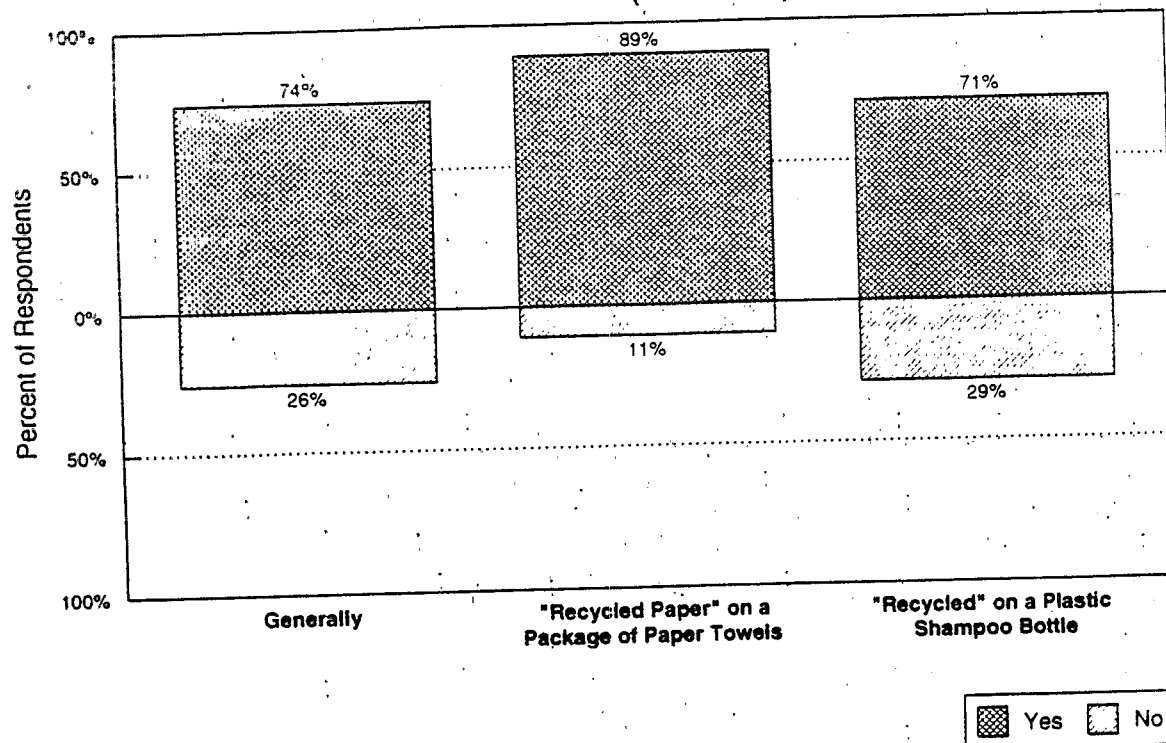
Recyclable Cude designed questions about the term *recyclable* according to packaging types. Respondents were first asked for the definition of *recyclable* as it pertains to plastic bottles, and then asked about the definition of *recyclable* when it is found on glass jar labels. The majority understood the term *recyclable* to mean that a product can be recycled. Sixty-seven percent understood that a recyclable plastic bottle could be recycled and 54 percent understood that a recyclable glass jar could be recycled. The most common mistake among respondents was to define *recyclable* on glass jars to mean that the jar could be reused. Cude notes that it is interesting that the knowledge of the term was lower for glass, given that more recycling programs in Illinois (and many other states) accept glass than plastic. (5) (See Figure 2.4.) Knowledge of plastic recycling may be attributable to recent promotional advertisements.

Figure 2.4: Percent of Consumers Who Understand "Recyclable"
(1990-1991)



Recycled Respondents were asked to define the term *recycled*, the phrase *recycled paper* on a package of paper towels, and the meaning of a *recycled* label on a plastic shampoo bottle. Seventy-five percent of respondents were able to correctly define the general term *recycled*. Respondents were similarly knowledgeable when the question specifically referred to paper. Comprehension was significantly lower when the question referred to the plastic bottle. Only 38 percent were able to define recycled plastic correctly. Importantly, more than 60 percent of respondents were unclear as to whether the label *recycled* applied to the product or its packaging. (5) (See Figure 2.5.)

Figure 2.5: Percent of Consumers Who Understand "Recycled"
(1990-1991)



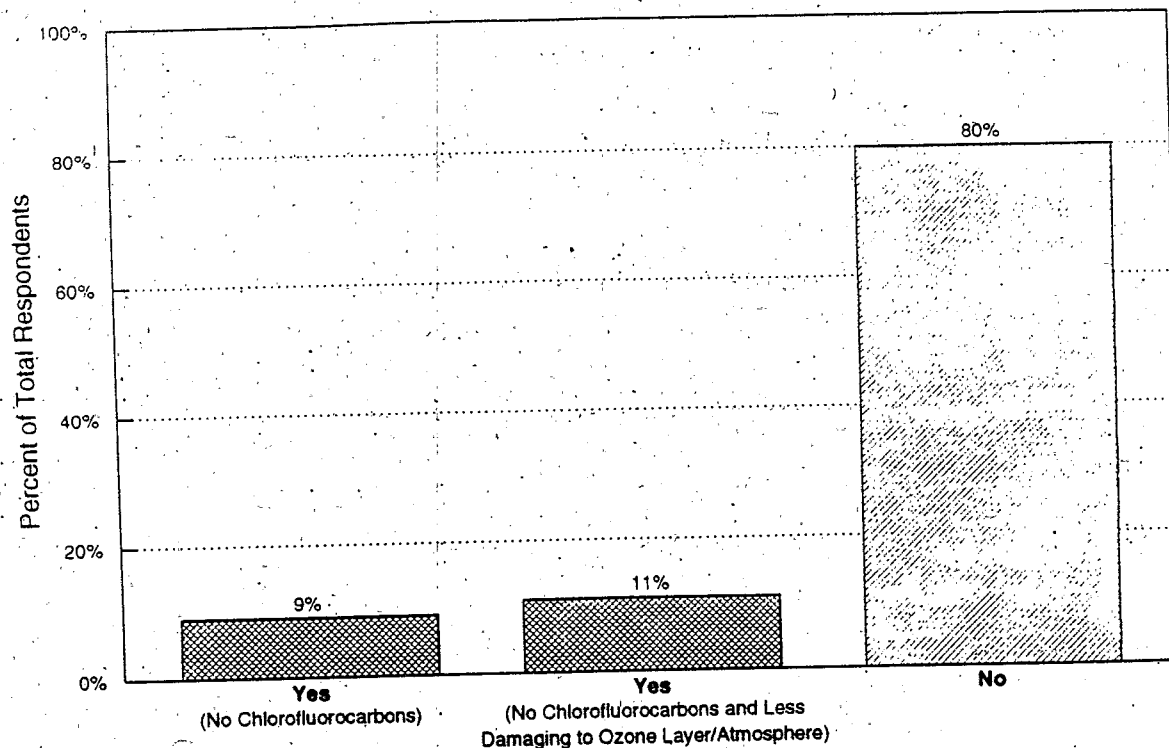
Source: Cude, Brenda, University of Illinois, 1991.

Respondents were then asked to say whether it is important to know if a package is composed entirely or only partially of recycled material. Interestingly, only 39 percent responded that it is important to know the proportion of recycled material in a package. Fifty-one percent stated explicitly that such knowledge was not important. The most common response among those considering such information not important was that "any recycled content is a positive step." (5)

Finally, respondents were asked to define the terms *preconsumer waste* and *postconsumer waste* on packaging labels. The vast majority of respondents did not understand either of these terms. Two-thirds reported not knowing what *preconsumer waste* meant and 83 percent did not know the definition of *postconsumer waste*. (5)

No CFCs Most respondents did not understand this phrase. Eighty percent could not provide an accurate definition. Only 11 percent commented that a product without CFCs was less damaging to the ozone layer or the atmosphere. (5) (See Figure 2.6.)

Figure 2.6: Percent of Consumers Who Understand "No CFCs"
(1990-1991)



Source: Cude, Brenda, University of Illinois, 1991.

Safe for the Environment Forty-six percent of respondents described products with this label as "not harming the environment." Another 17 percent were more specific in defining which aspects of the environment such a product would help protect (e.g., safe for the atmosphere, does not pollute). Eighteen percent indicated that *safe* meant biodegradable. (5)

Environmentally Friendly Over one-third of respondents could not provide a definition of the term, including 10 respondents who described it as "just an advertising term." The remainder provided definitions that referred to less harm to the environment. (5)

Respondents possessed a basic understanding of the terms *compostable*, *recyclable*, and *recycled*. However, they were frequently confused when any level of specificity or conditions were brought to the questioning. In particular, respondents readily confused the terms *recycled* and *recyclable*. Cude noted that in hurried point-of-purchase situations the level of confusion would probably increase. (5)

Among respondents, qualification of the term *recyclable*, based on the availability of recycling collection programs, was not an issue. Most did not understand the subtlety of this condition. In fact, few were aware that taking advantage of the environmental benefits of recyclable products would require further action on their part. In addition, few respondents mentioned the ability to recycle a recyclable product/package as a reason for purchase. (5)

In general, respondents had little or no knowledge of the other terms discussed above, exhibiting a lack of technical understanding for most of them. The ambiguity of terms like *safe for the environment* and *environmentally friendly* is borne out in consumer responses.

Although this survey lacked the nation-wide demographic breadth of the ERA *Environmental Report*, it was far more thorough in providing insight into the levels of consumer comprehension of labeling terms. The methodology also prompted respondents with the context in which terms were likely to be used. The survey results showed that respondents understood the broad meanings of commonly used terms, but also revealed that they were misled by the implications of particular marketing claims.

As in the *Environmental Report*, the University of Illinois surveys found that the terms most commonly used by marketers, such as *recycled* and *biodegradable*, were also the most widely understood by respondents. What the correlation also suggests is that consumers have the capacity to learn about the importance of specific product attributes if exposed to such information over time.¹¹ Educating consumers may therefore be as important as developing voluntary labeling guidelines to enable consumers to make environmentally informed purchasing decisions.

Other Studies of Consumer Comprehension of Labeling Terms

Several earlier studies evaluated consumer comprehension of environmental labeling terms. The results of these studies confirm the findings of the more recent research mentioned above. Below is a brief summary of other information about consumer comprehension of environmental terminology.

In 1989, the Gallup Organization conducted a poll for Dow Chemical Company to address the issue of consumer perception of the environmental effects of degradable plastic products. The question was asked: "When you hear the term *degradable* used in discussions about the disposal of solid waste, as far as you know, does it mean that the material breaks down into elements that are completely safe for the environment or that it breaks down but still presents a threat to the environment?" (8)

The responses were: 45 percent, completely safe; 45 percent, still threatens the environment; 10 percent, don't know.

¹¹ Understanding inherently ambiguous claims such as *environmentally friendly* would not likely change with education, except that consumers might come to see the claims as having no specific meaning.

These results indicate that consumers have widely differing understanding of the term *degradable*. The data also suggest that many consumers may interpret the term to represent an automatic environmental benefit. (8) The findings of the Gallup poll parallel the results of the more recent University of Illinois study, which shows that consumers often confuse context-dependent and absolute environmental terminology.

When consumers were presented with three different definitions of the term *recycling* in a 1990 Gallup poll, 67 percent identified *recycling* to mean a closed-loop process in which a product is remanufactured into the same product over and over again. The remainder of those responding believed that recycling was a finite process through which products could pass only once. The most popular, "closed-loop" definition is consistent with that set down by the Department of Commerce, which suggests that consumers do in fact understand some widely-used environmental marketing terms. (13) This conclusion corresponds with the findings of both the ERA and the Cude reports.

In a 1991 survey of Utah residents performed by Scammon and Mayer, the following question was asked: "If you were shopping at your local store and saw a product or package labeled with the words *recyclable where facilities exist*, would you assume that recycling facilities exist in *your* community?"

Fifty-one percent of the respondents answered yes, and 48.5 percent answered no. This suggests that the phrase '...where facilities exist' is insufficient clarification for more than half of the consumer population, and is particularly misleading for claims where recycling facilities for advertised materials are rare.

Consumers' Perception of Environmental Priorities

On a more fundamental level, many studies suggest that consumers are confused about which product materials contribute most to environmental problems. In reference to consumer understanding of solid waste issues, William Rathje, a University of Arizona archaeologist says: "We find that people's garbage is schizophrenic. In a single bag, you might see a special-order vegetable-based furniture polish and a nasty, microwaveable dish." Adds John Lister, a packaging consultant, "Consumers have set perceptions. Paper's good; plastic's bad. Chances are, neither will get recycled." (10)

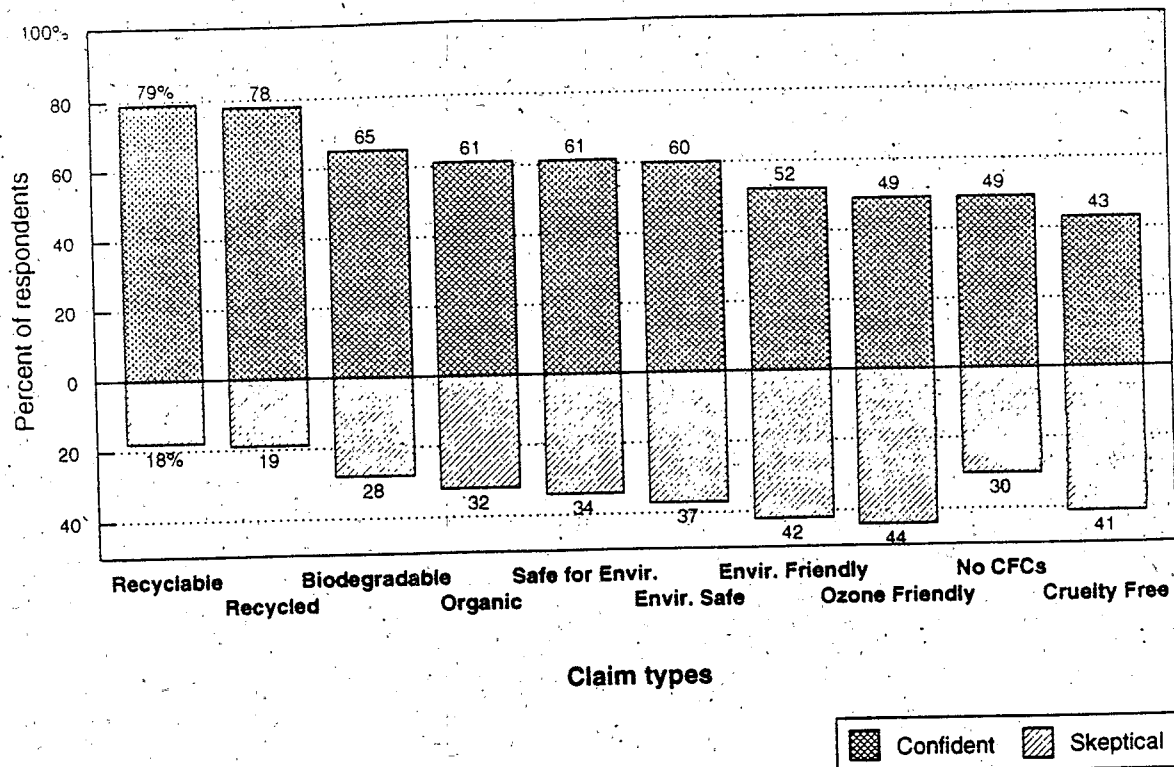
Even more significant than their confusion about solid waste management issues is consumers' lack of awareness of the importance of upstream causes of environmental damage. Marketers have tended to emphasize certain environmental issues, such as solid waste management, over other, potentially more important issues, such as resource conservation. A 1990 Abt Associates study found that only 1.1 percent of consumers had based environmental purchasing decisions on energy efficiency considerations, despite the fact that excess energy consumption is linked to carbon dioxide releases that contribute to global warming. (1)

2.3 CONSUMER CONFIDENCE IN ENVIRONMENTAL MARKETING CLAIMS

Evidence exists that a significant number of consumers are skeptical or unsure about the authenticity of environmental marketing claims. Although they indicate a willingness to pay more for products with real environmental attributes, many consumers do not believe that environmental marketing claims are to be trusted:

- The 1990 ERA *Environmental Report* revealed that fewer than one-third of the survey respondents actually looked for references to environmental attributes when purchasing products. Only 9 percent of respondents suggested that they searched regularly for green product labels. The low rate of consumer activism appears to be due in part to consumer confusion about which labeling terms are accurate indicators of environmental soundness. When asked whether they believed the environmental claims companies were making, nearly 47 percent of consumers said they generally dismiss environmental claims as "mere gimmickry." (9)
- A survey conducted by the Angus Reid Group, Golin/Harris Communications, and Environomics in the Spring of 1991 indicated that some environmental labels instill more confidence in consumers than others. Respondents displayed "considerable confidence" that products with certain labels "would be safer for the environment than competing products without that label." For such claims as *recyclable*, *recycled*, and *biodegradable*, a maximum of 79 percent felt either "very confident" or "somewhat confident" of the veracity of the claim. On the other hand, nearly half the respondents were skeptical of such marketing claims as *environmentally friendly*, *ozone friendly*, and *cruelty free* (A significant number of respondents were "unsure" if products with these last two claims were better than products without them). In no case did a claim create more skepticism than confidence among the respondents (see Figure 2.7). (10)

Figure 2.7: Consumer Confidence/Skepticism



Source: Environment Today, Angus Reid Group et al.

Note: Respondents total less than 100% due to omission of "unsure" responses.

- Similarly, Cambridge Reports/Research International found that consumers were puzzled and skeptical about green marketing claims. In July 1991, Cambridge Reports established that less than half (47 percent) of consumers reported having "really read the label on a product to find out whether or not it is better for the environment [sic]" within the last week. This figure was a slight increase from the 45 percent figure recorded in July 1990. (12)
- A 1991 report by Gerstman & Myers showed that only 55 percent of the respondents believed that "when a product is labeled as environmentally friendly, [it] really is better for the environment." Even more telling is that 42 percent of the people who said they read environmental labels did not find them generally credible. Only 3 percent of respondents indicated that environmental claims were "extremely believable," and only another 12 percent said they were "very believable." Nonetheless, a strong majority of consumers still believed that it was appropriate for companies to make environmental claims. (7) These results support the argument that consumers want to know about the

environmental attributes of products but that the credibility of claims needs to be improved.

- Finally, in a 1991 survey of 403 Utah residents, 55.3 percent agreed or strongly agreed with the statement that "a lot of brands that claim to be better for the environment are no better for the environment than brands that do not make such claims." According to the authors of the report, while "this result is hardly a ringing endorsement of environmental claims...it may at least suggest that consumers are alert to the possibility of vague or misleading claims and therefore are attending to such claims with care." (18)

The dynamic nature and growing complexity of environmental marketing terminology has been serving to build indifference and distrust among consumers toward product environmental claims. As consumers express increasing enthusiasm for environmental protection in general, marketers continue to introduce new variations of green labeling terms on their products. In addition, these marketers are adding complicated messages to their labels to avoid the liabilities associated with the rising tide of state and local actions to control environmental marketing claims.

2.4 ENVIRONMENTAL PURCHASING HABITS

Shoppers frequently express an interest in buying products that help reduce the rate of environmental degradation. In fact, people state in many surveys that they are willing to pay a price premium for products with environmental attributes. However, there is also evidence of a large gap between such avowals and consumer purchasing behavior. This disparity is due to a number of factors, such as: (a) the real or perceived higher prices of environmentally-oriented products, (b) the additional actions needed to realize the advertised environmental benefits (e.g., someone must separate and return recyclables), (c) the limited availability of such products, (d) the availability or lack of supporting infrastructure needed for activities such as recycling, (e) skepticism regarding marketers' environmental claims, (f) real or perceived uncertainty about performance/quality of products, and (g) brand loyalty.

Pollsters Peter Hart and Robert Teeter conducted a survey of consumers for the *Wall Street Journal* and NBC News in the summer of 1991. A subsequent article in the *Journal* underscored the willingness of consumers to sacrifice for the environmental cause. In response to the poll, eight out of ten voters professed that protecting the environment was more important than keeping prices down. In particular, 67 percent of those polled suggested that they would be willing to pay 15 to 20 cents more per gallon for a gasoline that causes much less pollution than current blends. In addition, 85 percent said they would be willing to pay more for cars that are more fuel-efficient and less polluting in the interest of protecting the environment, even if the cars were made "smaller and less safe." (14)

Nonetheless, actual consumer purchasing behavior tells a notably different story about the level of consumer commitment to environmentalism. While three-fourths of those surveyed said that the environmental reputation of manufacturers or products was an important

consideration in their buying decisions, only 46 percent of the respondents could actually say that, when purchasing a product in the last six months, they had chosen a more expensive alternative because of environmental concerns. (14)

Similarly, the 1990 Abt Associates study found that slightly more than half of consumers considered the environmental attributes of a product and/or company (and could name the product and its environmental attributes) when selecting a product in the past six months. The study also found that consumers do not necessarily pay more for environmentally-oriented products than they do for conventional products; approximately 63 percent of those who bought an environmentally-oriented product said that it cost the same as or less than the conventional alternative. (1)

Other recent studies have shown comparable results. Simmons Market Research Bureau found that 58 percent of adult men said aerosols should not be used, yet 87 percent had purchased aerosol shaving creams in the previous six months. Likewise, 60 percent of adult women said that aerosols should not be used for toiletries and household cleaners, but 49 percent had purchased more aerosol hair sprays than non-aerosol hair sprays over the same time period. (12)

2.5 SUMMARY

Consumers are increasingly interested in environmental issues. Although their actions reveal a sometimes passive concern about the environment, studies show that a large percentage (almost half) of consumers actually have made conscious purchasing decisions in the interest of protecting the environment. Anthony Casale of Environmental Research Associates notes that "for the first time, consumers in surveys are listing specific products as environmentally friendly." (15) This demonstrates that environmental consumerism is no longer a fringe activity; a wider cross-section of Americans has begun to participate.

On the other hand, even the most environmentally-conscious consumers continue to be confused about the meaning of environmental terms, and the ambiguity of many of these terms contributes to consumer mistrust of the purveyors of environmental claims. Consumers typically distrust private business on a variety of measures, and corporate environmental performance is no exception. However, consumers have shown the capacity to take advantage of a basic environmental education (i.e., exposure to environmental issues through the media), which helps them evaluate some of the more commonly used environmental marketing claims. What consumers appear to be lacking is (a) adequate understanding of the meanings of environmental claims, and, (b) a means of assessing the veracity and significance of claims.

Consumer perception will continue to be a strong determinant of product environmental attributes, because marketers respond directly to consumer preference (as opposed to the environmental issue behind the preference). For this reason, better informed consumers will give producers constructive marketplace feedback and incentives to make real environmental improvements. To ensure that the products themselves are designed with the goal of protecting

the environment, a continual effort to modify and update environmental definitions and guidelines will be needed. In turn, consumers must also learn and understand the rudimentary technical information needed to make environmentally-informed buying decisions.

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3. INVENTORY OF ENVIRONMENTAL LABELING AND MARKETING TERMS

3.1 INTRODUCTION

This chapter of the report has two primary objectives. The first is to determine the current level of environmental labeling activity in the United States, including the types of claims made on product labels and in advertising, the types of products for which those claims appear, and their frequency of appearance. The second is to outline and evaluate trends in environmental marketing claims over the past three and a half years. This chapter does not attempt to explain the causes of such trends in depth, but does attempt to document their use. Wherever possible, background information important to interpreting the trends is provided.

The results of the research indicate that environmental claims have become increasingly important in consumer marketing. The level of environmental claim activity has risen substantially in recent years, more than doubling between 1989 and 1992. The most frequently made claims relate to chemical use, or the lack thereof, in the production of food and other consumer goods (e.g., *organic*, *no pesticides*, and *no phosphates*). Claims relating to solid waste management, such as *recycled* and *recyclable*, account for the fastest growing type of environmental claims.

The product categories with the largest number of environmental marketing claims (as well as the largest number of new product introductions) were foods and health & beauty aids. Together, these accounted for three quarters of all new products and over one half of all claims. The highest percentage of products with claims appeared for laundry & cleaning products, paper products and bags. Laundry & cleaning products represented only 4 percent of new product launches from 1989 to 1992, but accounted for 20 percent of all claims.

Section 3.2 discusses the methodology used to extract and analyze the data from **Productscan**, the database source of information consulted for the study. Section 3.3 presents and discusses the study results. This discussion includes an evaluation of each type of marketing claim with respect to its trends and frequency of use. Figures illustrate the use of environmental claims over time, showing the amount of activity by type of claim and by type of product. Finally, these results are compared to those of other, similar studies.

3.2 METHODOLOGY

Due to the large size of the consumer market considered in this study and its continually changing character, limits had to be established on the amount of information gathered. The methodology used to extract and analyze selected product information is described in five sections:

- A description of **Productscan**, the source of the information gathered on new product introductions;
- The development of search criteria specific to **Productscan**;
- The definition of search terms as they relate to specific product claims;
- The method used for information compilation and analysis; and;
- The limitations of the analysis.

In addition, two other analyses of MIS data (3,8) are compared with the results of this study.

3.2.1. The Productscan database

To develop a claims inventory, this study relied upon a database maintained by Marketing Intelligence Service, Ltd. (MIS), of Naples, New York. **Productscan** features reports of over 6,000 new products introduced annually in all packaged goods markets. In addition to including new product releases in its inventory, **Productscan** also includes pre-existing products that have been substantially changed, repackaged or relabelled. For the purposes of this study, **Productscan** is considered to be the best single source for such information. Because it is a single source with unified standards of information, it enables a quantitative analysis of claims used in the marketplace to be performed.

MIS's definition of the packaged goods market includes all goods that have brand names on the package, are packaged in smaller quantities for consumer use rather than commercial or industrial applications, and in general are products "you might find in grocery stores and drugstores" (7). MIS characterized this market into 164 product categories. Most of these product types are either foods and beverages, health and beauty aids, or non-durable household products. Particularly innovative products that fit outside the usual definitions are also included. For example, a new appliance such as a hair crimper, although it is a durable product, may be included if it is innovative and if it is sold in a store that also sells typical consumer packaged goods. However, if other manufacturers were to release a similar product, that product would not be reported in the database.

Each product release is given its own record in the database. Two fields of each record provide information on environmental marketing claims. The package tag field has claims codified by MIS staff announcing some feature or benefit. The description field is a general text description of the product, written by MIS staff, using such sources as advertisements, press releases, and actual products. Descriptions may or may not be taken verbatim from the sources.

Although **Productscan** is a currently the best source of information for new consumer product releases, it does have some limitations for examining environmental product trends. The database tracks new packaged-goods product introductions for market research purposes. It was

not developed primarily to analyze marketing claims, and has documented environmental attributes of products only since 1987. In addition, certain environmental terms did not appear in the package tag field prior to Spring 1990, creating an information gap within the period of time covered by this study. Finally, certain types of products with environmental claims were excluded from the database and, therefore, from this report. These products include appliances, automobiles, books, and records, whose claims range from books printed on recycled paper, to energy-efficient refrigerators and reformulated gasoline (12). Given these constraints, there are limitations to drawing specific conclusions about environmental labeling trends using this data, as discussed in section 3.2.5.

3.2.2. Search Criteria

Of the 71 package tag categories found in **Productscan**, 9 are relevant to environmental claims. These are: *No Pesticides*, *No Chemicals*, *No Phosphates*, *Organic*, *No Toxic*, *No Fluorocarbons*, *Recyclable*, *Recycled Materials*, and *Biodegradable*. Note that tags such as *natural* and *no additives* require certain contexts to be considered environmental claims, and are therefore not included. A total of 56 search terms, covering both the package tag and description fields, were used in this study, as shown in Table 3.1. Several keywords were truncated to include variations in word form; these are marked with an asterisk in Table 3.1. The 56 search terms were categorized into ten claim type categories. Summary results for the claim type categories are discussed in Section 3.3.1.

Table 3.1: Breakdown of Productscan Search Criteria

| Claim Type Category | Search Terms | | Inferred Meaning |
|-----------------------|--|--|---|
| Toxicity Related | Pestici* Chemical* Phosph* Organic (in conjunction with no, free, or contains) | Toxic Insectic* Bleach Chlorine | Avoids toxics use and residues through production techniques |
| General Environmental | Earth* ² Eco | Environ* Ecolog* | Contains products that are less harmful to the environment |
| Pollution | Pollut* Nonpollut* Toxin | Diox* Landfill Groundwater Bioremediation | Pollution prevention in use and manufacturing, protection against pollution. |
| Wildlife Conservation | Dolphin* Habitat* Donat* Proceeds | Rainforest* Conserv* Endangered Species | Promotes the conservation of habitat and wildlife, often through cause-related marketing. |
| Ozone Related | Fluorocarb* | Ozone* CFC* | Avoids chemicals that cause depletion of stratospheric ozone |
| Energy | Energy Fluorescent Fuel Renew* Efficien* | Product category "Household maintenance and Energy Conservation" | Less energy used in manufacturing and use of product, use of alternative energy sources |
| Source Reduced | Packag* Source (in conjunction with small, reduc*, or less) | Refill* Reuse* | Mitigates solid waste management problems; reduction of demand for landfills and incinerators |
| Recycled Content | Recycled | Post-Consumer* | |
| Recyclable | Recycl* | | |
| Degradable | Biodegrad* Degrad* | Compost* Photodegrad* | |

1. Nine environmentally-related terms were used for searches within the package tag field. Of these, *recycled*, *recyclable*, *biodegradable*, and *no pesticides* were added by MIS to its package tag field between March and July 1990.

2. Asterisks mark truncated terms.

3.2.3 Definition of Environmental Claims

All categories with the exception of *toxicity related* are clearly related to environmental terms only. Several claims relate to mitigating solid waste management problems through recycling, composting, and biodegradation (i.e., *recycled*, *recyclable*, *degradable*, and *source reduced*). Another category, *general environmental*, covers general claims such as *environmentally safe* or *environmentally friendly*. The *wildlife conservation* category covers claims concerned with wildlife and habitat, especially tropical rainforests. The *ozone related* category refers to the avoidance of chemicals causing stratospheric ozone depletion, an increasingly important concern of American consumers. *Energy* claims refer to energy efficiency in product manufacture and use, while *pollution* claims cover reduced air, water and solid waste pollution from production and use, as well as personal protection from air and water pollution.

The remaining category, *toxicity related*, contains terms that could be construed as either environment or health related, or both. Marketers use the claims to mean "no synthetic chemicals", or even "no bad chemicals," addressing consumer health and environmental concerns, and a general desire for simple and "natural" products. *Organic*, as defined in the Organic Foods Production Act of 1990 and in the California Health and Safety Codes, means that the product is made without the use of any synthetic chemicals. Terms such as *no pesticides* and *no insecticides* indicate that the product is produced or grown without the application of toxic chemicals. The benefit implied by these terms would be to the consumer's health as well as to the environment. Other claims, like *no chemicals* and *no toxic* are dependent on context for clarification. Terms like *no phosphates*, *no bleach*, or *no chlorine* are intended only as a benefit to the environment, not to the immediate health of the consumer.

All of these terms are defined in greater detail in section 5.2.2 and 5.2.3. of this report.

3.2.4 Tabulation of Statistics

The ten categories of claim types were examined across eight categories of product types: foods, health and beauty aids, beverages, pet & miscellaneous products, laundry & cleaning products, paper products, bags, and pesticides & insecticides.¹² Results were broken down into four sections: 1989, 1990, 1991, and the first half of 1992. The raw data is presented at the end of the chapter in Table 3.6. Section 3.3.1 presents these results as trends over time for each claim type, while section 3.3.2 shows trends for product type.

Both the number of claims and the number of products with claims were determined from the **Productscan** search. It was not uncommon for products to have more than one claim. For example, a laundry detergent packaged in a plastic bottle may have the claim that the package

¹² The products that compose each product category are presented in greater detail in Appendix A.

contains recycled material and is recyclable, and that the detergent itself contains no phosphates and is biodegradable. This single product will appear in the *recycled*, *recyclable*, *toxicity related* and *degradable* categories. In addition, this laundry detergent would appear in the Total Releases column of Table 3.6 as one product, but in the Total Claims column as four claims. Although the ratio of claims to new products is not computed here, it can illustrate the "density" of environmental marketing claims within product categories. The Products with Claims column counts the number of products that have claims, and gives the percentage of such products to total releases.

3.2.5 Limitations on Information

The two principle limitations of the analysis conducted on **Productscan** data concern trends in claims from 1989 to 1990 for certain claim categories and the type of products included in the database. In addition, the approach taken in the study of searching for a specific list of terms does not necessarily capture the broad range of possible claims. A product-by-product analysis of marketing claims would be necessary to identify the context in which claims are made.

MIS added the terms *recycled*, *recyclable*, *biodegradable*, and *no pesticides* to its package tag field between March and July 1990, which falls within the time frame of the analysis. Prior to that time MIS was not systematically tracking these claims, and as a result some claims may have been overlooked. This change coincides with Earth Day 1990, an event that prompted many marketers to introduce environmentally-oriented products. Although there was likely an increase in new product introductions with environmental claims at that time, due to the changes in MIS's data collection procedures the increase is possibly not as prominent as is indicated by the results.

As discussed in Section 3.2.1, this data source does not include environmental marketing activity outside of the packaged consumer goods market. The database does not cover durable goods, services, mail order and other forms of marketing.

Despite these limitations, **Productscan** is the best single source for systematically measuring environmental marketing claims in the packaged goods market. It allows for quantitative analysis of a very large, constantly fluctuating and highly visible segment of the consumer market.

3.3 RESULTS

The analysis of the **Productscan** database indicates a rising trend in the use of environmental claims on packaged consumer goods for the first three years of the study, leveling off in the first half of 1992. The number of products with environmental claims increased from 5.9 percent of all new product introductions (1989) to 10.5 percent (1990) to 12.3 percent (1991) (Table 3.3). In the first half of 1992 the number of claims decreased slightly from 1991, to a rate of 11.4 percent. The claim types *recycled material* and *recyclable* saw the greatest increase between 1989 and 1991 (Table 3.4, Figures 3.2 and 3.4), but both decreased in the first half of 1992.

In 1991, solid waste-related claims (*recycled*, *recyclable*, *degradable*, and *source reduced* categories combined) accounted for 45 percent of the environmental claims made for new products, with *toxicity related* claims making up 37 percent and other claims 18 percent. In 1990, the combined solid waste categories had one more claim than the *toxicity related* category, both comprising about 40 percent of environmental claims for new product introductions. Taking into account the late addition of tags for recycling and degradability, the number of solid waste claims could be higher than this figure indicates. A caveat for the comparison of solid waste claims and *toxicity related* claims is that claims of *recycled* and *recyclable* often go together on the same product, so there may be more individual products with *toxicity related* claims than with solid waste claims.

In general, the total number of claims increased until 1992, when they declined slightly. Claims for health & beauty aids and laundry & cleaning products increased fourfold in the first three years (Table 3.5, Figures 3.12 and 3.15). The product category foods contained the most claims, although laundry & cleaning products and health & beauty aids are increasing. In every year, the three product categories with the greatest number of new releases have the lowest percentage of products with claims.

To put the trend in environmental claims for consumer goods in perspective, environmental claims were compared to health claims, the most prevalent type of claim made for consumer products contained in **Productscan** (six times as many health claims as environmental claims were made for food and beverage products).¹³ The results indicate that environmental claims have risen over the past three and one-half years (rising from 5.8 percent of new food and beverage releases in 1989 to a high of 8.4 percent in 1991, declining to 7.6 percent in 1992). The increased use of environmental terms differs from the use of health claims which fluctuated around 42 percent over the same time period.

¹³ The comparisons were limited to food and beverage products under the assumption that these two product categories contain most of the health claims made.

| Table 3.2: Comparison of Environmental and Health Claims for Food and Beverage Products, 1989-1992 | | | | |
|--|-------|-------|-------|-------|
| Total New Food and Beverage Product Introductions | | | | |
| | 1989 | 1990 | 1991 | 1992* |
| Number | 3,397 | 4,094 | 3,721 | 3,684 |
| Health Claims | | | | |
| Number | 1,480 | 1,771 | 1,601 | 1,512 |
| Percentage | 43.6% | 42.0% | 46.8% | 41.0% |
| Environmental Claims | | | | |
| Number | 183 | 293 | 313 | 280 |
| Percentage | 5.4% | 7.2% | 8.4% | 7.6% |
| * To calculate an annual estimate, the figures for the first six months of 1992 were doubled. Source: Productscan , Abt Associates analysis. | | | | |

Other studies (3,8) indicate that the use of environmental marketing claims is growing substantially. MIS's *New Green Products Report* issued in 1989 and updated periodically, based on their **Productscan** database, also reported an increase in products with environmental claims. (8,4) These figures are shown in Table 3.3 in comparison with the results of the present study.

| Table 3.3: Percentage of Products with Environmental Claims | | |
|---|-----------------------------|-----------------------------|
| Year | MIS Study Percentage (%) | Abt Study Percentage (%) |
| 1986 | 1.1 | -- |
| 1987 | 2.0 | -- |
| 1988 | 2.8 | -- |
| 1989 | 4.5 | 5.9 |
| 1990 | 10.1 | 10.5 |
| 1991 | 12.6 | 12.3 |
| Jan - June 1992 | 11.5 | 11.4 |
| Sources: Marketing Intelligence Service, Abt Associates. | | |

MIS used a different definition of environmental claims, including claims about animal testing and use of animal products. It was not indicated how the limitations of the database, spelled out in Section 3.2, were treated in the report.

A study done by *Green Market Alert* (3), also using the **Productscan** database, studied the household products industry, one of six categories in the MIS database, for five types of attributes or claims associated with environmental benefits. The study looked at the introduction of refills, bag-in-box packaging, and concentrated laundry detergents known as *ultra*,¹⁴ and the use of *no bleach* and *no phosphates* claims. Combined, products with these claims or attributes rose from 8.6 percent (1989) to 17.5 percent (1990) to 22.1 percent (1991) of household product introductions.

3.3.1 Trends for Claim Types

This section contains discussions of trends for each of the ten environmental marketing claim types. Table 3.4 illustrates the frequency and distribution of claim activity. All years of the study are presented, with the combined years presented in the last column.

| <div>Table 3.4</div> <div>Environmental Marketing Claims, by Claim Type, January 1989 - June 1992</div> | | | | | | | | | | |
|---|------|----------------|-------|-----|-------|-----|-------------------|-----|------------------------|-------|
| | 1989 | | 1990 | | 1991 | | 1992 ² | | 1989-1992 ³ | |
| | # | % ¹ | # | % | # | % | # | % | # | % |
| Toxicity Related | 274 | 4.9 | 403 | 6.3 | 395 | 6.5 | 424 | 6.7 | 1,284 | 42.9% |
| Recyclable | 3 | 0.1 | 131 | 2.0 | 201 | 3.3 | 162 | 2.6 | 416 | 13.9% |
| Degradable | 37 | 0.7 | 153 | 2.4 | 133 | 2.2 | 136 | 2.2 | 391 | 13.1% |
| Recycled | 0 | 0.0 | 114 | 1.8 | 141 | 2.3 | 114 | 1.8 | 312 | 10.4% |
| General Environmental | 21 | 0.4 | 123 | 1.9 | 111 | 1.8 | 108 | 1.7 | 309 | 10.3% |
| Pollution | 11 | 0.2 | 49 | 0.8 | 47 | 0.8 | 30 | 0.5 | 122 | 4.1% |
| Wildlife Conservation | 3 | 0.1 | 16 | 0.3 | 20 | 0.3 | 24 | 0.4 | 51 | 1.7% |
| Ozone Related | 12 | 0.2 | 12 | 0.2 | 11 | 0.2 | 14 | 0.2 | 42 | 1.4% |
| Source Reduced | 6 | 0.1 | 6 | 0.1 | 9 | 0.1 | 36 | 0.6 | 39 | 1.3% |
| Energy | 3 | 0.1 | 9 | 0.1 | 13 | 0.2 | 4 | 0.1 | 27 | 0.9% |
| Total | 370 | -- | 1,016 | -- | 1,081 | -- | 1,052 | -- | 2,993 | 100% |

1. Percentage of claims to new product introductions within categories only. (Total percentages would reflect double counts of products with more than one claim.)

2. The number of claims in the first half of 1992 was doubled here for comparative purposes.

3. For the total across the entire study period (Jan. 1989-June 1992), claims in 1992 were not doubled.

¹⁴ Refills are smaller packages of concentrated formulas that are combined with water to refill the original packaging. Bag-in-box packages allow for separation of plastic and cardboard for easier recycling. Ultras, by virtue of being condensed formulas, require less packaging.

Toxicity related claims are by far the most frequently used, comprising nearly half of all claims used. *Ozone related*, *source reduced*, and *energy* terms are rarely used. The claims are discussed below in order of frequency of use. Each discussion is accompanied by a line graph of annual claim totals. Although discrete, these totals are represented by line graphs to better illustrate trends of claim activity. Figures for the first half of 1992 have been doubled on the graphs to represent all of 1992, for purposes of comparison.

- Toxicity related (see Figure 3.1)

Toxicity related is the most frequently used type of claim. Appearing 1,284 times from 1989 to 1992, it makes up half of all environmental claims used. Nearly half of the *toxicity related* claims were made for foods. Health & beauty aids and laundry & cleaning products had 15.4 and 15.8 percent of *toxicity related* claims respectively. Laundry & cleaning products such as *no phosphates*, *no bleach* or *no chlorine* had the highest frequency of *toxicity related* claims, appearing on 26 percent of products in 1992.

Some of the *toxicity related* claims for food products can also be interpreted as "health food" claims, such as *organic*, *no pesticides*, *no insecticides*. The claim *no pesticides* was added to the *Productscan* database in July, 1990.

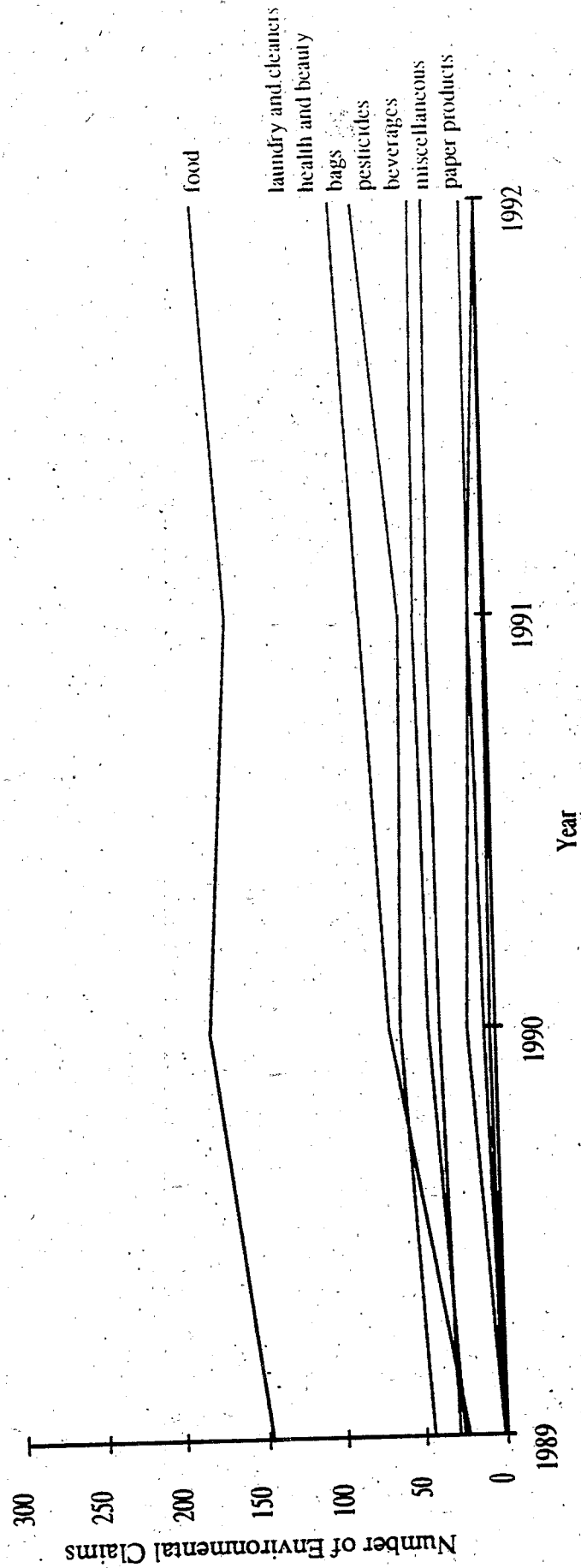
- Recyclable (Figure 3.2)

Recycling is one of the most widely practiced "pro-environment" activities by Americans. From 1990 to 1991, *recyclable* claims were the fastest growing type of environmental claim, though their frequency of use declined in 1992. Significant increases were seen from 1990 to 1991 in claims for laundry & cleaning products, pet & miscellaneous products, and beverages. Because MIS began to keep track of *recyclable* claims systematically only in the third week of March 1990, statistics for 1989 are not reliable.

Recyclable claims make up 13.9 percent of all claims, a total of 416 over the years of the study. Most of the *recyclable* claims referred to packaging rather than the products themselves. Although the greatest number of claims were for foods and health & beauty aids, laundry & cleaning products had the highest density of products with *recyclable* claims, appearing on 13 and 12 percent of new products released in 1991 and 1992 respectively. Paper products account for only four *recyclable* claims in the whole study; the category is composed mostly of paper towels, napkins and toilet paper. According to a survey performed by the University of Illinois, paper recycling was understood better than any other kind of recycling program. In spite of this wide recognition of paper recycling, paper bags have largely avoided *recyclable* claims.

One possible explanation for this claim's rapid increase in use is in the way that marketers have defined the term "recyclable." Many *recyclable* claims refer only to the

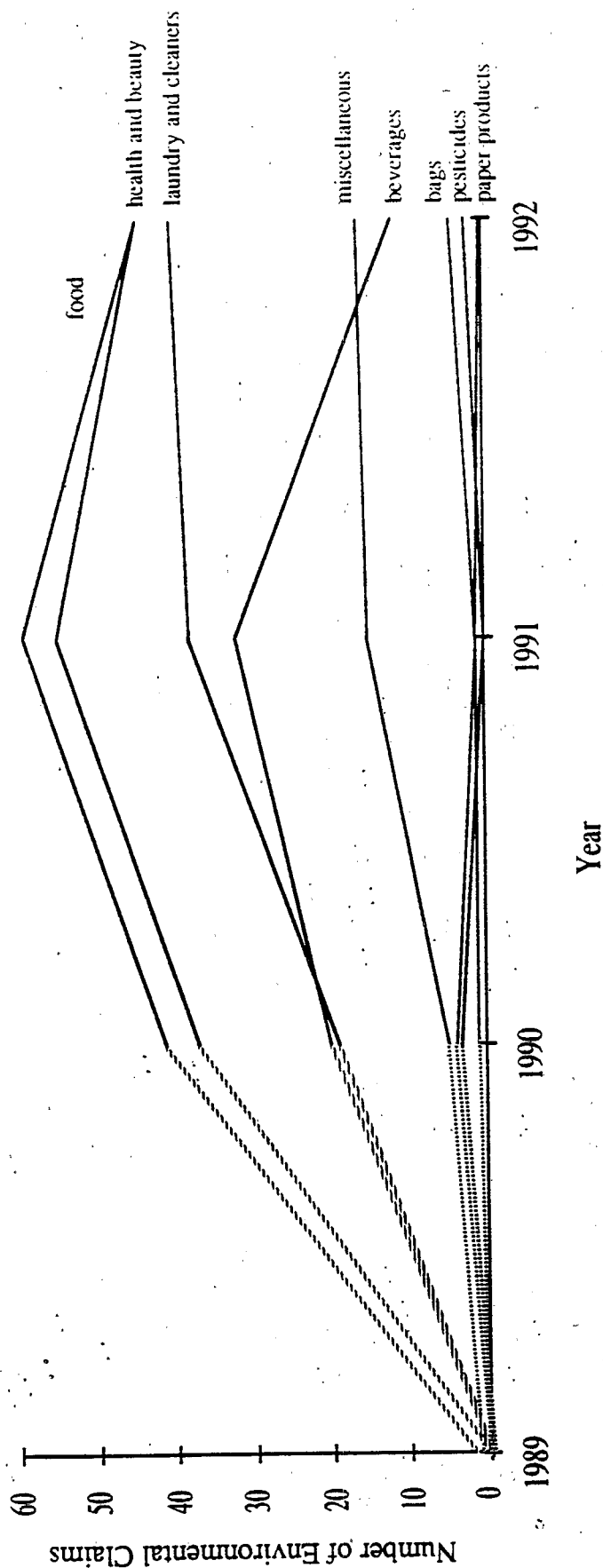
Figure 3.1 Frequency of Use of Toxicity Related Claims by Product Category



Note: •The number of claims for the first half of 1992 have been doubled to represent all of 1992.
 •Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of Productscan database.

Figure 3.2. Frequency of Use of the Claim *Recyclable*, by Product Category



- Notes:
- Observations for 1989 of *recycled*, *recyclable* and *degradable* are taken from the description field of **Productscan**.
 - Package tags for these claims were added to **Productscan** in March-May 1990.
 - Use of a dotted line indicates the number of observations found before the introduction of package tags for these claims.
 - Figures for the first half of 1992 have been doubled to represent all of 1992.
 - Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of **Productscan** database.

technological feasibility of recycling the labeled material. Even if disclaimers such as "recyclable where facilities exist" are added, *recyclable* claims rarely address actual recycling rates or the existence of infrastructure needed to reclaim the material. By defining the term in this way, many manufacturers have been able to make the claim without changing their operations.

However, state regulations in California, requiring that there be recycling facilities in areas where the claim *recyclable* is being made, have prompted some marketers to remove these claims in 1992.¹⁵ For example, Procter & Gamble, the single largest manufacturer of packaged goods in the United States, is in the process of removing from all labels the phrase *recyclable where facilities exist* (6). *Recyclable* claims declined across the board in the first half of 1992.

- Degradable (Figure 3.3)

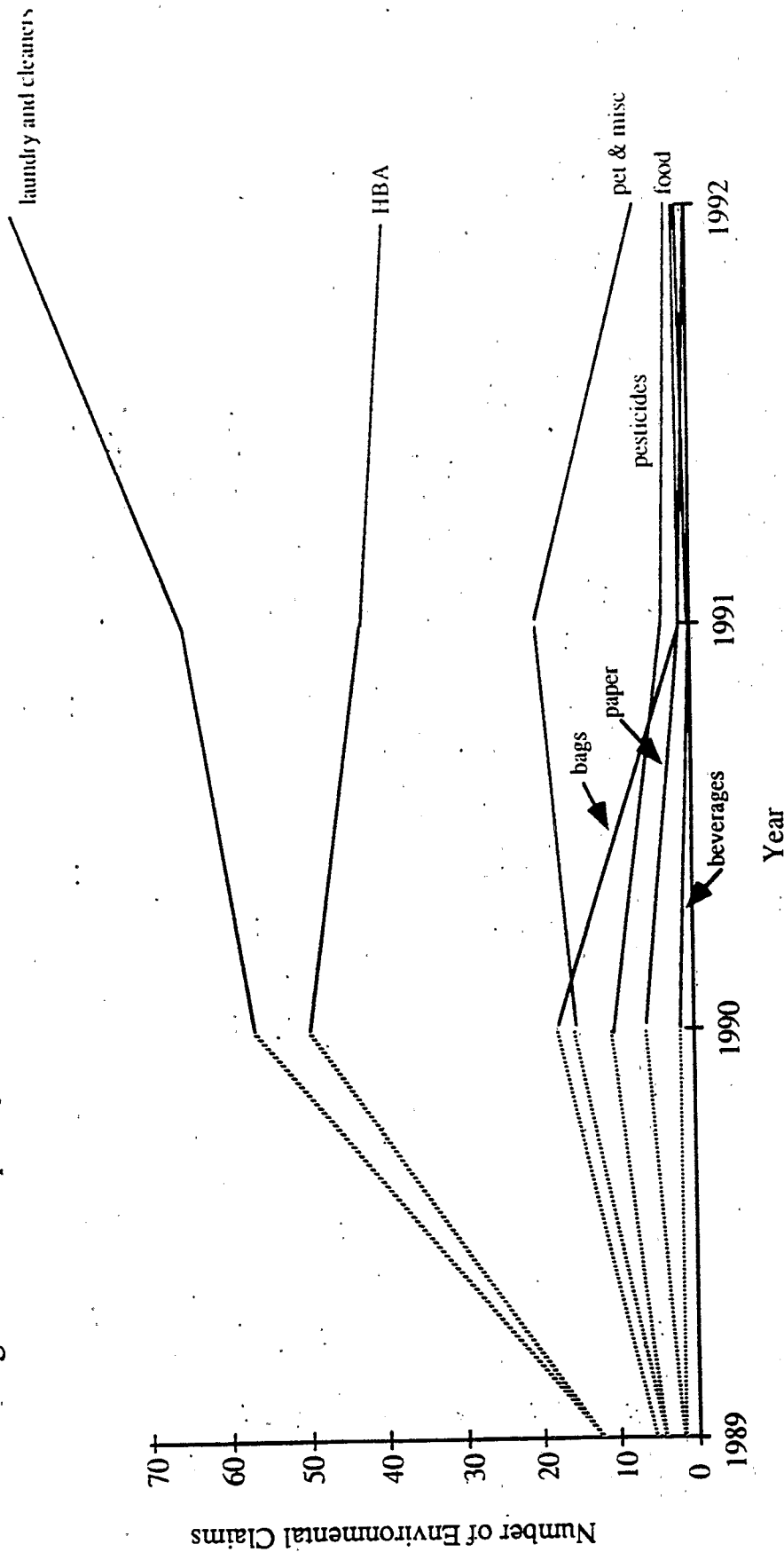
Degradable claims were made slightly less often than *recyclable*, appearing 391 times in three and a half years. Laundry & cleaning products and health & beauty aids account for 77 percent of the *degradable* claims. MIS added the package tag for *biodegradable* claims in March, 1990, the same year that *degradable* claims increased from 37 to 153. Since then, however, claims have appeared consistently at just over two percent of all new products.

Degradable claims for laundry & cleaning products and health & beauty aids refer most frequently to the products themselves (such as laundry detergents), but may also refer to the packaging. Disposable diapers are also listed under health & beauty aids in **Productscan**, and some brands were briefly promoted as *compostable*.

The decline in food packaging, bags, and paper claims was balanced by increases in the laundry products category. Declines in *degradable* claims are likely the effect of litigation on environmental marketing. Claims for food packaging, bags, and paper products fell from 10, 17, and 5 claims respectively in 1990, to 3, 1, and 1 in 1991. In 1990, legal complaints against the marketing of bio- and photodegradable plastic products (e.g., trash and grocery bags) and compostable diapers (described in Chapter 4) were brought by the New York City Consumer Affairs Department, the State Attorneys General Task Force, and the FTC. Although most of these suits were resolved in 1991, no resurgence of this claim occurred in these categories in 1992.

¹⁵ In February 1992, a coalition of business and advertising groups brought suit against the state of California challenging these regulations. (*Advertising Age*, February 10, 1992) On December 24, 1992, the U.S. District Court in San Francisco overturned the definition of *recyclable*, saying that it was "unconstitutionally vague." (*Advertising Age*, January 4, 1993)

Figure 3.3. Frequency of Use of the Claim *Degradable*, by Product Category



- Notes:
- Observations for 1989 of *recycled*, *recyclable* and *degradable* are taken from the description field of **Productscan**.
 - Package tags for these claims were added to **Productscan** in March-May 1990.
 - Use of a dotted line indicates the number of observations found before the introduction of package tags for these claims.
 - Figures for the first half of 1992 have been doubled to represent all of 1992.
 - Lines do not illustrate trends during the course of a year, the number of claims for each year is a discrete point.

Source: Abi Associates analysis of **Productscan** database.

- Recycled (Figure 3.4)

From 1989 to 1992, 312 claims of *recycled content* were recorded, just over 10 percent of all environmental claims.¹⁶ The claims were distributed among all product types, appearing most frequently on foods (92 times) and paper products (64 times). The use of *recycled* claims increased from 1990 to 1991 for all product types except paper products, which fell slightly. In the first six months of 1992, *recycled* claims for paper products continued to decline, falling from 41 percent of new products in 1991 to 24 percent in 1992. Claims for foods, health & beauty aids and beverages also declined in this period.

Like *recyclable* claims, marketers have been withdrawing *recycled content* claims in 1992. Rhode Island law requires disclosure of post-consumer recycled content on packaging, prompting Kraft General Foods to withdraw the claim from all products. "We have changed a number of labels to comply by taking the information off," said a representative of Kraft. (6) Other cases of marketers discontinuing claims are discussed in Chapter 4.

- General Environmental (Figure 3.5)

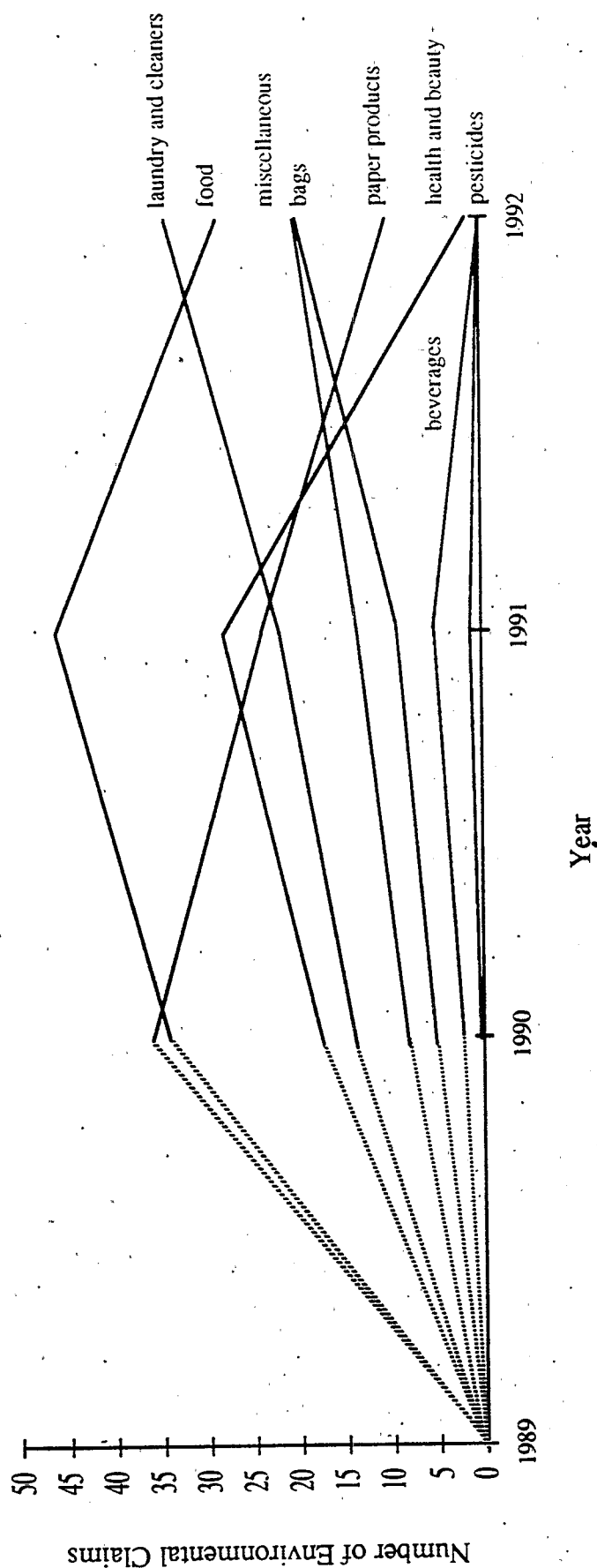
General environmental claims for products occurred almost as often as claims for *recycled* products in the time span of the study, 309 times or 10.3 percent of all claims. This type of claim appeared most often on laundry & cleaning products (108 times) and health & beauty aids (92 times). From 1989 to 1990, use of this claim increased more than five-fold, from 21 uses to 123. The number of uses declined slightly in 1991, due primarily to declines in the number of *general environmental* claims for paper products. The use of the claim for paper products rose from once in 1989 to 28 times (34 percent of new products) in 1990, only to fall back to one use in 1991 and none in the first half of 1992. The trend of the claim for bags was similar, though not as pronounced.

It is unclear why only bags and paper products abandoned the claim in 1991. Certain marketers may have reacted to public criticism of such broad and intangible claims and chose to avoid possible legal challenges. Apparently not all marketers shared this view.

In the first half of 1992 the overall number of general environmental claims stayed roughly the same, with increases in laundry & cleaning products making up for declines in health & beauty aids and foods. In this time period, fully half of products with *general environmental* claims were laundry & cleaning products.

¹⁶ MIS began to keep track of *recycled* claims using package tags in April, 1990. In addition to searches in the package tag field, the database was searched for *recycled* keywords in the description field. No *recycled* claims were found in the description fields in 1989.

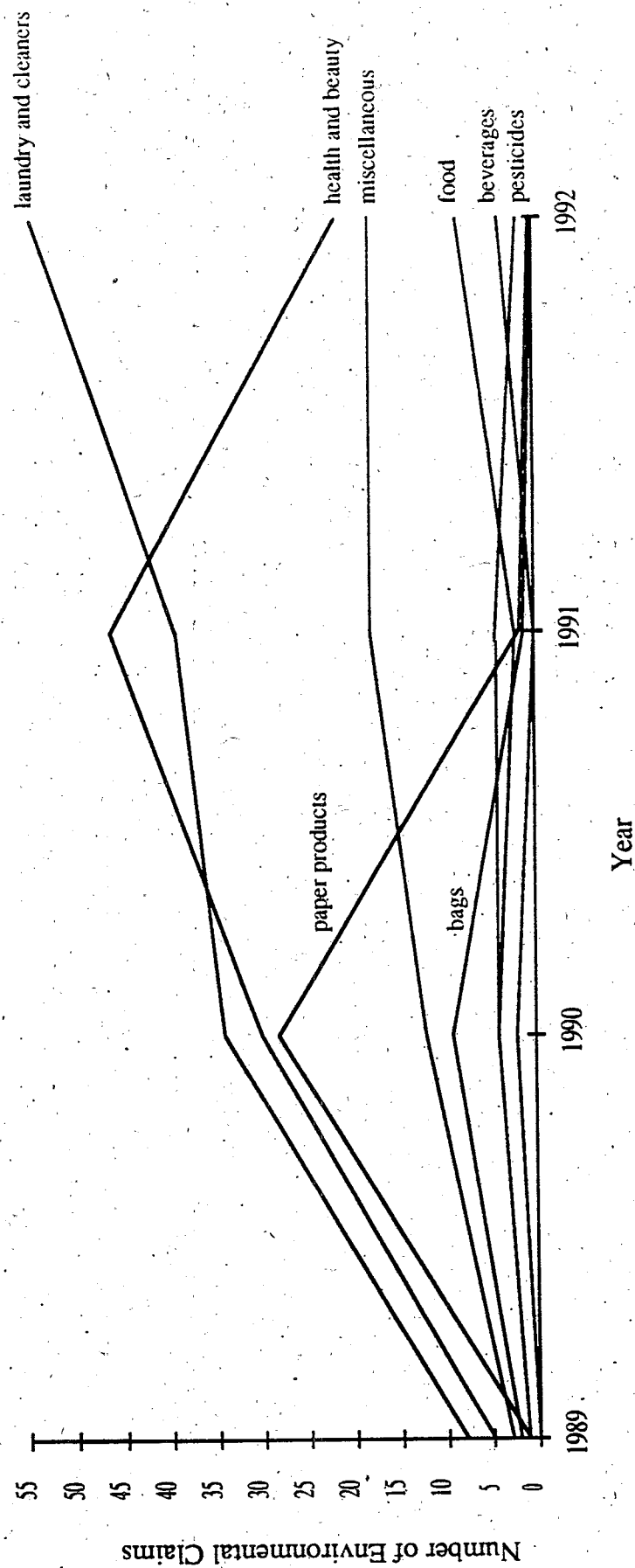
Figure 3.4. Frequency of Use of the Claim *Recycled*, by Product Category



- Notes:
- Observations for 1989 of *recycled*, *recyclable* and *degradable* are taken from the description field of **Productscan**.
 - Package tags for these claims were added to **Productscan** in March-May 1990.
 - Use of a dotted line indicates the number of observations found before the introduction of package tags for these claims.
 - Figures for the first half of 1992 have been doubled to represent all of 1992.
 - Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of **Productscan** database.

Figure 3.5. Frequency of Use of General Environmental Claims, by Product Category



Note: The number of claims for the first half of 1992 have been doubled to represent all of 1992.
 Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of Productscan database.

- Pollution (Figure 3.6)

Claims in this category refer to both pollution prevention in manufacturing and use of products and to personal protection from air and water pollution. *Pollution* claims, accounting for 122 claims in the period of the study, increased from 1989 to 1991 and decreased slightly in the first half of 1992. Most claims were made for health & beauty aids (45 times), with a significant number made for paper products (23 times). In 1992, when claims in almost all product categories declined, *pollution* claims for paper products declined the most, falling from 17 percent of new product introductions in 1991 to 5 percent.

For paper products and some health & beauty aids made with paper, the *pollution* claim referred most often to the paper bleaching process. For a surprising number of health & beauty aids, claims were made that the products protect the user from air and water pollution. One marketer pointed out that "the environment, pollution and stress can make even the healthiest skin look tired and dull", while another offered a cosmetics product "that helps create a thin veil of protection between your skin and environmental pollutants." (Productscan)

- Wildlife Conservation (Figure 3.7)

Wildlife conservation claims appeared on only 51 products in the course of the study, with more than half of these being claims on food products. The rate of introductions with this claim has increased steadily since 1989, rising to 0.4 percent of all new product introductions in 1992, or slightly less than *pollution* claims.

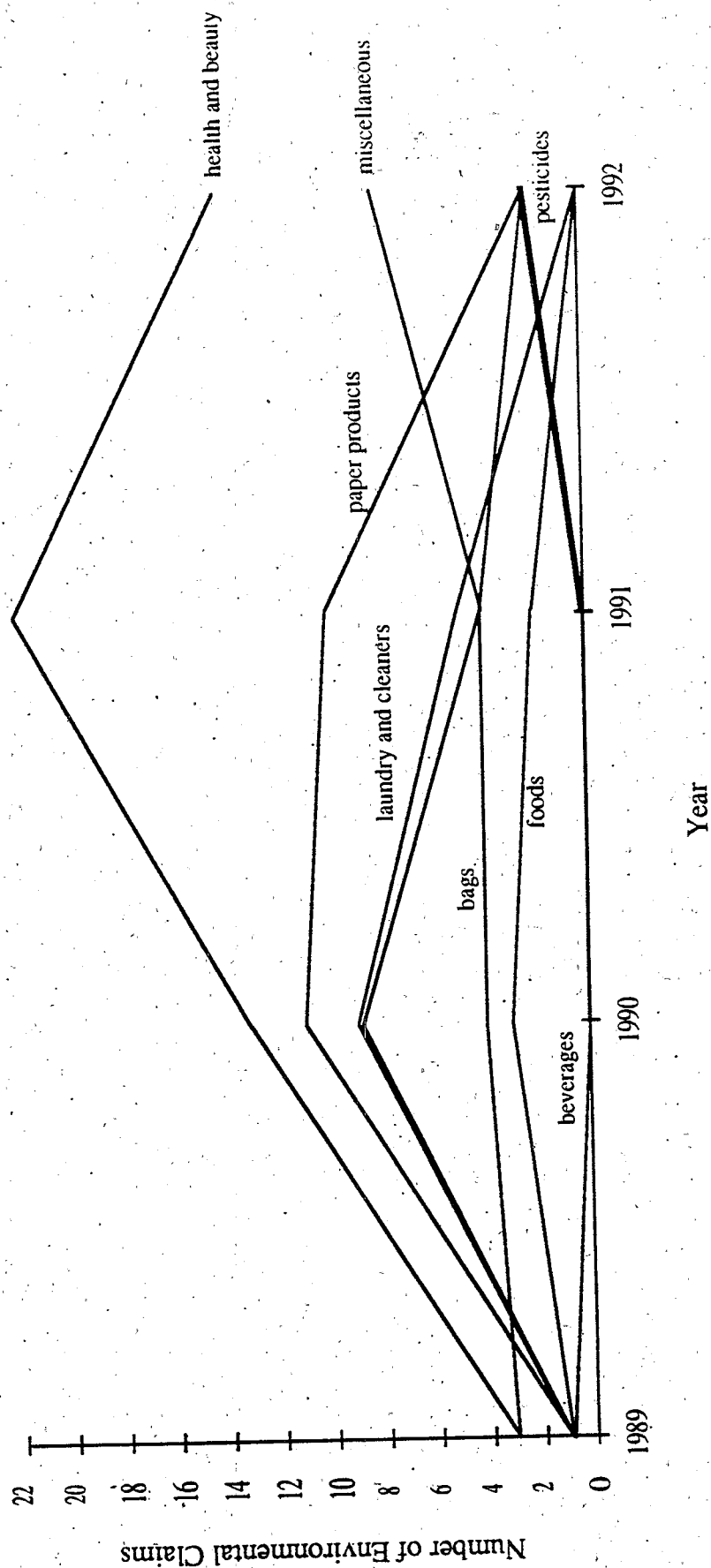
Most *wildlife conservation* claims are of two types: foods and health & beauty aids made with rainforest products; and any kind of product with a promotional tie-in to non-profit groups working to protect wildlife and habitat. Although *dolphin friendly* claims seem to be widespread, very few such claims were noted by Productscan.

- Ozone Related (Figure 3.8)

Ozone related claims appeared only 42 times in the study, comprising slightly more than one percent of products with environmental claims made and only 0.2 percent of all new products. They appear most often on health & beauty aids (19 times in three and a half years), less often on laundry & cleaning products (11 times).

From July 1991 to June 1992, ten successful lawsuits were brought against *ozone related* claims (see Chapter 4). Surprisingly, the rate of new product introductions with *ozone related* claims increased in 1992.

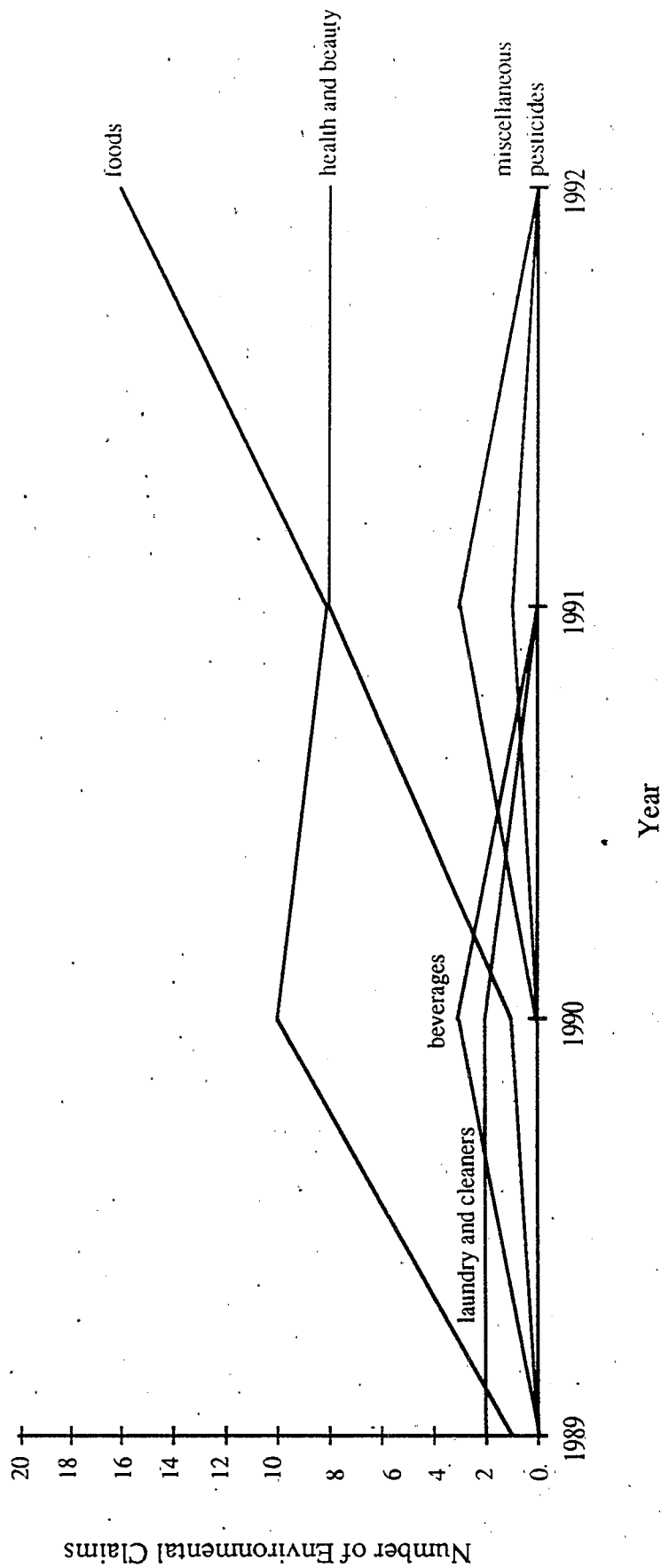
Figure 3.6. Frequency of Use of *Pollution* Claims, by Product Category



Note: •The number of claims for the first half of 1992 have been doubled to represent all of 1992.
 •Lines do not illustrate trends during the course of a year, the number of claims for each year is a discrete point.

Source: Abt Associates analysis of **Productscan** database.

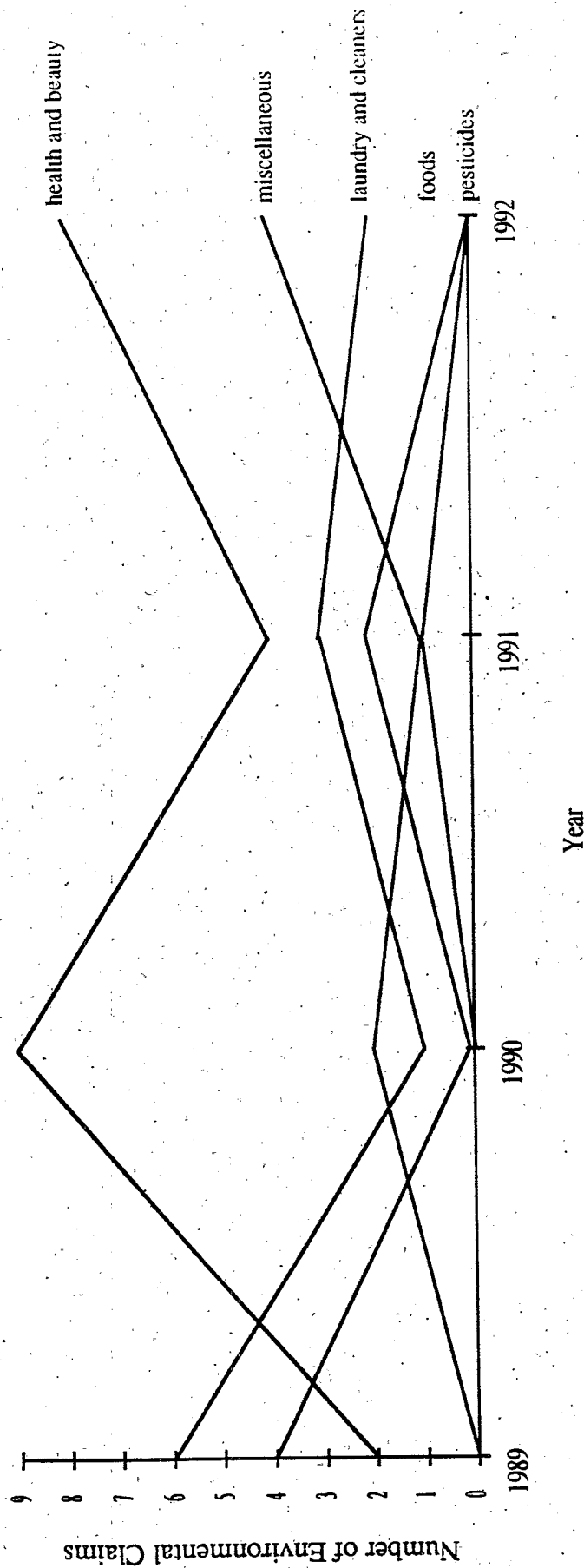
Figure 3.7. Frequency of Use of *Wildlife* Claims, by Product Category



Note: •The number of claims for the first half of 1992 have been doubled to represent all of 1992.
 •Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of Productscan database.

Figure 3.8. Frequency of Use of Ozone Related Claims, by Product Category



Note: •The number of claims for the first half of 1992 have been doubled to represent all of 1992.
 •Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of Productscan database.

- Source Reduced (Figure 3.9)¹⁷

Because *source reduced* is a phrase that marketers rarely use, the **Productscan** search for this claim category included related terms like *reusable*, *refill* or *refillable*, and *reduced packaging*. This claim category comprises only 1.4 percent of all environmental marketing claims, though it has increased in the time period of the study. The claim type has appeared most often on laundry & cleaning products, accounting for 25 of 39 appearances overall. In 1989, all *source reduced* claims appeared on laundry & cleaning products, as compared to 15 of 18 claims in 1992. In the last year and a half, the claim has increased for health & beauty aids because some companies have started removing outer packaging (called "overboxes") from their products, and some specialty stores have promoted refillable bottles.

These results differ from a study of "household products" done by *Green Market Alert*, which reported a higher frequency of *source reduced* claims from 1989 to 1991 (3). Using the **Productscan** database, that study looked for packaging that featured three specific source reduction attributes. Refills, such as Procter and Gamble's Downy Fabric Softener, accounted for 35 introductions in the three years, with 16 new products in 1991 alone. *Ultras*, a type of concentrated laundry soap formulated to need less packaging, had 24 product launches in 1991. "Bag-in-box" packaging, where the plastic bag can be separated from the cardboard box for easier recycling, made up only five new products.

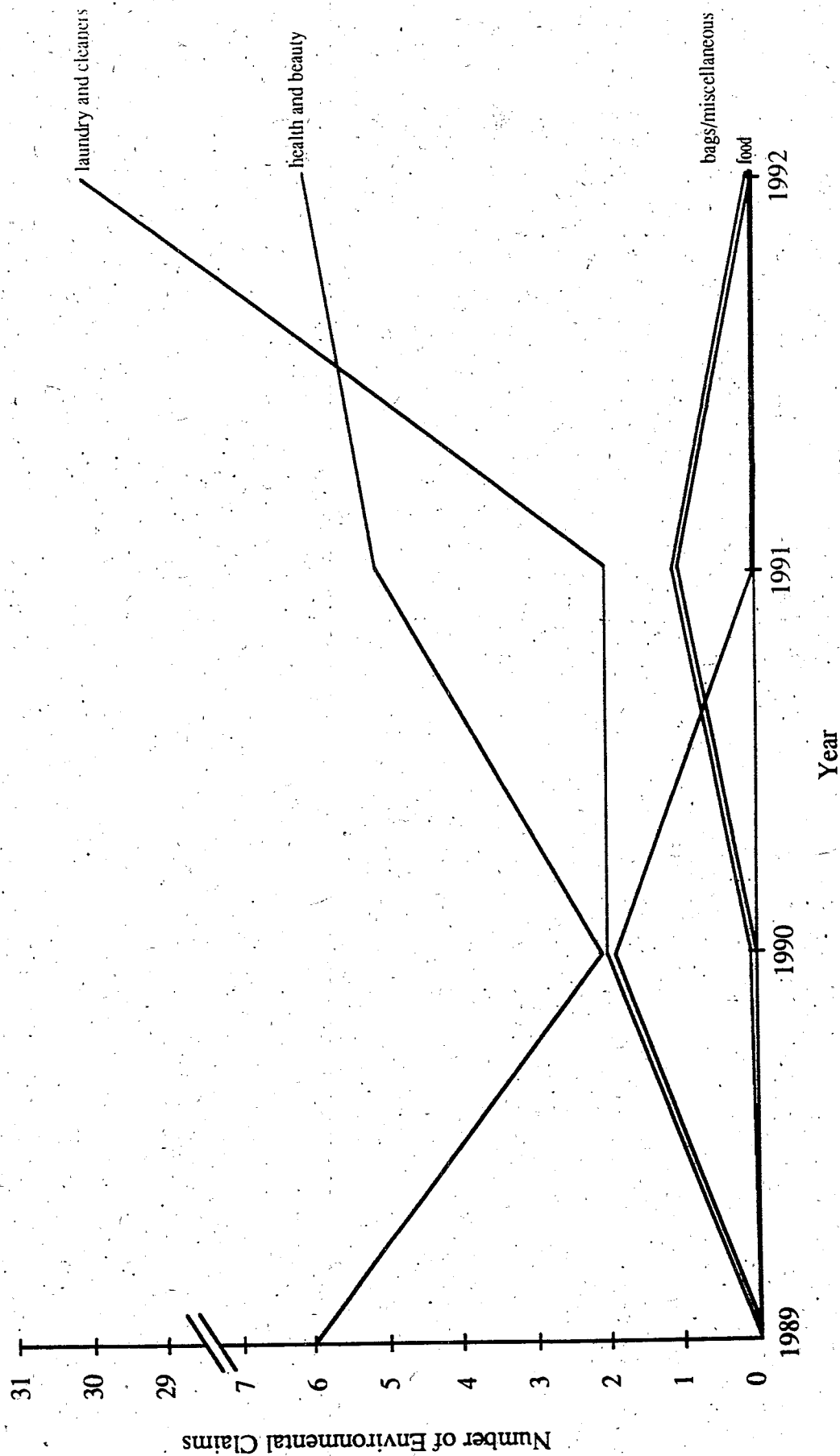
Conversely, this analysis only found only 21 *source reduced* claims for the same time period. In the first half of 1992, the number of new products rose to 18, which is a rate of introduction almost equal to the 42 claims from the *Green Market Alert* study in 1991. The present study did not search for *ultra* concentrated formula detergent, or bag-in-box packaging. Also, MIS tends to keep track of only the most prominent claims on a package. Because laundry & cleaning products marketers often make *source reduction* claims in fine print on the side of a detergent box, these claims were apparently not reported by **Productscan**.

- Energy Conservation (Figure 3.10)

Energy conservation was the type of claim least used by marketers, appearing on less than 1 percent of all products with environmental marketing claims and 0.13 percent of all new product introductions. The category with the highest number of *energy* claims was pet & miscellaneous products, which includes household items such as light bulbs. The number of *energy* claims increased until the first half of 1992, when only 2 claims were made, down from 13 in 1991.

¹⁷ EPA defines *source reduction* as "any practice which reduces the amount of any hazardous substance, pollutant or contaminant entering the waste stream or otherwise released into the environment prior to recycling, treatment, or disposal." (5) Here, however, it is used only as a solid waste term, while claims relating to reduced hazardous waste are covered under the term *toxicity related*.

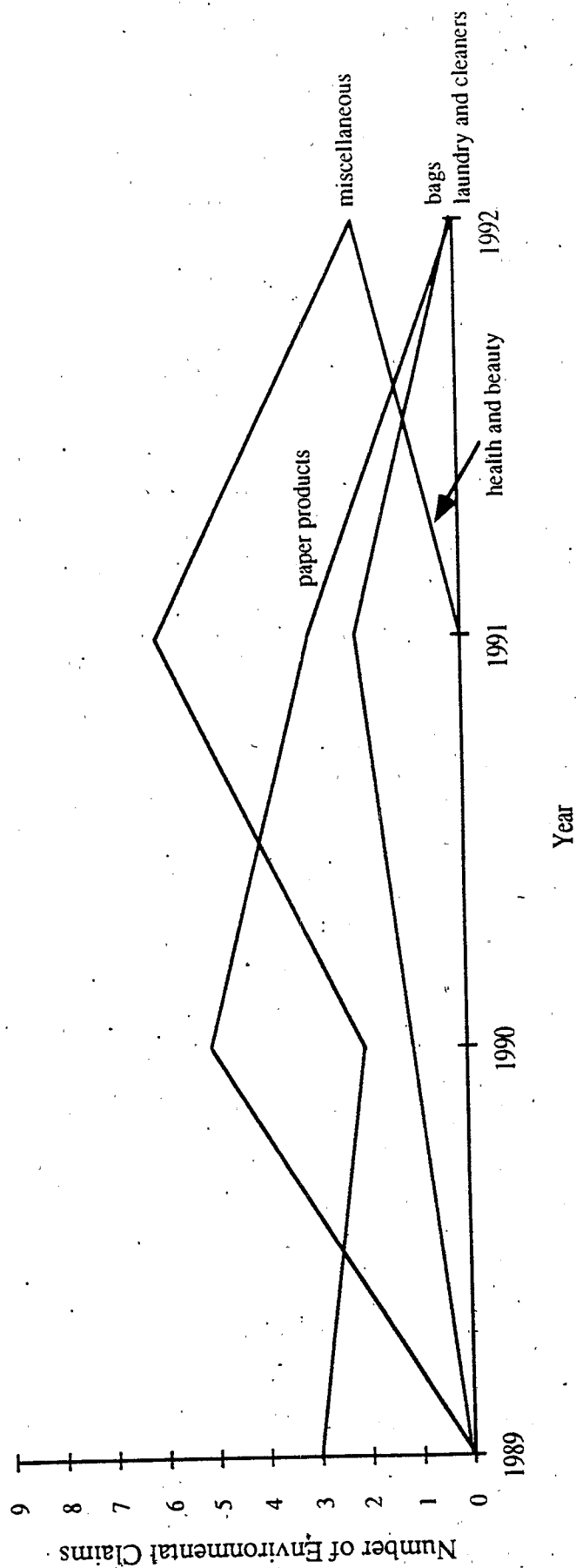
Figure 3.9. Frequency of Use of *Source Reduced* Claims, by Product Category



Note: •The number of claims for the first half of 1992 have been doubled to represent all of 1992.
 •Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abr Associates analysis of Productscan database.

Figure 3.10. Frequency of Use of *Energy Related* Claims, by Product Category



Note: •The number of claims for the first half of 1992 have been doubled to represent all of 1992.
 •Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of **Productscan** database.

3.3.2 Trends for Product Types

A description of trends for claims associated with each of the eight product types follows. Table 3.5 illustrates the frequency of claims and the distribution of claim activity among product categories. It also shows the share of total new product introductions for each category.

| Table 3.5 | | | | | | | | | | | |
|---|------|----------------|------|------|------|------|-------------------|------|------------------------|------|-----------------------------------|
| Environmental marketing claims, by Product Type, January 1989 - June 1992 | | | | | | | | | | | |
| Product Categories | 1989 | | 1990 | | 1991 | | 1992 ² | | 1989-1992 ³ | | Share of All New Product Launches |
| | # | % ¹ | # | % | # | % | # | % | # | % | |
| Foods | 152 | 5.3 | 236 | 6.8 | 239 | 7.6 | 232 | 7.5 | 743 | 6.7 | 51.9 |
| HBA | 60 | 4.0 | 146 | 9.5 | 171 | 10.6 | 158 | 9.4 | 456 | 8.3 | 25.9 |
| Beverages | 31 | 5.9 | 57 | 9.0 | 74 | 12.6 | 48 | 8.3 | 186 | 9.1 | 9.6 |
| Pet & Misc. | 35 | 7.7 | 61 | 17.5 | 92 | 28.8 | 82 | 18.2 | 229 | 17.0 | 6.3 |
| Laundry & Cleaning Products | 39 | 18.5 | 96 | 36.1 | 120 | 41.7 | 158 | 46.5 | 334 | 35.7 | 4.4 |
| Paper | 4 | 9.1 | 47 | 57.3 | 29 | 49.2 | 10 | 23.8 | 85 | 41.3 | 1.0 |
| Pesticides & Insecticides | 2 | 10.5 | 9 | 27.3 | 10 | 34.5 | 10 | 20.0 | 26 | 24.5 | 0.5 |
| Bags | 7 | 53.8 | 21 | 67.7 | 8 | 33.3 | 20 | 50.0 | 46 | 52.3 | 0.4 |
| Total | 330 | 5.9 | 673 | 10.5 | 743 | 12.3 | 718 | 11.4 | 2,105 | 9.9 | 100% |

1. Percentage of products of this product category only bearing environmental claims.

2. The number of product with claims in the first half of 1992 was doubled here for comparative purposes.

3. For the total across the entire study period (Jan. 1989-June 1992), claims in 1992 were not doubled.

Foods account for more than half of all new product introductions, with health & beauty aids making up another quarter. While health & beauty aids also account for the highest number of products with environmental marketing claims, they have the lowest percentage of claims of any product category. Bags and paper products have the highest percentages of environmental claims. The product types are discussed in order of total releases. While the annual totals are discrete, they are represented with a line graph to better illustrate changes in the amount of claim activity.

- Foods (see Figure 3.11)

Foods, the largest category of new products, comprise just over half of all new product introductions each year. The percentage of food products with environmental claims rose from 1989 to 1990, and stayed about the same from 1990 to 1992. Across three and a half years, *toxicity related* claims accounted for 77 percent of all claims made for foods. *Toxicity related* claims accounted for 94 percent of environmental claims for food in 1989, but declined to about three-quarters in the subsequent years. The total amount of environmental claims for foods stayed about the same, due to the increase in claims of *recycled* and *recyclable* packaging in 1991. Use of these two solid waste-related claims combined increased from 26 percent of claims for foods in 1990 to 36 percent in 1991. These two, plus *toxicity related*, account for more than 90 percent of claims made for food for the three years of the study.

It is interesting to note that to earlier claims for foods referred overwhelmingly to the food product and its health impact on the individual consumer (i.e., *toxicity related* claims). Food product claims now relate increasingly to packaging and solid waste issues, which could be considered to benefit society rather than the individual.

- Health & Beauty Aids (Figure 3.12)

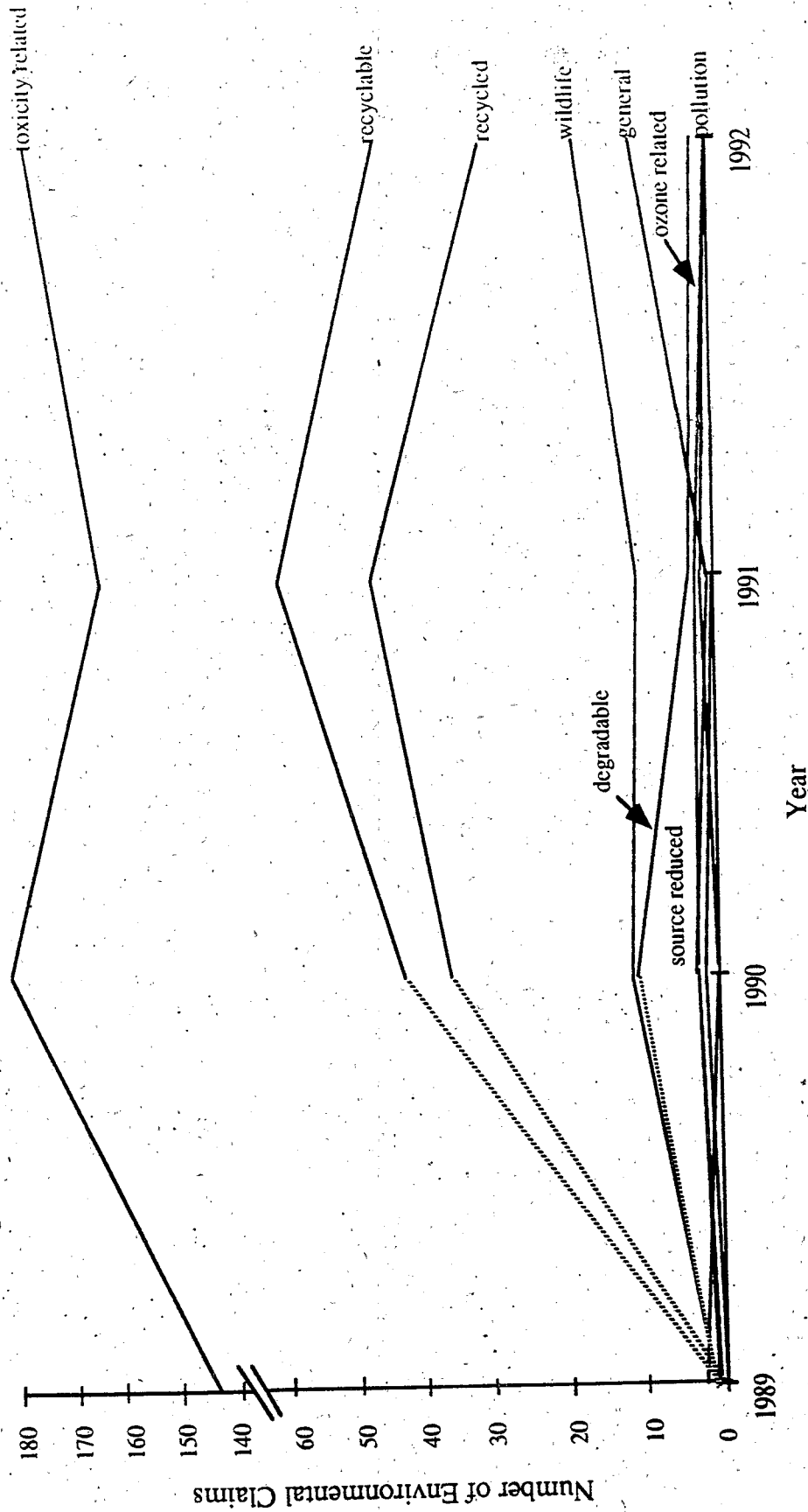
Health & beauty aids, the second largest product category, comprise one quarter of all new product releases. The percentage of products with environmental claims followed a trend similar to food products, rising significantly from 1989 to 1990, and essentially leveling off for the rest of the period. Health & beauty products appeared in all claim categories. *Toxicity related* claims account for 30 percent of all environmental claims made for health & beauty aids over the three and a half years of the study, while *degradable*, *recyclable*, and *general environmental* each represent around 17 percent.

All claim types for health & beauty aids increased from 1989 to 1990. From 1990 to 1991, *toxicity related*, *degradable* and *ozone related* claims declined, though this was more than compensated for by increases in all other categories. *Recycled* claims saw a severe decline in 1992, along with drops in *pollution* and *general environmental* claims. It is interesting to note that of the claims that declined in 1992, two require actions on the part of the manufacturer.

- Beverages (Figure 3.13)

Beverages, the third largest category of new product launches, had far fewer claims than foods or health & beauty aids. Environmental claims for beverages had patterns similar to those for foods, although their number declined more in 1992. The percentage of products with claims rose from 5.9 percent in 1989 to 12.4 percent in 1991, only to fall to 8.3 in 1992. *Toxicity related* claims, such as *organic*, accounted for 61 percent of claims for beverages.

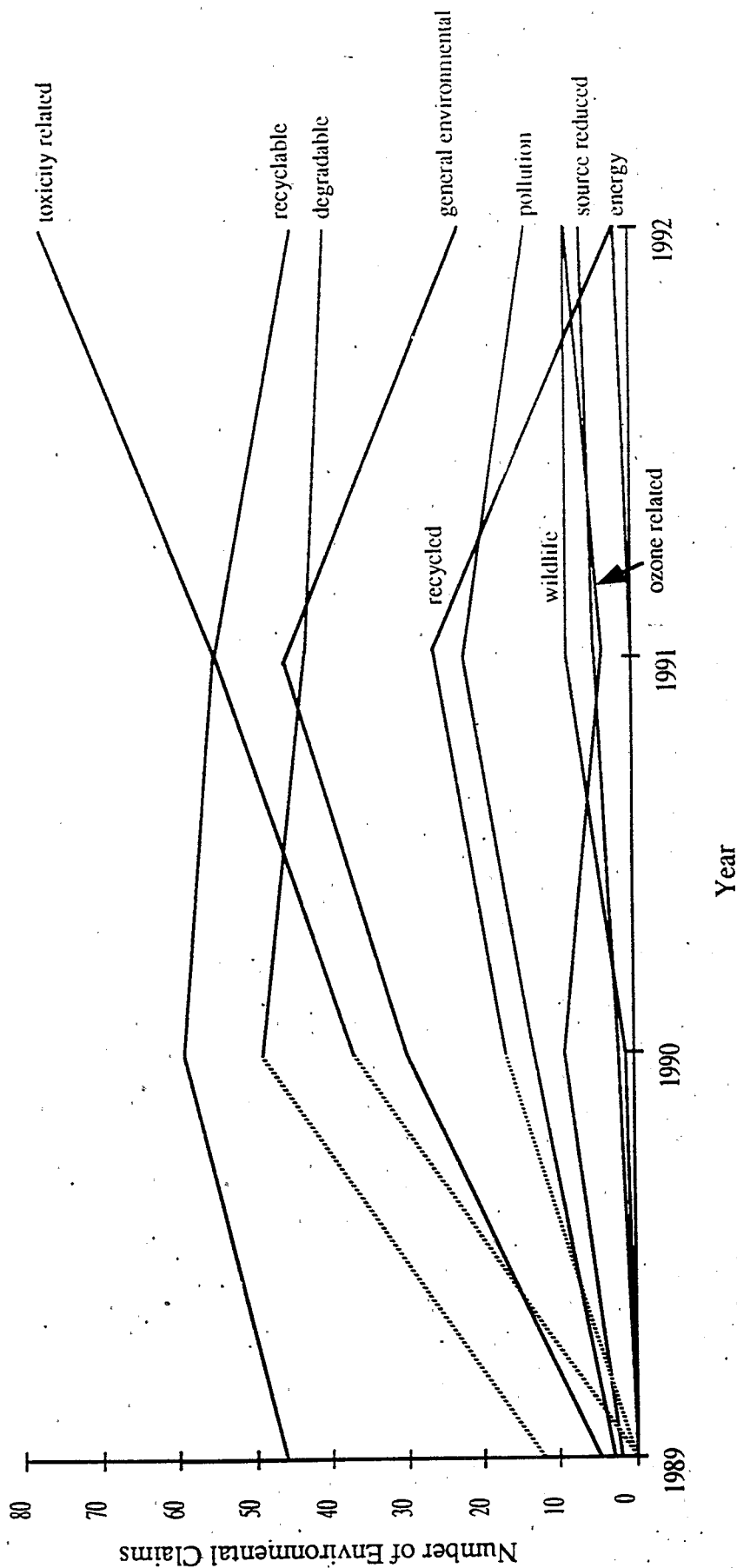
Figure 3.11. Frequency of Use of Environmental Claims Made for Foods, by claim



- Notes:
- Observations for 1989 of *recycled*, *recyclable* and *degradable* are taken from the description field of **Productscan**.
 - Package tags for these claims were added to **Productscan** in March-May 1990.
 - Use of a dotted line indicates the number of observations found before the introduction of package tags for these claims.
 - Figures for the first half of 1992 have been doubled to represent all of 1992.
 - Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of **Productscan** database.

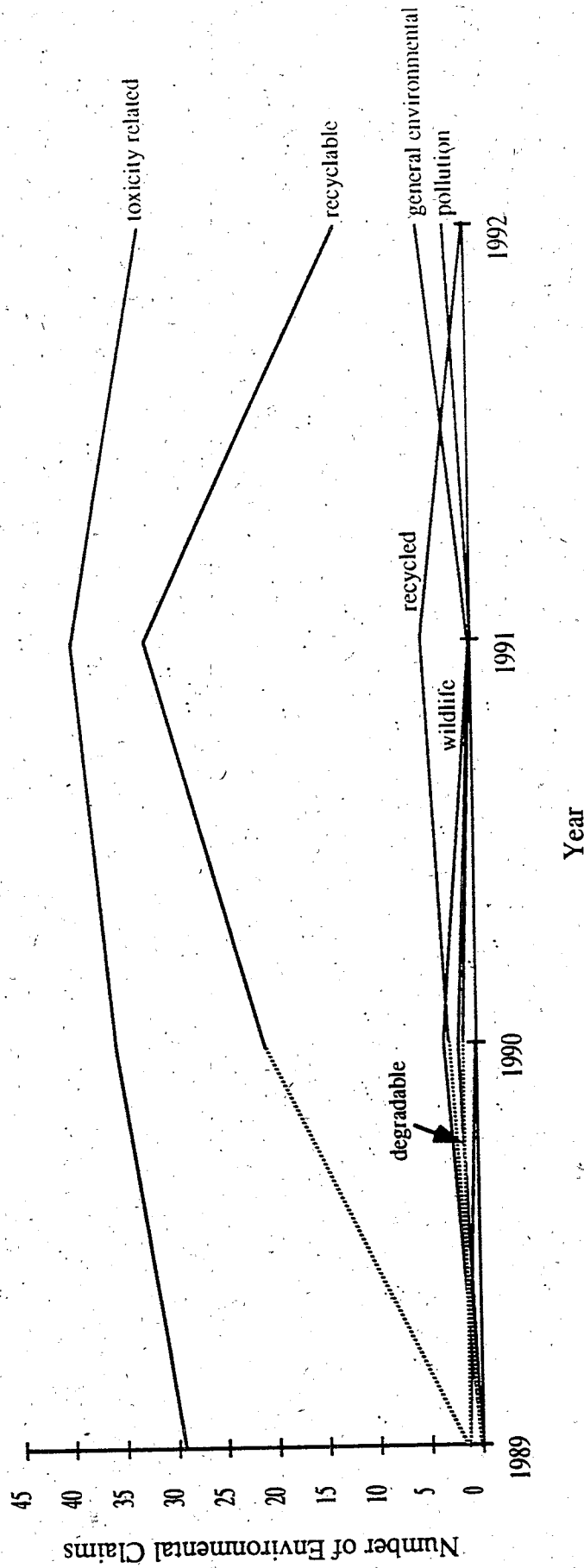
Figure 3.12. Frequency of Use of Environmental Claims Made for Health and Beauty Aids, by claim



- Notes:
- Observations for 1989 of *recycled*, *recyclable* and *degradable* are taken from the description field of **Productscan**.
 - Package tags for these claims were added to **Productscan** in March-May 1990.
 - Use of a dotted line indicates the number of observations found before the introduction of package tags for these claims.
 - Figures for the first half of 1992 have been doubled to represent all of 1992.
 - Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of **Productscan** database.

Figure 3.13. Frequency of Use of Environmental Claims Made for Beverages, by claim



- Notes:
- Observations for 1989 of *recycled*, *recyclable* and *degradable* are taken from the description field of **Productscan**.
 - Package tags for these claims were added to **Productscan** in March-May 1990.
 - Use of a dotted line indicates the number of observations found before the introduction of package tags for these claims.
 - Figures for the first half of 1992 have been doubled to represent all of 1992.
 - Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of **Productscan** database.

Recyclable claims, totalling 30 percent, grew quickly until 1991 but accounted for most of the decline in environmental claims for beverages in 1992.

Although the number of *toxicity related* claims did not change much from 1989 to 1992, their share of all claims made for beverages declined from 97 percent to 64 percent. The incidence of *recyclable* claims increased from 0 in 1989 to 43 percent of claims for beverages in 1991. These two types account for almost all environmental claims made for beverages.

- Pet & Miscellaneous Products (Figure 3.14)

The percentage of pet & miscellaneous products with environmental claims increased from 7.1 to 27.9 percent from 1989 to 1991, declining to 18.2 percent in 1992. Exaggerating this trend is the fact that new product releases declined while environmental claims increased. Just under half of all environmental claims were *toxicity related*, with recycling claims, *degradable* and *general environmental* each constituting about 12 percent.

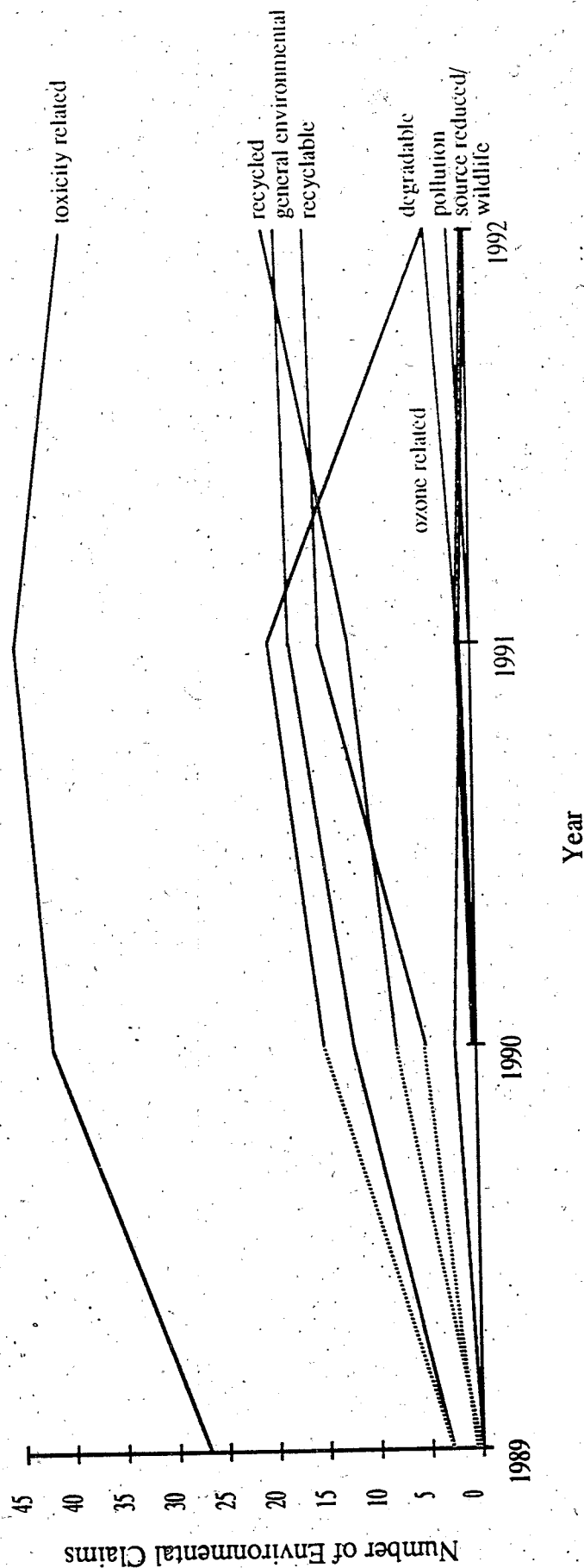
In addition to pet products, this category includes a variety of household products and miscellanea such as light bulbs, stationery, automotive products, and "household maintenance and energy conservation" products. (See Appendix 1 for a complete list of products included in the category.) This category also includes packaged fireplace logs, charcoal, and lighter fluid, all of which have been subject to regulation in certain parts of the country, and have thus changed their makeup to cause less ground level air pollution (10,13). While pet & miscellaneous products dominated the *energy* claims category, they did not contain many *pollution* claims.

- Laundry & Cleaning Products (Figure 3.15)

Laundry & cleaning products have had a great deal of environmental marketing claim activity. Although only the fifth largest source of new product introductions, this category had the third highest number of products with environmental claims. Over one third of new laundry & cleaning products had environmental claims. Unlike the four larger categories, laundry & cleaning products has continued to increase during the entire period covered by the study, from 18.5 percent of product launches in 1989 to 46.5 percent in 1992.

Toxicity related claims comprise 30 percent of claims used for laundry & cleaning products over the past three and a half years, *degradable* 26 percent, and *general environmental* 16 percent. All types of environmental claims were made for laundry & cleaning products. Increases were seen in most categories from 1989 to 1992, with no major declines. As mentioned above in the discussion of *source reduced* claims, smaller packages for concentrated powdered laundry soap, called "ultras," were introduced in 1991. The number of *source reduced* claims increased substantially in 1992.

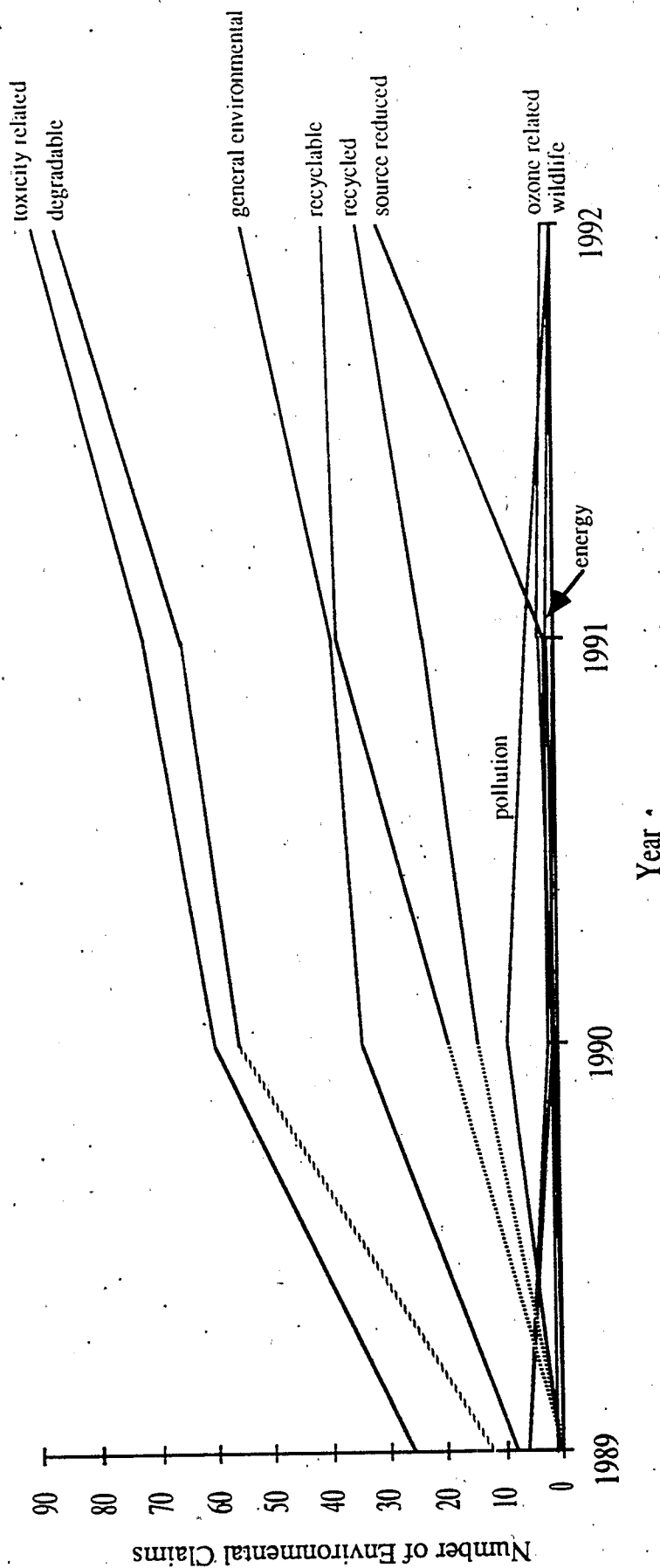
Figure 3.14. Frequency of Use of Environmental Claims Made for Pet and Miscellaneous Products, by claim



- Notes:
- Observations for 1989 of *recycled*, *recyclable* and *degradable* are taken from the description field of **Productscan**.
 - Package tags for these claims were added to **Productscan** in March-May 1990.
 - Use of a dotted line indicates the number of observations found before the introduction of package tags for these claims.
 - Figures for the first half of 1992 have been doubled to represent all of 1992.
 - Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of **Productscan** database.

Figure 3.15. Frequency of Use of Environmental Marketing Claims on
Laundry and Cleaning Products, by claim



- Notes:
- Observations for 1989 of *recycled*, *recyclable* and *degradable* are taken from the description field of **Productscan**.
 - Package tags for these claims were added to **Productscan** in March-May 1990.
 - Use of a dotted line indicates the number of observations found before the introduction of package tags for these claims.
 - Figures for the first half of 1992 have been doubled to represent all of 1992.
 - Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of **Productscan** database.

In the first half of 1992, 168 environmental marketing claims were made for 170 products, the greatest amount of activity of any product type for that period. Laundry & cleaning products often make multiple claims. Thus a single product may claim *no phosphates*, *biodegradable*, *recycled* and *recyclable*. In this period, new product launches containing environmental marketing claims averaged more than two environmental claims per product.

- Paper Products (Figure 3.16)

Paper products, such as napkins, paper towels, and toilet paper, comprise only one percent of new consumer product launches. Thirty-nine percent of all paper products released in the first half of 1992 contained *recycled* claims. *General environmental* and *toxicity related* claims each account for about 17 percent.

The number of paper products with environmental claims peaked in 1990 at 57.3 percent. That year had the highest number of new product introductions as well, suggesting that many paper products were introduced specifically to take advantage of the trend in environmental marketing. The low number of claims in 1989, on only 4 of 44 products, may be due in part to the absence of *recycled* and *recyclable* claims as package tags in **Productscan** at that time.

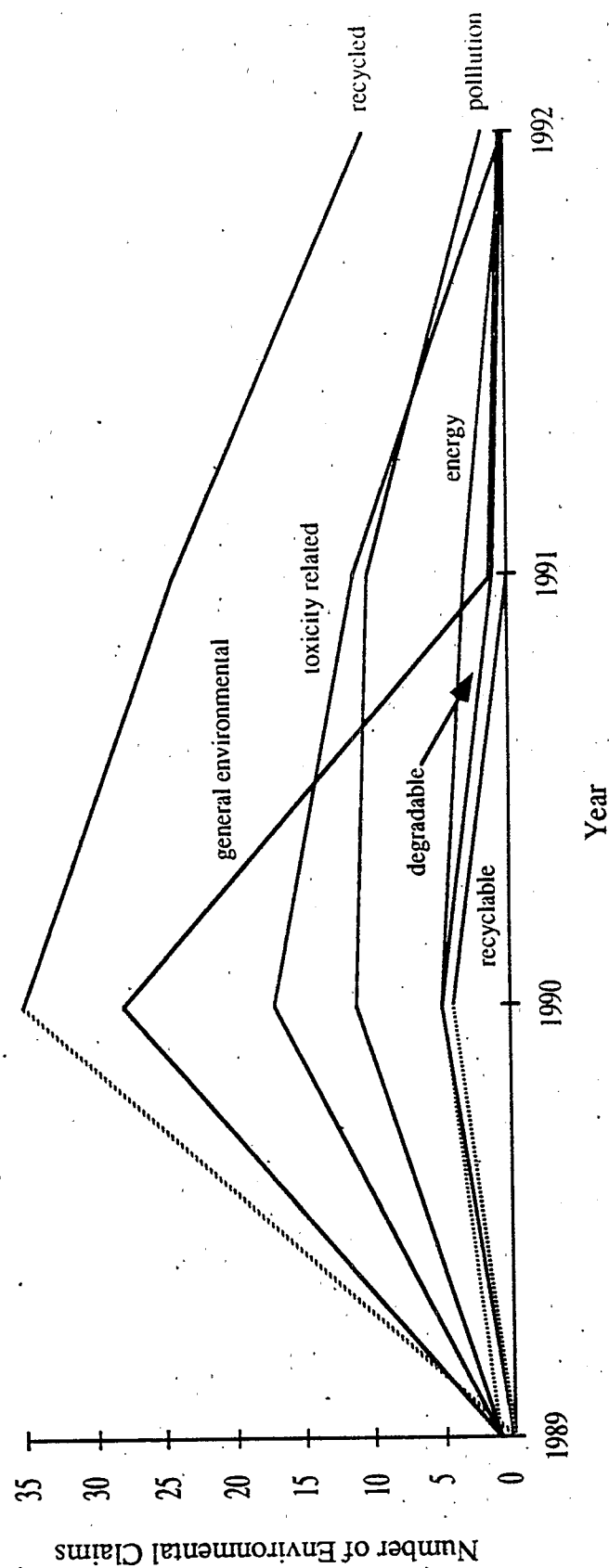
The number of paper products with claims declined by more than half from 1990 to 1992, partly due to a decline in the number of new product launches. Most of this decline was in *general environmental* claims, falling from one-third of new products to only one in 1991 and none in the first half of 1992. *Recycled*, *toxicity related* and *pollution* claims also declined in 1992. Paper products had a higher percentage of *recycled* claims than any other product type in 1991, with almost half of new paper releases claiming to contain recycled material.

- Pesticides & Insecticides (Figure 3.17)

The product category pesticides & insecticides had the lowest number of products with environmental claims, with a total of only 26 claims over the 30 months of the study; less than one percent of all products with environmental claims. Under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), EPA has restricted the use of *non-toxic* and other claims for registered pesticides. Nonetheless, *toxicity related* claims (such as "no synthetic chemicals") appeared on 22 pesticides & insecticides, and on every such product with a claim in 1991. In addition, there were ten *general environmental* claims, and nine other assorted claims.

Overall, the trend for environmental claims on pesticides & insecticides was similar to other products, peaking in 1991 at 34.5 percent of new products. *Toxicity related* claims accounted for most of the trend, rising from 5 to 34.5 percent of products with claims per year from 1989 to 1991 and falling to 16 percent in 1992.

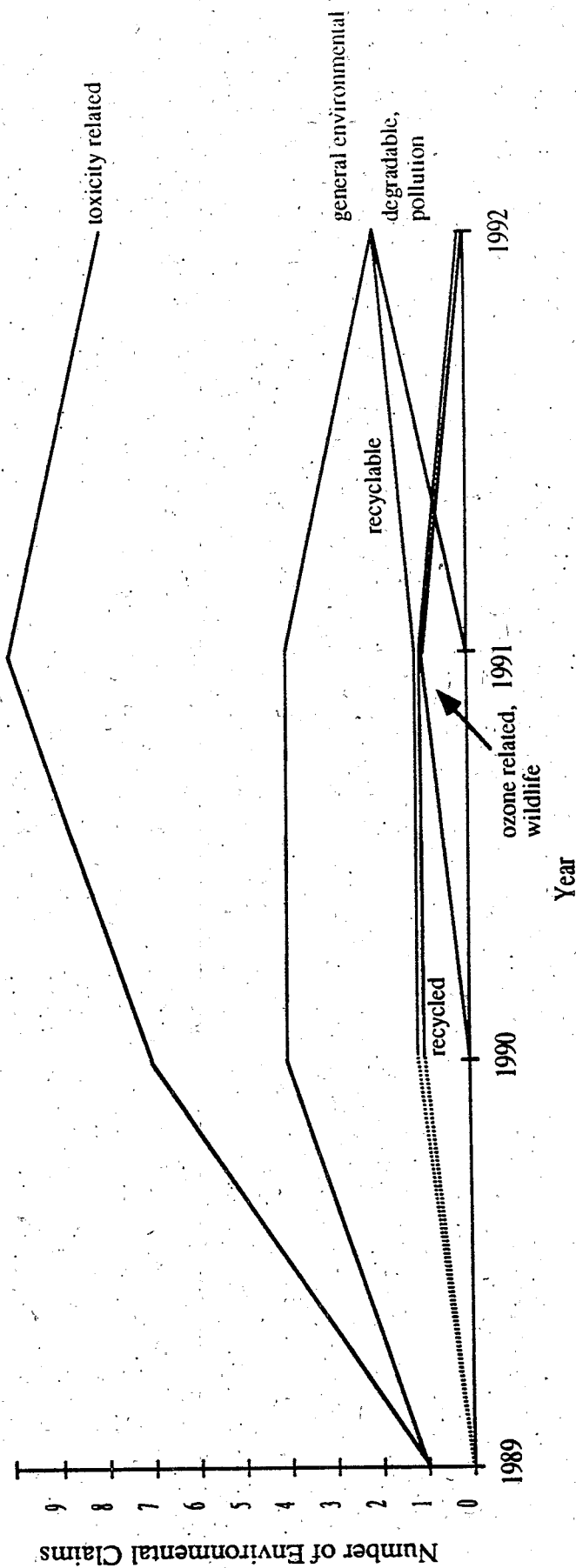
Figure 3.16. Frequency of Use of Environmental Claims made for Paper Products, by claim



- Notes:
- Observations for 1989 of *recycled*, *recyclable* and *degradable* are taken from the description field of **Productscan**.
 - Package tags for these claims were added to **Productscan** in March-May 1990.
 - Use of a dotted line indicates the number of observations found before the introduction of package tags for these claims.
 - Figures for the first half of 1992 have been doubled to represent all of 1992.
 - Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of **Productscan** database.

Figure 3.17. Frequency of Use of Environmental Marketing Claims on Pesticides and Insecticides, by claim.



- Notes:
- Observations for 1989 of *recycled*, *recyclable* and *degradable* are taken from the description field of **Productscan**.
 - Package tags for these claims were added to **Productscan** in March-May 1990.
 - Use of a dotted line indicates the number of observations found before the introduction of package tags for these claims.
 - Figures for the first half of 1992 have been doubled to represent all of 1992.
 - Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of **Productscan** database.

- Bags (Figure 3.18)

This category includes paper and plastic bags for trash, groceries, and food storage. Eighty-eight new bag products were introduced from January 1989 to June 1992, the smallest category of products and only four-tenths of one percent of all new product launches. However, the rate of introductions of products with environmental claims was the highest of any category, with over half of those 88 products bearing claims.

The number of claims for bags peaked in 1990, with 41 environmental claims spread among two thirds (21) of product introductions. In 1991 the number of bags with environmental claims fell from two thirds to one third (8 of 24 new products). This decline was due almost entirely to a drop in *degradable* claims. *Degradable* claims appeared on 17 of 21 bags in 1990. In 1991, only one bag appeared with a claim of *degradability*. This trend is attributable to the host of legal challenges to claims for biodegradable and photodegradable plastic bags. At least 11 lawsuits were made in 1991 challenging claims of plastic bag degradability (see Chapter 4).

The number of bags with environmental claims rose again in the first half of 1992, appearing on 10 of 20 new products. All ten of these bags claimed *recycled content*.

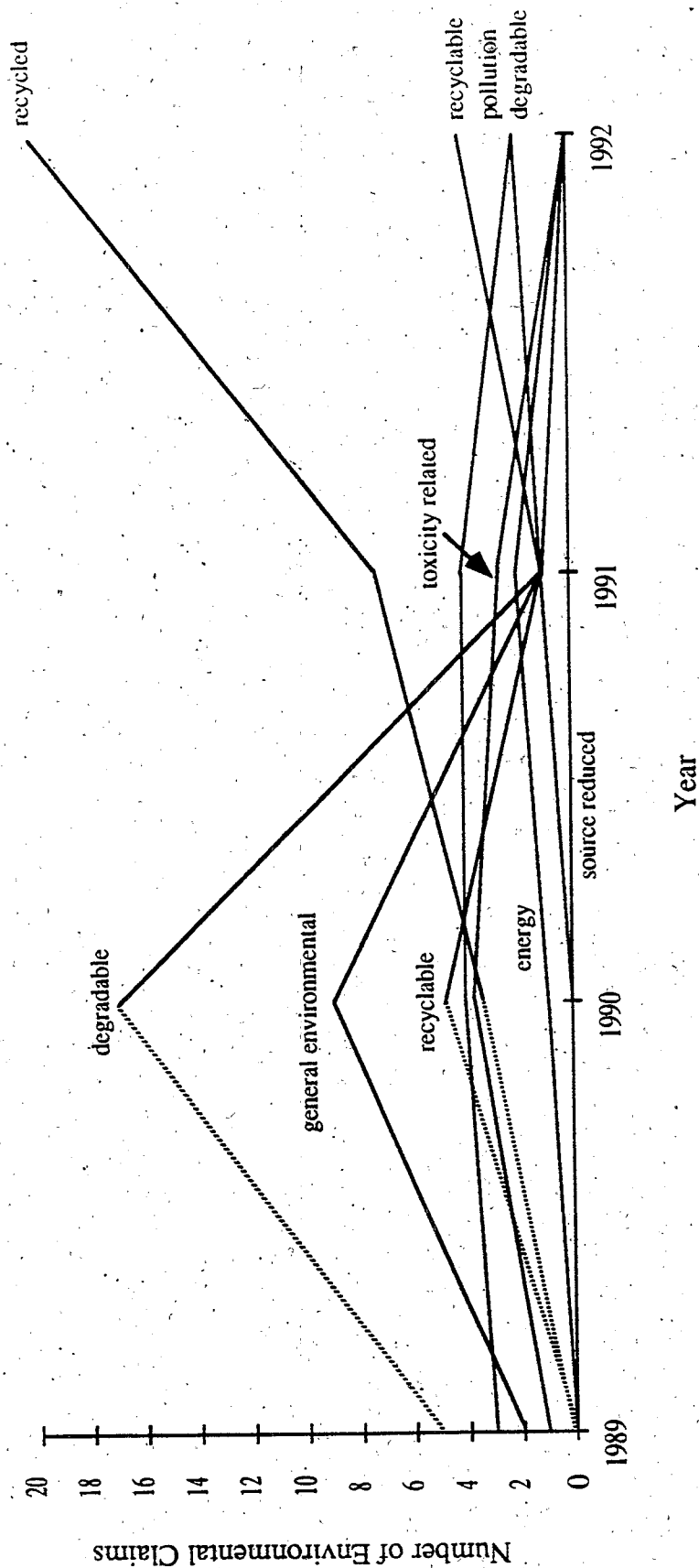
3.4 SUMMARY

Overall, this quantitative survey supports the general impression provided by current marketing literature that the use of environmental marketing claims is an increasingly important part of packaged goods marketing. Due to limitations in the main data source, the most apparently dramatic increases, from 1989 to 1990, are not completely reliable. Although the causes of trends in environmental marketing claims are not addressed by the *Productscan* information, some are easily discerned. The effects of lawsuits and various state regulations seeking restrictions on claims of degradable plastic products can be seen in the reduced number of such claims in 1991.¹⁸ The increase in *source reduced* claims indicates that marketers and consumers may be gaining a more refined knowledge of solid waste management solutions, and/or that marketers are realizing the cost savings of more efficient resource use.

Although the number of new products with environmental claims is down slightly in the first half of 1992, it is too soon to say that the trend is "all but dead." (11) More likely, the decline may be an indication of the confusion generated by lawsuits, state regulations, and a lack of federal guidelines. A spokesperson for Church & Dwight, maker of Arm & Hammer products, explained that "The risks of getting involved in green advertising until [the labeling controversy is] sorted out are too high."

¹⁸ Surprisingly, however, there was no apparent decrease in the number of *ozone related* marketing claims, despite the fact that at least 11 actions were taken against marketers as of mid-1992.

Figure 3.18. Frequency of Use of Environmental Claims Made for Bags, by claim



- Notes:
- Observations for 1989 of *recycled*, *recyclable* and *degradable* are taken from the description field of Productscan.
 - Package tags for these claims were added to Productscan in March-May 1990.
 - Use of a dotted line indicates the number of observations found before the introduction of package tags for these claims.
 - Figures for the first half of 1992 have been doubled to represent all of 1992.
 - Lines do not illustrate trends during the course of a year; the number of claims for each year is a discrete point.

Source: Abt Associates analysis of Productscan database.

While some marketers reacted to the FTC environmental marketing guidelines with predictions of increased activity, others expressed caution regarding continued state and local regulations. "You still have to be concerned about what happens in states with their own environmental rules — California, New York and Rhode Island, specifically — and I would think marketers would still want to see some assurances from those states," said Paul Petrucci, senior counsel for Kraft General Foods. (1)

Table 3.6
Environmental Marketing Claims, January 1989 — June 1992

On the following pages, Table 3.6 presents a compilation of the results discussed above. The numbers and percentages of claim types, measured against total new product releases, are shown for each product type, for each year covered by this study. Total claims and releases, and the total number and percentages of products with environmental claims are also given, broken down by product type and claim type.

Table 3.6: Environmental Marketing Claims: January 1989 – June 1992

| 1/92 – 6/92 | | Claim Type | | | | | | | | | | | |
|----------------------|----------|------------|------------|-------|---------|-------|----------|-------|---------|-------|-----------|------|--|
| Product Type | Toxicity | Pct. | Recyclable | Pct. | Degrad. | Pct. | Recycled | Pct. | General | Pct. | Pollution | Pct. | |
| Foods | 39 | 5.7% | 22 | 1.4% | 1 | 0.1% | 14 | 0.9% | 4 | 0.3% | 0 | 0.0% | |
| Health & Beauty | 38 | 4.5% | 22 | 2.6% | 20 | 2.4% | 1 | 0.1% | 11 | 1.3% | 7 | 0.8% | |
| Beverages | 16 | 5.5% | 6 | 2.1% | 0 | 0.0% | 0 | 0.0% | 2 | 0.7% | 1 | 0.3% | |
| Pet & Misc. | 20 | 8.9% | 8 | 3.6% | 2 | 0.9% | 10 | 4.4% | 9 | 4.0% | 4 | 1.8% | |
| Laundry & Clean. | 45 | 26.5% | 20 | 11.8% | 43 | 25.3% | 17 | 10.0% | 27 | 15.9% | 0 | 0.0% | |
| Paper | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 5 | 23.8% | 0 | 0.0% | 1 | 4.8% | |
| Pesticides & Insect. | 4 | 16.0% | 1 | 4.0% | 1 | 4.0% | 0 | 0.0% | 1 | 4.0% | 1 | 4.0% | |
| Bags | 0 | 0.0% | 2 | 10.0% | 1 | 5.0% | 10 | 50.0% | 0 | 0.0% | 1 | 5.0% | |
| Total | 212 | 6.7% | 81 | 2.6% | 68 | 2.2% | 57 | 1.8% | 54 | 1.7% | 15 | 0.5% | |

| 1991 | | Claim Type | | | | | | | | | | |
|----------------------|----------|------------|------------|-------|---------|-------|----------|-------|---------|-------|-----------|-------|
| Product Type | Toxicity | Pct. | Recyclable | Pct. | Degrad. | Pct. | Recycled | Pct. | General | Pct. | Pollution | Pct. |
| Foods | 163 | 5.2% | 59 | 1.9% | 3 | 0.1% | 44 | 1.4% | 2 | 0.1% | 2 | 0.1% |
| Health & Beauty | 55 | 3.4% | 55 | 3.4% | 43 | 2.7% | 26 | 1.6% | 46 | 2.9% | 22 | 1.4% |
| Beverages | 37 | 6.3% | 32 | 5.4% | 0 | 0.0% | 4 | 0.7% | 0 | 0.0% | 0 | 0.0% |
| Pet & Misc. | 45 | 14.1% | 15 | 4.7% | 20 | 6.3% | 12 | 3.8% | 18 | 5.6% | 4 | 1.3% |
| Laundry & Clean. | 72 | 25.0% | 38 | 13.2% | 65 | 22.6% | 23 | 8.0% | 39 | 13.5% | 5 | 1.7% |
| Paper | 11 | 18.6% | 0 | 0.0% | 1 | 1.7% | 24 | 40.7% | 1 | 1.7% | 10 | 16.9% |
| Pesticides & Insect. | 10 | 34.5% | 1 | 3.4% | 0 | 0.0% | 1 | 3.4% | 4 | 13.8% | 0 | 0.0% |
| Bags | 2 | 8.3% | 1 | 4.2% | 1 | 4.2% | 7 | 29.2% | 1 | 4.2% | 4 | 16.7% |
| Total | 395 | 6.5% | 201 | 3.3% | 133 | 2.2% | 141 | 2.3% | 111 | 1.8% | 47 | 0.8% |

| 1990 | | Claim Type | | | | | | | | | | |
|----------------------|----------|------------|------------|-------|---------|-------|----------|-------|---------|-------|-----------|-------|
| Product Type | Toxicity | Pct. | Recyclable | Pct. | Degrad. | Pct. | Recycled | Pct. | General | Pct. | Pollution | Pct. |
| Foods | 180 | 5.2% | 41 | 1.2% | 10 | 0.3% | 34 | 1.0% | 4 | 0.1% | 3 | 0.1% |
| Health & Beauty | 59 | 3.8% | 37 | 2.4% | 49 | 3.2% | 17 | 1.1% | 30 | 1.9% | 13 | 0.8% |
| Beverages | 35 | 5.5% | 20 | 3.2% | 1 | 0.2% | 2 | 0.3% | 2 | 0.3% | 0 | 0.0% |
| Pet & Misc. | 42 | 12.1% | 5 | 1.4% | 15 | 4.3% | 8 | 2.3% | 12 | 3.4% | 9 | 2.6% |
| Laundry & Clean. | 60 | 22.6% | 19 | 7.1% | 56 | 21.1% | 14 | 5.3% | 34 | 12.8% | 9 | 3.4% |
| Paper | 17 | 20.7% | 4 | 4.9% | 5 | 6.1% | 35 | 42.7% | 28 | 34.1% | 11 | 13.4% |
| Pesticides & Insect. | 7 | 21.2% | 1 | 3.0% | 0 | 0.0% | 1 | 3.0% | 4 | 12.1% | 0 | 0.0% |
| Bags | 3 | 9.7% | 4 | 12.9% | 17 | 54.8% | 3 | 9.7% | 9 | 29.0% | 4 | 12.9% |
| Total | 403 | 6.3% | 131 | 2.0% | 153 | 2.4% | 114 | 1.8% | 123 | 1.9% | 49 | 0.8% |

| 1989 | Claim Type | | | | | | | | | | | |
|----------------------|------------|-------|------------|------|---------|-------|----------|------|---------|-------|-----------|-------|
| Product Type | Toxicity | Pct. | Recyclable | Pct. | Degrad. | Pct. | Recycled | Pct. | General | Pct. | Pollution | Pct. |
| Foods | 143 | 5.0% | 2 | 0.1% | 3 | 0.1% | 0 | 0.0% | 1 | 0.0% | 1 | 0.0% |
| Health & Beauty | 46 | 3.1% | 0 | 0.0% | 12 | 0.8% | 0 | 0.0% | 5 | 0.3% | 3 | 0.2% |
| Beverages | 29 | 5.5% | 0 | 0.0% | 1 | 0.2% | 0 | 0.0% | 0 | 0.0% | 1 | 0.2% |
| Pet & Misc. | 27 | 6.0% | 1 | 0.2% | 3 | 0.7% | 0 | 0.0% | 3 | 0.7% | 1 | 0.2% |
| Laundry & Clean. | 26 | 12.3% | 0 | 0.0% | 12 | 5.7% | 0 | 0.0% | 8 | 3.8% | 1 | 0.5% |
| Paper | 1 | 2.3% | 0 | 0.0% | 1 | 2.3% | 0 | 0.0% | 1 | 2.3% | 1 | 2.3% |
| Pesticides & Insect. | 1 | 5.3% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 5.3% | 0 | 0.0% |
| Bags | 1 | 7.7% | 0 | 0.0% | 5 | 38.5% | 0 | 0.0% | 2 | 15.4% | 3 | 23.1% |
| Total | 274 | 4.9% | 3 | 0.1% | 37 | 0.7% | 0 | 0.0% | 21 | 0.4% | 11 | 0.2% |

| Wildlife | Pct. | O3 Related | Pct. | Source Red. | Pct. | Energy | Pct. | Total Claims | Total Releases | Products with Claims | % Products with Claims |
|----------|------|------------|------|-------------|------|--------|------|--------------|----------------|----------------------|------------------------|
| 8 | 0.5% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 138 | 1,553 | 116 | 7.5% |
| 4 | 0.5% | 4 | 0.5% | 3 | 0.4% | 1 | 0.1% | 111 | 839 | 79 | 9.4% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 25 | 289 | 24 | 8.3% |
| 0 | 0.0% | 2 | 0.9% | 0 | 0.0% | 1 | 0.4% | 56 | 225 | 41 | 18.2% |
| 0 | 0.0% | 1 | 0.6% | 15 | 8.8% | 0 | 0.0% | 168 | 170 | 79 | 46.5% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 6 | 21 | 5 | 23.8% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 8 | 25 | 5 | 20.0% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 14 | 20 | 10 | 50.0% |
| 12 | 0.4% | 7 | 0.2% | 18 | 0.6% | 2 | 0.1% | 526 | 3,142 | 359 | 11.4% |

| Wildlife | Pct. | O3 Related | Pct. | Source Red. | Pct. | Energy | Pct. | Total Claims | Total Releases | Products with Claims | % Products with Claims |
|----------|------|------------|------|-------------|------|--------|------|--------------|----------------|----------------------|------------------------|
| 8 | 0.3% | 2 | 0.1% | 0 | 0.0% | 0 | 0.0% | 283 | 3,132 | 239 | 7.6% |
| 8 | 0.5% | 4 | 0.2% | 5 | 0.3% | 0 | 0.0% | 264 | 1,614 | 171 | 10.6% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 73 | 589 | 74 | 12.6% |
| 3 | 0.9% | 1 | 0.3% | 1 | 0.3% | 6 | 1.9% | 125 | 319 | 92 | 28.8% |
| 0 | 0.0% | 3 | 1.0% | 2 | 0.7% | 2 | 0.7% | 249 | 288 | 120 | 41.7% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 3 | 5.1% | 50 | 59 | 29 | 49.2% |
| 1 | 3.4% | 1 | 3.4% | 0 | 0.0% | 0 | 0.0% | 18 | 29 | 10 | 34.5% |
| 0 | 0.0% | 0 | 0.0% | 1 | 4.2% | 2 | 8.3% | 19 | 24 | 8 | 33.3% |
| 20 | 0.3% | 11 | 0.2% | 9 | 0.1% | 13 | 0.2% | 1,081 | 6,054 | 743 | 12.3% |

| Wildlife | Pct. | O3 Related | Pct. | Source Red. | Pct. | Energy | Pct. | Total Claims | Total Releases | Products with Claims | % Products with Claims |
|----------|------|------------|------|-------------|------|--------|------|--------------|----------------|----------------------|------------------------|
| 10 | 0.3% | 0 | 0.0% | 2 | 0.1% | 0 | 0.0% | 284 | 3,463 | 236 | 6.8% |
| 1 | 0.1% | 9 | 0.6% | 2 | 0.1% | 0 | 0.0% | 217 | 1,542 | 146 | 9.5% |
| 3 | 0.5% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 63 | 631 | 57 | 9.0% |
| 0 | 0.0% | 2 | 0.6% | 0 | 0.0% | 2 | 0.6% | 95 | 348 | 61 | 17.5% |
| 2 | 0.8% | 1 | 0.4% | 2 | 0.8% | 1 | 0.4% | 198 | 266 | 96 | 36.1% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 5 | 6.1% | 105 | 82 | 47 | 57.3% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 13 | 33 | 9 | 27.3% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 3.2% | 41 | 31 | 21 | 67.7% |
| 16 | 0.3% | 12 | 0.2% | 6 | 0.1% | 9 | 0.1% | 1,016 | 6,396 | 673 | 10.5% |

| Wildlife | Pct. | O3 Related | Pct. | Source Red. | Pct. | Energy | Pct. | Total Claims | Total Releases | Products with Claims | % Products with Claims |
|----------|------|------------|------|-------------|------|--------|------|--------------|----------------|----------------------|------------------------|
| 1 | 0.0% | 4 | 0.1% | 0 | 0.0% | 0 | 0.0% | 155 | 2,869 | 152 | 5.3% |
| 0 | 0.0% | 2 | 0.1% | 0 | 0.0% | 0 | 0.0% | 68 | 1,501 | 60 | 4.0% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 31 | 528 | 31 | 5.9% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 3 | 0.7% | 38 | 452 | 35 | 7.7% |
| 2 | 0.9% | 6 | 2.8% | 6 | 2.8% | 0 | 0.0% | 61 | 211 | 39 | 18.5% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 4 | 44 | 4 | 9.1% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 2 | 19 | 2 | 10.5% |
| 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 11 | 13 | 7 | 53.8% |
| 3 | 0.1% | 12 | 0.2% | 6 | 0.1% | 3 | 0.1% | 370 | 5,637 | 330 | 5.9% |

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4. DISCONTINUATION OR AVOIDANCE OF ENVIRONMENTAL CLAIMS

4.1 INTRODUCTION

The sustained confusion over the meanings of environmental marketing terms make marketers hesitant to introduce environmental claims, and consumers skeptical of the validity of environmental labels. (36) Adding to the confusion is the sometimes conflicting array of regulations that states and regional organizations have enacted in an attempt to define and restrict different environmental marketing claims prior to the issuance of FTC guidelines.

Many national marketers are concerned with the "patchwork" of green labeling standards. State, regional and private agencies have led the way in policing environmental advertising, often with different and conflicting rules. Marketers have argued that complying with the increasing number of state regulations is becoming enormously expensive and difficult. (26,41,46) For many corporations, the confusion prior to the issuance of FTC guidelines has translated into removing or avoiding green marketing claims in lieu of facing possible legal action by the broad array of state and local agencies now involved in enforcement. As the National Food Processors Association argued in its petition to the FTC, marketers need "safe harbors" where they can make real environmental claims without fear of being sued. (38)

Until recently, no federal agency had issued comprehensive guidelines or standards for environmental marketing claims. Rather, the Federal Trade Commission chose to prosecute deceptive environmental advertising on a case-by-case basis, with the results of the cases serving as examples to marketers. This approach was criticized for being too slow and haphazard, and for essentially requiring that some consumers be misled or deceived before the FTC takes any action. (17)

On July 28, 1992, however, the FTC released environmental marketing guidelines (see Appendix 4). Although the guidelines are voluntary, they illustrate FTC interpretations of the Federal Trade Commission Act of 1914 which outlaws "unfair or deceptive acts or practices in affairs of commerce." (43) As a result, they give a good indication of how the law would function if it were put to test by a marketer's claim. The guidelines consist of a series of real world examples of marketing claims with opinions as to why they may or may not be considered deceptive. In general, the guidelines discourage the use of general environmental claims that may be vague or ambiguous to consumers, and encourage marketers to (a) make only those claims that can be supported with documentation, (b) clearly qualify claims, and (c) avoid overstating the benefit of an attribute. The guidelines are intended to protect consumers from misleading marketing practices, and to delineate safe environmental terms for marketers. Among other sources, the FTC guidelines were informed by its own decisions regarding misleading environmental claims, guidelines drafted by the National Food Processors' Association, and the Task Force of State Attorneys General Report, *Green Report II* (See Section 4.4).

There is evidence that increasing numbers of marketers have dropped or are not making environmental claims due to the lack of consensus as to which environmental terms can be legitimately used for their products. (24) As might be expected, some marketers are dropping claims over which other corporations have been sued. Others are wary of making new environmental marketing claims when they have been challenged on previous ones. Several marketers have decided not to advertise real environmental improvements in their processes or products, deciding that the risk of litigation is not worth the benefit of the environmental claim.

Although it is too early to see the effects of the FTC guidelines, indications are that many marketers will welcome the input of the federal government. (43,5,42,34) Agreements on the specifics may not be readily forthcoming, but states, consumer groups, and environmental groups have been generally supportive of the FTC's guidelines. For example, the FTC guidelines do not encourage manufacturers to differentiate between pre- and post-consumer recycled material in the contents of a product or package. The *Green Report II* does encourage it, and more importantly, the state of New York requires that products or packages contain a certain percentage of post-consumer recycled content material to make the claim *recycled*. The NY State Attorney General's office has indicated that it "will consider prosecuting" claims that violate its own regulations. (22)

For the most part, the increased hesitancy of marketers in making environmental claims has been a positive consequence of the policing actions taken by regulatory agencies. Most of the claims that have been discontinued have been those that consumer advocates and enforcement agencies considered to be deceptive (see Sections 4.2-4.3). However, in those cases where legitimate, truthful claims are avoided due to regulatory uncertainty, consumers lose information that could influence their purchasing decisions, and marketers lose marketplace incentives for making environmental improvements.

The 3M Corporation is one example of how regulatory uncertainty affects marketers. 3M is considered by many to be a leader in incorporating environmental concerns into its corporate strategies. The company has developed, as part of its corporate policy, the requirement that all environmental claims be submitted to an Environmental Marketing Claims Review Committee for approval before they can be released. Claims are reviewed for technical accuracy, substantiation, and clarity of communication. Broad, ambiguous, insupportable, or poorly defined claims such as *safe for the environment*, or *environmentally friendly*, are avoided.

According to 3M sources, the Environmental Marketing Claims Review Committee has moved to abandon certain claims even when they meet existing corporate environmental labeling guidelines. The Committee's reaction is based on the fact that the beneficial impacts of environmental labeling are perceived to be small and uncertain at best, while the negative impacts upon the overall corporate image resulting from litigation against the company are potentially significant. Furthermore, although the benefits of environmental labeling are limited to a particular product line, such negative impacts can adversely affect all corporate activities. Instead of direct environmental marketing, 3M will sometimes inform reliable third-party

environmental groups of its environmental improvements in the hope that knowledge of its actions will spread indirectly through these groups. (1)

A concrete example of the effects of challenges to environmental marketing claims can be observed in the sales trends for BPI Environmental, a manufacturer of plastic grocery bags. As a result of challenges to other marketers' claims of degradability for plastic bags by the FTC and the New York City Department of Consumer Affairs, BPI's sales of plastic bags labeled as *photo-* and *biodegradable* fell from \$5 million in 1990 to \$1.5 million in 1991. On the other hand, the company's sales of plastic bags labeled as *recycled* increased sales tenfold last year, from \$600,000 to \$6.4 million. (23)

This chapter deals with cases in which marketers have removed or are avoiding using environmental labels on their products. Section 4.2 discusses companies that have voluntarily removed environmental labels. Section 4.3 covers companies that potentially could have made environmental claims about their products but have chosen not to. Section 4.4 describes environmental labeling claims that have been withdrawn or modified after being legally challenged. Section 4.5 discusses the impact of new FTC guidelines on marketers.

4.2 VOLUNTARY REMOVAL OF ENVIRONMENTAL LABELS

Companies that have or are considering voluntarily removing environmental labels from their products include Church and Dwight, Dial Corporation, Dow Chemical, First Brands, and Procter and Gamble. The claims voluntarily removed include the context-dependent terms *recyclable* and *degradable*, and general or loosely defined phrases such as *made from recycled paper* and *earth friendly*. Such withdrawal of claims is due in large part to the fact that as of mid-1992, at least 14 suits had been raised against companies for using *degradable*, with at least 4 suits raised against those using the term *recyclable* and at least 7 raised against those making general claims.¹⁹ (20) The major reason given by company spokespeople for proactively changing product labeling was to avoid potential litigation resulting from changes in state laws. Recently, several major marketers, including Procter and Gamble Co., Kraft General Foods, First Brands Corp., Mary Kay Cosmetics, and Andrew Jergens Co., announced their decision to avoid *recycled* and *recyclable* claims because of states' widely differing definitions of the terms. (32)

- Church and Dwight

Church and Dwight is considering dropping *box made from recycled paper* from its products. In addition, the company is spending reportedly hundreds of thousands of dollars to change the *recyclable* label on boxes of Arm & Hammer baking soda to comply with new state statutes. Church and Dwight is also considering dropping all environmental marketing claims

¹⁹ Context-dependent terms such as *degradable* and *recyclable*, and vague general terms, have been criticized for being inherently misleading and/or unsubstantiable (see Chapter 5). Several critics have argued that the use of these terms should be restricted or banned.

due to the cost and other concerns related to repeatedly changing labels to comply with new state laws. (15,21)

- Dial Corporation

Dial Corporation exchanged the general label *earth friendly* for *all natural packaging* and *recycled paperboard* on the package of their 20-Mule Team Borax. The company is currently debating whether or not to include more specific recycled content information, or even eliminate all claims of recycled content packaging. (21)

- Dow Chemical

According to New York Attorney General Robert Abrams, several companies have modified or withdrawn environmental claims in light of actions taken by the multi-state Task Force of Attorneys General. Dow Chemical has agreed to remove the terms *degradable* and *recyclable* from its Handi-Wrap plastic food wrap. A number of other firms have notified the task force of their intention to withdraw or modify environmental advertising claims. (33)

- First Brands

First Brands has announced plans to discontinue promoting Glad trash bags as *degradable*. In addition, the company is removing the claim *recycled* from the Glad trash bag packaging, even though the packages have had the claim for ten years. The Director of Environmental Affairs for the company explained, "With no national guidelines, we can't deal with a patchwork of legislation." The package will still feature a claim about the reduced amount of material used to make the bags. (32)

- Kraft General Foods

Kraft is removing the claim *recycled* from all packages, even though all of its dry products use packaging that is 100 percent pre- or postconsumer recycled content. The company cites Rhode Island's requirement that the amount of postconsumer content be stated on the label as the motivation to remove the term. (32)

- Procter & Gamble

Procter and Gamble removed *this product coded for recycling* from its detergent bottles, and is removing the label *recyclable where facilities exist* from packaging for all brands. (32,44) The company also announced it would specify total and postconsumer content when it makes *recycled content* claims. (32) The company cited state regulations in Rhode Island and California as the cause for the change. The company also canceled a television commercial showing teenagers throwing empty Sunny Delight containers into a bin marked *recycle*. Although the containers were technically recyclable, few programs existed to recycle them; Procter and Gamble reportedly decided to avoid any potential problems with the claim. (33) To

facilitate keeping up with changing regulations, P&G has established in-house green labeling guidelines that reflect its understanding of the regulatory and legislative *status quo*. (32)

Procter and Gamble is also changing the label of its Cheerfree laundry detergent to make the claim more precise. The label will read: *Box made from 100 percent recycled paper (Minimum 35 percent postconsumer) and Scoop made from 100 percent postconsumer recycled plastic*. The existing label reads: *This package is designed to help reduce solid waste in the environment. The box is made from recycled paper. The box is smaller than conventional detergent packages. This results in less solid waste. The scoop is coded to identify the type of plastic so that it can be more easily recycled, where recycling collection facilities exist. Please support recycling in your community*. (32) The new claim mirrors the widely accepted recycled content claim first used by Lever Brothers.

Marketers aware of the debate surrounding environmental marketing terms have begun to modify their labeling to avoid controversial terms and vague, general statements. However, rather than giving guidance to marketers, the numerous policing actions and state regulations brought against them have merely served to increase their apprehension. Asserts Rajeev Bal, president of Webster Industries, which makes the Good Sense line of *degradable* plastic bags, "It's a logistical nightmare. Our labels read like essays to comply with all the state requirements."²⁰ (47) Prior to the issuance of FTC guidelines, marketers were faced with trying to second-guess how strictly state and local regulators will interpret the range of definitions for environmental marketing terms. An additional concern is that even added precision in marketers' claims may not guarantee that consumers will understand the new statements over the more general claims (see Chapter 2).

4.3 COMPANIES CHOOSING NOT TO MAKE ENVIRONMENTAL CLAIMS

Several companies have decided not to use the claims *recyclable where facilities exist* and *source-reduced*, which have been criticized by state and consumer organizations for being poorly defined and potentially misleading. Other marketers have qualified or limited the scope of their claims, and expressed wariness of making new claims in light of the lack of standardized federal guidelines clarifying the use of environmental terms.

- DowBrands

DowBrands already labels both its Dow Bathroom Cleaner Trigger Sponge and its Nucleic A Compleat 2 conditioner/shampoo with *bottle made from 25 percent post consumer recycled plastic*, and labels its food protection bags and wraps with *packaged in recycled paperboard*. However, the company has decided not to label its packages *recyclable where facilities exist* for fear of litigation. (21)

²⁰ In fact, state regulations, although sometimes conflicting, require very simple language. Groups such as the Attorneys General Task Force and the New York City Department of Consumer Affairs promote using the additional language.

- Drackett Company

Drackett is keeping the label *better for the environment...65 percent less plastic than a bottle...contains 20 percent recycled plastic* on its Windex refill pouch. However, the company is "exercising extreme caution" in making environmental claims given the current regulatory uncertainty. (21)

- Sara Lee Corp. (Winston-Salem, NC)

Sara Lee, the owner of L'eggs brand pantyhose, is minimizing the environmental claims it is making related to its change in packaging, from the plastic egg it has used for 21 years to a smaller milk-carton style package made from 95 percent recycled paperboard with 67 percent postconsumer and 28 percent postindustrial content. This packaging meets New York City's definition of *recycled*, the nation's most stringent standard. As a result, the company is using the label *made from recycled paperboard* with the chasing arrows symbol. (24)

- Mobil Corporation

After being sued by the State Task Force of Attorneys General for degradability claims on its trash bags, Mobil has decided not to make source reduction claims about its Hefty Steel-Sak trash and tall kitchen bags, even though the new bags use 30 percent less material. However, Mobil's two main competitors, First Brands Corporation and Carlisle Plastic, decided to make qualified source reduction claims on its new lines of trash bags. First Brands labeled its *improved Glad* bags with the statement: *Although small, this reduction is part of a continuing effort on the part of Glad to help reduce solid waste.* Carlisle labeled its Ruffies bags with: *A better choice for our environment — made with 40 percent less plastic.* • (33)

- 3M Corporation

3M recently decided to produce a less toxic water-based adhesive called Fastbond 30 as an alternative to its traditional "melt-based" adhesives. This represented decreased hazardous waste management costs for the company and considerable environmental improvements for both the producer and the users. Purchasers of the melt-based adhesives were simply offered the water-based product as an alternative, but no claim was made with regard to the *less toxic* or *source reduced* properties of the replacement product because 3M decided that the potential benefit of making the claim did not outweigh the risk of possible litigation. However, even though 3M did not directly advertise the environmental benefits of the manufacturing change, customers were attracted to the new product expressly because of its environmental attributes. (1)

- Mary Kay Cosmetics

Despite doing "a ton of environmental stuff," Mary Kay has no environmental claims on its products. The company cites not only legal restraints to making claims, but the skepticism of consumers as determinants in its decision. (32)

- Andrew Jergens Co.

The company considered printing the claim *made from recycled material* on the package of its Actibath carbonated bath tablet, but decided against it, citing the difficulties of meeting varying state regulations. (32)

4.4 CLAIMS WITHDRAWN OR MODIFIED AFTER LEGAL CHALLENGE

Although the Federal Trade Commission (FTC) historically has played the largest role in truth-in-advertising issues, other organizations have also begun to take action against deceptive or misleading environmental marketing claims. The New York City Department of Consumer Affairs (NYC DCA) has brought the most actions against companies, followed by the Task Force of State Attorneys General (State AsG), the FTC, and the National Advertising Division of the Better Business Bureau (NAD).²¹ (20) Individual state attorneys general have also filed suits, specifically those in Pennsylvania, Oklahoma and New York. In addition, the New Jersey Department of Consumer Affairs has threatened marketers with lawsuits for deceptive marketing unless they change their advertising within a certain time frame.

One problem with the process of determining environmental marketing regulations by adjudication is that the regulatory agencies involved in prosecuting false claims do not necessarily have the scientific or technical background to determine whether or not subtler claims are valid. In several instances, the definition taken by an enforcement agency was markedly different than that commonly accepted by scientists and environmentalists. For example, the National Advertising Review Board of the Better Business Bureau defined the term *recyclable* to mean "the product is transformed to another useful purpose, through a process that includes human intervention, and that it is not added to the waste stream once its initial use is completed." Under this definition, the Board ruled that recycling included composting (as well as incineration to produce electricity). (21) This definition is far less stringent than those proposed by the majority of the organizations involved in defining environmental marketing terms, including the EPA (See Chapter 5, Appendices 2 and 3).

Of forty-eight actions against environmental claims, seventeen were for claims of the degradability of plastic products, primarily plastic bags and disposable diapers. Claims about propellants, most often *ozone friendly* or *no CFCs*, were the cause of ten complaints. Almost every action was against a packaged consumer goods marketer. The only exceptions were ChemLawn lawn care service, and Craftmatic/Contour Industries (a manufacturer of home water treatment systems). Table 4.1 shows all of the actions taken against marketers as of June 1992.

²¹ If NAD cannot resolve a conflict with an advertiser, NAD or the marketer can appeal to a panel of the National Advertising Review Board (NARB) (c.f. Stone Container Corporation).

Table 4.1 Legal Challenges to Environmental Marketing Terms — As of June 1992

| First Announced | Company | Product Type | Type of Claim | Language | Regulatory Body |
|------------------|--------------------------------|------------------------------|-----------------------|--|--------------------------|
| October 17, 1990 | American Enviro Products | Disposable diapers | Degradable | <ul style="list-style-type: none"> • "Biodegradable" • "Will biodegrade before your child grows up" | State AsG |
| December 9, 1990 | Combibloc, Tetra-Pak | Drink boxes | Recyclable | <ul style="list-style-type: none"> • "As easy to recycle as this page" | NYC DCA |
| 1990 | Vons | Vegetables | Toxicity related | <ul style="list-style-type: none"> • "pesticide free" | FTC |
| June 1990 | Chemlawn | Lawn pesticides | Toxicity related | <ul style="list-style-type: none"> • "safe" • "non-toxic" • "fully tested for health and environmental effects" | NY AG |
| 1991 | Craftmatic/Contour Industries | Home water treatment systems | Unsubstantiated claim | <ul style="list-style-type: none"> • home tap water was <i>polluted and harmful</i> to human health. | FTC |
| 1991 | Advanced Automotive Technology | PetroMiser gasoline additive | Pollution | <ul style="list-style-type: none"> • "reduces automotive emissions" | OK AG |
| 1991 | Johnson Controls | Plastic bottles | Recycled | <ul style="list-style-type: none"> • "Environmental packaging...the 100 percent recycled container." | NAD-ad modified or ended |
| March 21, 1991 | Webster Industries | Plastic waste bags | Degradable | <ul style="list-style-type: none"> • "Degradate into harmless organic powder" • "Contains photodegradable additive" | NYC DCA |
| March 21, 1991 | Key Food | Plastic shopping bags | Degradable | <ul style="list-style-type: none"> • "Degrades in sunlight" | NYC DCA |
| March 21, 1991 | RKO Warner Video | Plastic shopping bags | Degradable | <ul style="list-style-type: none"> • "This bag is photodegradable" | NYC DCA |

Table 4.1 Legal Challenges to Environmental Marketing Terms — As of June 1992

| First Announced | Company | Product Type | Type of Claim | Language | Regulatory Body |
|-----------------|--------------------------|---|------------------------|--|-----------------|
| March 21, 1991 | Daffy's Stores | Plastic shopping bags | Degradable | <ul style="list-style-type: none"> "This bag is recycled plastic and is degradable" | NYC DCA |
| March 21, 1991 | Procter & Gamble | Disposable diapers | Compostable | <ul style="list-style-type: none"> "Ninety days ago this was a disposable diaper" | NYC DCA |
| March 21, 1991 | Icelandic Spring Water | Drink boxes | Degradable | <ul style="list-style-type: none"> "Biodegradable packaging" | NYC DCA |
| April 22, 1991 | Zipatone, Inc. | Spray cement | General environmental | <ul style="list-style-type: none"> "Ecologically Safe Propellant...you get the job done quickly without damaging the environment" | FTC |
| May 9, 1991 | Sloan's Supermarkets | Plastic shopping bags | Degradable | <ul style="list-style-type: none"> "Degradable bag" "Will begin degrading within three days of exposure to ultraviolet light..." | NYC DCA |
| May 9, 1991 | Pathmark Supermarkets | Plastic shopping bags | Degradable | <ul style="list-style-type: none"> "Degradable" "Non-toxic when incinerated" | NYC DCA |
| May 9, 1991 | Love Pharmacy | Plastic shopping bags | Degradable | <ul style="list-style-type: none"> "Degradable bag" "Will begin degrading within three days of exposure to ultraviolet light..." | NYC DCA |
| May 9, 1991 | Down to Earth stores | Plastic shopping bags | Degradable, Recyclable | <ul style="list-style-type: none"> "This bag is biodegradable and recyclable" | NYC DCA |
| June 5, 1991 | Jerome Russell Cosmetics | Hair care and other beauty aid products | Ozone-related | <ul style="list-style-type: none"> "Ozone-safe" "Ozone-friendly" | FTC |
| June 27, 1991 | Mobil Chemical Company | Plastic waste bags | Degradable | <ul style="list-style-type: none"> "Degradable" | State AsG |

Table 4.1 Legal Challenges to Environmental Marketing Terms — As of June 1992

| First Announced | Company | Product Type | Type of Claim | Language | Regulatory Body |
|------------------|------------------------------------|---------------------|--------------------------------------|---|--------------------------|
| July 2, 1991 | Webster Industries | Plastic waste bags | General environmental, Degradable | <ul style="list-style-type: none"> • "Environmentally safe" • "Photodegradable" | State AsG |
| August 5, 1991 | Alberto-Culver Company | Hair spray products | General environmental, Ozone-related | <ul style="list-style-type: none"> • "Environmentally safe" • "Ozone friendly" | State AsG |
| August 28, 1991 | Tetra Pak; Combibloc; Lintas, Inc. | Drink boxes | Recyclable | <ul style="list-style-type: none"> • "As easy to recycle as your daily newspaper" | State AsG |
| August 30, 1991 | American Enviro Products | Disposable diapers | Degradable | <ul style="list-style-type: none"> • "Will decompose in landfill within 3-5 years or before your child grows up" | FTC |
| October 9, 1991 | First Brands | Plastic waste bags | General environmental, Degradable | <ul style="list-style-type: none"> • "Safe for the environment" • "Degradable" | FTC |
| October 10, 1991 | Clairol, Inc. | Hair sprays | General environmental | <ul style="list-style-type: none"> • "Environmentally safe" | State AsG |
| October 10, 1991 | The Drackett Co. | Household cleaners | Ozone-related | <ul style="list-style-type: none"> • "Use with confidence . . . contains no fluorocarbons alleged to damage ozone" | State AsG |
| October 10, 1991 | Westwood Pharmaceuticals, Inc. | Sunscreen | Ozone-related | <ul style="list-style-type: none"> • "Ozone safe" | State AsG |
| October 15, 1991 | Rockline, Inc. | Coffee filters | General environmental | <ul style="list-style-type: none"> • "Environmentally friendly product and packaging" | NAD-ad modified or ended |

Table 4.1 Legal Challenges to Environmental Marketing Terms — As of June 1992

| First Announced | Company | Product Type | Type of Claim | Language | Regulatory Body |
|--------------------------------|-------------------------|---|--|---|--------------------------|
| October 16, 1991 | Colgate-Palmolive | Dishwashing liquid | Vague use of new; Unsubstantiated exclusivity claims, Recycled | <ul style="list-style-type: none"> "New Bottle! With 20 percent recycled plastic...the only dishwashing liquid made with 20 percent previously used plastic..." | NAD-ad modified or ended |
| November 14, 1991 | Procter & Gamble | Disposable diapers | Compostable | <ul style="list-style-type: none"> "Ninety days ago this was a disposable diaper" "Environmental Information... This product is compostable in municipal composting units." | State AsG |
| July 17, 1991 | Revlon, Inc. | Hair sprays | General environmental | <ul style="list-style-type: none"> "Environmentally safe" | NYC DCA |
| July 17, 1991 | Procter & Gamble | Anti-perspirants | Ozone-related | <ul style="list-style-type: none"> "Contains no CFCs which harm the ozone layer" | NYC DCA-no action |
| July 17, 1991 | S.C. Johnson & Son | Furniture polish, air fresheners, shaving gel | Ozone-related | <ul style="list-style-type: none"> "Contains no propellant alleged to damage ozone" | NYC DCA |
| July 17, 1991 | Gillette | Shave cream, hair sprays, anti-perspirants | Ozone-related | <ul style="list-style-type: none"> "Ozone Friendly" "No CFCs" | NYC DCA |
| 1991 | Chemlawn | Lawn pesticides | Toxicity related | | PA AG |
| January 1992 ^a | Tech Spray, Inc. | Electronic equipment-cleaning products | Ozone-related | <ul style="list-style-type: none"> "Ozone friendly" "Ozone friendly formula" "CFC Free" | FTC |
| February 25, 1992 ^c | Carlisle Plastics, Inc. | Plastic bags | Degradable | | State AsG |

Table 4.1 Legal Challenges to Environmental Marketing Terms— As of June 1992

| First Announced | Company | Product Type | Type of Claim | Language | Regulatory Body |
|-----------------------------|--------------------------|-------------------|----------------------|---|---|
| March 1992 ^f | Sunshine Makers | Household cleaner | Toxicity related | <ul style="list-style-type: none"> • "Simple Green is completely non-toxic, so it's safe, even for kids." • "Without the chemical pollutants others contain" • "biodegradable" • "environmentally safe" | NAD — recommended claims discontinued or modified, advertiser refused, NAD referred case to government agency |
| March 12, 1992 ^b | Statler Industries, Inc. | Bathroom tissue | Recycled, Pollution | <ul style="list-style-type: none"> • "Made from 100 percent recycled paper" • "The Tree Free company has been recognized by Earth Day-NYC as having the lowest toxic emissions of any integrated tissue paper mill in the country" • "No elemental chlorine is added in the manufacturing process to whiten our product" | NAD - claim substantiated |
| March 13, 1992 ^b | Fort Howard Corp. | Paper towels | Recycled, Recyclable | <ul style="list-style-type: none"> • "Green Forest Paper Towels are made to our highest standards from 100 percent recycled paper fibers, including a minimum of 10 percent postconsumer content." • "Green Forest products help the environment in two ways; precious natural resources are saved and paper is recycled instead of entering landfills" • "This wrapper may be recycled where plastic film recycling facilities exist" | NAD — the first two claims were substantiated, the last was considered misleading and was discontinued |

Table 4.1 Legal Challenges to Environmental Marketing Terms — As of June 1992

| First Announced | Company | Product Type | Type of Claim | Language | Regulatory Body |
|-----------------------------|------------------------------------|------------------|--|---|--|
| March 31, 1992 ^b | Celestial Seasonings, Inc. | Herbal teas | Oxygen bleached, Exclusivity, Recycled, Source reduced | <ul style="list-style-type: none"> • "...now the first tea company in America to use only oxygen bleached tea bags..." • "we print our boxes on 100% recycled paperboard" • "our tradition of using English Pillow Style tea bags...saves 2 million pounds of packaging annually." | NAD — first claim substantiated, recommended modifying second two. Celestial Seasonings agreed to consider recommendations |
| April 1, 1992 ^b | A. V. Olsson Trading Company, Inc. | Paper products | 100% unbleached, General environmental | <ul style="list-style-type: none"> • "100% unbleached" • "environmentally friendly products" • "...using them will have a positive effect on the environment" | NAD — first claim substantiated, recommended modifying second. Advertiser appealing decision. |
| April 8, 1992 ^b | 3M | Dishwashing pads | Recycled, Biodegradable, Absence of phosphorus | <ul style="list-style-type: none"> • plastic fibers made from recycled PET • "All detergents...are biodegradable" • "0.0% phosphorus" • "Packaging made with Recycled Paper and Paperboard" | NAD — claim substantiated |

Table 4.1 Legal Challenges to Environmental Marketing Terms — As of June 1992

| First Announced | Company | Product Type | Type of Claim | Language | Regulatory Body |
|-----------------------------|---------------------------------|----------------------------|--|---|---|
| April 17, 1992 ^b | ICD Products/Confab Corporation | Paper towels | Recycled | <ul style="list-style-type: none"> • "This product is made from 100 % recycled fiber" • "And with every purchase, 1 % will be donated to the National Audubon Society, to help protect our natural resources." • "No new trees were destroyed to create this product. We add no inks, dyes, perfumes, or chlorine bleaching agents that can pollute the atmosphere." | NAD -- claims substantiated |
| May 14, 1992 ^a | RMED International, Inc. | Disposable diapers | Degradable, Unsubstantiated claim | <ul style="list-style-type: none"> • TenderCare disposable diapers biodegrade in landfills | FTC |
| June 12, 1992 ^b | Stone Container | Paper lawn and refuse bags | General environmental, Biodegradable, Recyclable | <ul style="list-style-type: none"> • "environmentally safe" • "biodegradable and recyclable paper, lawn, and refuse bags" • "paper, the natural package, recyclable, biodegradable, reusable, renewable" • "Compost — the 'Yard Master Refuse Bag' will biodegrade along with its green contents." | NAD — case appealed by Stone, Review Board recommended claims be qualified. |

Table 4.1 Legal Challenges to Environmental Marketing Terms — As of June 1992

| First Announced | Company | Product Type | Type of Claim | Language | Regulatory Body |
|----------------------------|-----------------------|--|---------------------------------|--|--|
| June 25, 1992 ^b | Melitta USA, Inc. | Bleached and unbleached coffee filters | General environmental, Recycled | <ul style="list-style-type: none"> • "Oxygen cleansed filters are environmentally safer..." • "made from...pulp produced with no chemical bleaches...thereby minimizing the release of unwanted by-products..." • "...there is no better white filter made today - safer for the environment..." • "Recycled Paperboard. Environmentally Sound." • "...environmentally friendly..." | NAD — unbleached claim substantiated, others discontinued or modified. |
| July 27, 1992 | Mobil Oil Corporation | Hefty trash bags | Degradable | <ul style="list-style-type: none"> • "Degradable" • "These bags will continue to break down into harmless particles even after they are buried in a landfill." | FTC |

Sources: Except where noted, *Green Market Alert* (January 1992, February 1992).

^a Personal communication with FTC spokesperson.

^b NAD press release.

^c Unless otherwise noted, all cases resulted in consent agreements.

^d FTC press release.

^e Environment Reporter, April 3, 1992.

^f Advertising Age, March 23, 1992, p. 21

4.4.1 Federal Trade Commission Actions

The FTC brought suit against several companies in the 1970s, but otherwise took no public action on environmental marketing advertising after that until 1991. (20,45) FTC actions have involved the use of the terms *biodegradable*, *ecologically safe*, *pollution-free*, *ozone friendly*, and *pesticide-free*. In each case, the claim being made was seen as deceptive or misleading. In addition, FTC officials reported that as of early 1991 there were over two dozen pending investigations into various uses of environmental claims, including more controversial and context-dependent terms such as *recyclable* or *source reduced*.²²

FTC decisions are rendered in the form of "consent agreements." Consent agreements do not constitute an admission of a law violation, but do carry the force of law for future actions. A violation of a consent agreement may result in a fine of \$10,000.

Although traditionally the FTC has chosen to regulate truth-in-advertising issues through case-by-case adjudication, it responded in July of 1992 to requests from industry representatives, consumer and environmental groups and state law enforcement officials by issuing guidelines for environmental marketing. FTC will continue with its case-by-case approach to enforcing these guidelines. The guidelines are discussed in Chapter 5 and the full text of the guidelines is presented in Appendix 4.

Early FTC Actions

- Ex-Cell-O-Corp, 82 FTC 36 (January 9, 1973)

In 1973, the FTC issued a consent order requiring Ex-Cell-O, a manufacturer of containers for dairy and other products, to either cease advertising its containers as *biodegradable* or indicate the limits on their biodegradability, the plastic components of the containers, and environmental factors affecting the rate of biodegradability. (45)

- Standard Oil Co of California, 84 FTC 1401 (November 26, 1974)

In 1974, the FTC issued a consent order requiring Standard Oil and its advertising company to cease advertising that an additive in Standard's Chevron gasoline would produce *pollution-free* automobile exhaust. (45)²³

²² For the most part, dates in the table and in the text represent the day on which the case was first publicly announced. However, the dates associated with the NAD decisions and the 1992 FTC decisions represent the day on which the case was settled.

²³ British officials reprimanded British Petroleum in 1990 for making the same claim in marketing Supergreen gas. (21)

- Albano Enterprises, Inc., 89 FTC 523 (1977)

The FTC issued a consent order requiring a manufacturer of automobile gas saver products to cease representing that its products will increase fuel economy or reduce air emissions, unless the claims are scientifically supported.

- Crown Central Petroleum Corp., 84 FTC 1493 (1974)

The FTC filed suit against a company advertising a "Clean-Air gasoline" additive as dramatically reducing engine exhaust emissions. The Commission ordered the company to cease claiming that any gasoline or gas additive will eliminate or reduce air pollution caused by motor vehicles, or will result in pollution-free exhaust, unless the claims are substantiated by scientific tests.

1991 to early 1992 Actions

- Zipatone Inc., FTC Docket No. C-3336 (July 29, 1991)

On Earth Day 1991, the FTC announced a consent order involving advertisement claims by Zipatone that its adhesive spray for commercial art applications contained an *ecologically-safe propellant*. The FTC argued that although Zipatone's new aerosol propellant was non-ozone-depleting, the primary ingredient in the product itself was ozone-depleting. The use of the term *ecologically safe* in advertisements, allegedly implying that the product was ecologically safe, was false and misleading. (4)

- Jerome Russell Cosmetics USA Inc., FTC Docket No. C-3341 (August 30, 1991)

In June 1991, the FTC issued a consent order involving claims made by Jerome Russell Cosmetics that its Hair Color, Fluorescent Ultra Hair Glo, Hair and Body Glitter Spray, and Fluorescent Color and Glitter Products were *ozone safe* and *ozone friendly* and *contained no fluorocarbons*. Again, FTC asserted that these claims were misleading and unsubstantiated because the products themselves contained an ozone-depleting substance. (45)

- Craftmatic/Contour Industries, (1991)

The FTC issued a consent decree requiring that Craftmatic/Contour cease the claim that without their home water treatment system, home tap water was *polluted and harmful* to human health. The claim was deemed to be unsubstantiated, and Craftmatic/Contour was required to pay \$700,000 in consumer redress. (20) This is just one of many consent orders that the FTC has issued regarding water filters (FTC spokesperson).

- Vons Companies Inc., FTC Docket No. C-3302 (August 27, 1990).

The FTC issued a consent order requiring that Vons cease from claiming that its products were *pesticide-free*, citing that Vons had reduced, but not eliminated, pesticides in its produce.

- First Brands Corp., FTC Docket No. C-3358, (January 3, 1992)

The FTC issued a consent order against First Brands Corporation (Danbury, CT), requiring it to stop claiming that its Glad trash bags were *degradable* or *photodegradable* unless the claims were substantiated. This claim allegedly implied that the bags provide an environmental benefit after their disposal in a sanitary landfill. First Brands was also required to cease using general terms such as *safe for the environment* or *environmentally friendly* unless the claims were (a) specifically and clearly defined in close proximity to the claim, and (b) supported by scientific evidence.

- American Enviro Products, FTC Docket No. C-3376 (March 26, 1992)

The FTC issued a consent order against American Enviro Products, requiring them to stop claiming that their disposable diapers will biodegrade in a landfill *within 3-5 years* or *before your child grows up*. (20) This claim was seen as unsubstantiated. The Task Force of State Attorneys General had issued a consent order against the company on the same product and claim in October 1990.

- Tech Spray, FTC Docket No. C-3377 (April 2, 1992)

The FTC issued a consent order against Tech Spray for allegedly false and unsubstantiated advertising and labeling its electronic equipment-cleaning products as *ozone friendly* when the products contained ozone-depleting substances. (20)

- RMED International, Inc., FTC Docket No. C-3382 (May 14, 1992)

The FTC issued a consent order against RMED International for (a) claiming that its TenderCare disposable diapers would biodegrade in landfills and (b) making an unsubstantiated claim of environmental benefit. The consent order requires that the company substantiate any future claims of biodegradability or environmental benefit. (18)

- Mobil Oil Corporation, FTC Docket No. 902-3111 (July 27, 1992)

The FTC issued a consent order against Mobil Oil Corp. requiring it to stop claiming that its Hefty, Kordite, and Baggies trash bags are degradable unless the claims are substantiated. This claim allegedly implied that the bags provide an environmental benefit after their disposal in a sanitary landfill. Mobil was also required to cease using general terms such as *safe for the environment* or *environmentally friendly* unless the claims were (a) specifically and clearly defined in close proximity to the claim, and (b) supported by scientific evidence.

4.4.2 State Actions

A group of eleven state attorneys general from California, Florida, Massachusetts, Minnesota, Missouri, New York, Tennessee, Texas, Utah, Washington, and Wisconsin have formed a Task Force to challenge companies making false or misleading green marketing claims on their products. The Task Force focused their initial efforts on claims of *degradable*, *environmentally safe*, *recyclable*, and *ozone friendly*. In addition to bringing suit against marketers, the Task Force issued the *Green Report* and the *Green Report II*, guidelines that seek to promote truthful environmental advertising and labeling (see Chapter 5).

- American Enviro Products (October 8, 1990)

The Task Force brought suit against American Enviro over claims that the *revolutionary outer backing* of its Bunnies Disposable Diapers would degrade in three to five years. The Task Force asserted that the diapers would not biodegrade in normal landfill conditions, and thus would not help to mitigate landfill problems.

American Enviro agreed to redesign its package labeling and to pay \$5,000 in costs to each of the ten states involved. Under the settlement, the company is prohibited from claiming that its diapers are *degradable* or *biodegradable*, and can only discuss the potential value of *degradable* products in appropriate composting programs if the advertising clearly discloses that few such programs exist at this time. (45)

- Mobil Chemical Company (June 27, 1991)

Beginning with the Texas Attorney General's office, several state attorneys general have brought independent or group actions against Mobil over claims that its Hefty trash bags were *biodegradable*. Recently, Mobil settled with the state of Washington to (a) discontinue making claims about the degradability of its garbage bags at least until the term is defined or regulated by federal laws, trade rules, or guidelines that have the force of law, or by the terms of an FTC consent order; and (b) to pay the state \$25,000. (2)

- Chemlawn (June 1990)

New York State Attorney General Abrams legally challenged Chemlawn Services Corp. that Chemlawn advertisements falsely represented that its pesticides were safe, non-toxic, and fully tested for health and environmental effects. Although Chemlawn admitted no wrongdoing, the case was settled in June 1990 with Chemlawn paying \$100,000 in costs, agreeing to provide a copy of the settlement to any New York customer who requests one, and agreeing to refrain from making broad safety claims in advertisements for its pesticides. (40,45)

- Webster Industries (July 2, 1991)

In a consent agreement with the Task Force, Webster agreed to remove the labels *environmentally safe* and *photodegradable* from its plastic trash bags. (20)

- Alberto-Culver Company (August 5, 1991)

In July and August of 1991, Alberto-Culver Company entered into agreements with several states under which it promised not to represent any of its aerosol hair spray products containing ozone-depleting substances or volatile organic compounds (VOCs) as being either environmentally beneficial or offering environmental benefits, unless it had competent and reliable scientific evidence to substantiate the claims. Alberto-Culver also agreed to pay \$50,000 for investigation costs. (3)

- Tetra Pak; Combibloc; and Lintas, Inc. (August 28, 1991)

In a consent agreement with the Task Force, the companies agreed to remove the claim *as easy to recycle as your daily newspaper* from advertising pertaining to their drink boxes. Tetra Pak and Combibloc were sued by the New York Department of Consumer Affairs in December 1990 for the same claim. (37)

- Bristol-Myers Squibb, (October 10, 1991)

The Task Force reached a settlement requiring three Bristol-Myers Squibb subsidiaries to stop using *environmentally-safe* and *ozone-safe* claims for hair sprays, household cleaners, and other consumer products containing VOCs that contribute to air pollution. The agreement requires the three companies, Clairol, Inc., the Drackett Co., and Westwood Pharmaceuticals, Inc., to pay a total of \$50,000 for the costs of the investigation. (37)

The settlement involves Clairol's Clairmist and Sheer Mist hair sprays; Drackett's Renuzit, Endust, and Behold household cleansers; and Westwood's Presun 2 sunscreen. The agreement also prevents these companies from making any other environmental claims unless the claims are supported by reliable scientific evidence. (37)

- Procter and Gamble (November 14, 1991)

The Task Force reached a consent agreement with Procter and Gamble (P&G) concerning advertisements claiming that its Luvs and Pampers diapers are compostable. The agreement set permanent standards for future claims about composting and required the company to pay each of the ten states \$5,000 to cover the costs of investigation.

The agreement requires compostable claims to be made only if (a) facilities for composting are readily available to a substantial number of consumers where the claim

is made, or (b) the claim states the percentage of the population that has access to composting (i.e., currently less than one percent of the American population); and the claim states the percentage of the product that is compostable and a toll-free number for further information on composting facilities in their area. (37)

- Oklahoma v. Advanced Automotive Technology, CJ-90-06035 (D. Ok. 91)

The Oklahoma Attorney General court issued an injunction forbidding AAT from making the unsubstantiated claim that its product PetroMizer reduces automotive emissions. (37)

- Carlisle Plastics, Inc. (February 25, 1992)

In a consent agreement, Carlisle Plastics agreed to stop advertising its plastic bags as *degradable* or *source-reduced*, and to not make any environmental claims that were not substantiated by reliable evidence. In addition, they agreed to pay nine state Attorneys General \$45,000. (16)

4.4.3. New York City Department of Consumer Affairs Actions

The New York City Department of Consumer Affairs (NYC DCA), led by Commissioner Mark Green, has been very active in challenging green marketing claims under the city's false advertising law. Under Commissioner Green, the NYC DCA has followed a relatively strict interpretation of New York City law, challenging even "factual" claims if they are perceived to contain insufficient information. The following is a listing of cases brought against marketers by the NYC DCA for so-called "green collar fraud" as of late 1991.

- Combibloc, Inc. and Tetra Pak, Inc. (December 9, 1990)

Combibloc and Tetra Pak, the country's two largest drink box manufacturers, signed consent agreements with the NYC DCA agreeing to stop using the phrase *Drink boxes are as easy to recycle as your daily newspaper* in their advertising unless and until the products are being recycled in significant amounts wherever they are being sold. The NYC DCA charged that the advertising was deceitful because (a) the plastic-coated drink boxes are not "as easy" to recycle as newspapers, and (b) the advertisements fail to mention that the necessary infrastructure to collect and recycle drink boxes is not available to New York consumers. Combibloc and Tetra Pak each paid the city \$1,000 for the cost of investigation. (39)

- Procter and Gamble (first announced March 21, 1991, settled September 19, 1991)

Procter and Gamble was charged with deception by the NYC DCA for an advertisement picturing a handful of "soil enhancer" with the headline *Ninety days ago this was a disposable diaper*. The NYC DCA ruled the statement to be deceptive

because (a) the plastic lining of the diaper cannot physically be composted, and (b) facilities to compost the diapers were not available to New York City consumers. The DCA did not accept the advertisement's statements of *while composting isn't available everywhere, ten communities already have programs in place*, and nearly 80 percent of the diaper is compostable, as adequate qualifiers of the compostability claim.

Procter and Gamble agreed not to make unqualified compostability claims about its diapers in any advertisement or national publication that appears in New York City until composting is widely available to New York consumers. Advertisements promoting the diapers' potential or technological feasibility to be composted would have to highlight the limited availability of diaper composting. P&G also agreed to pay the City \$5,000 for the costs of the investigation. (39)

- Icelandic Marketing USA (March 21, 1991)

Icelandic was charged by the DCA with deceptive advertising for selling a 6.8 oz. drink box of imported water labeled with claims of *biodegradable packaging* and *harmless when incinerated*. The NYC DCA argued that since the drink box is made from a composite of plastic, paper, and aluminum, it is neither harmless when incinerated nor degradable, since it contains no degradable additive. Icelandic agreed to stop claiming *harmless when incinerated* and would qualify claims of degradability with the disclosure that such packaging is not currently degradable in New York City. (39)

- Daffy's Stores (March 21, 1991)

Daffy's stores signed a consent agreement with the DCA agreeing to stop labeling its plastic shopping bags with the phrase *this bag is recycled plastic and is degradable*. (20,45)

- RKO Warner Video (March 21, 1991)

RKO signed a consent agreement with the DCA agreeing to stop labeling its plastic shopping bags with the phrase *this bag is photodegradable*. (20,39)

- Key Food (March 21, 1991)

Key Food signed a consent agreement with the DCA agreeing to stop labeling its plastic shopping bags with the phrase *degrades in sunlight*. (20,39)

- Webster Industries (March 21, 1991)

Webster signed a consent agreement with the DCA agreeing to stop labeling its plastic garbage bags with the phrases *degrades into harmless organic powder* and *contains photodegradable additive*. (20,39)

- Down to Earth Stores (May 9, 1991)

Down to Earth Stores was charged with deceptive marketing by the DCA for labeling its plastic shopping bags with the phrase *this bag is biodegradable and recyclable*. Down to Earth agreed to refrain from making biodegradable and recyclable claims on its shopping bags. (20,39)

- Love Pharmacy (May 9, 1991)

Love Pharmacy signed a consent agreement with the DCA agreeing to stop labeling its plastic shopping bags with the phrases *degradable bag* and *will begin degrading within three days of exposure to ultraviolet light*. (20,39)

- Pathmark Supermarkets (May 9, 1991)

Pathmark signed a consent agreement with the DCA agreeing to stop labeling its plastic shopping bags with the phrases *degradable* and *non-toxic when incinerated*. (20,39)

- Sloan's Supermarkets (May 9, 1991)

Sloan's Supermarket signed a consent agreement with the DCA agreeing to stop labeling its plastic shopping bags with the phrases *degradable bag* and *will begin degrading within three days of exposure to ultraviolet light*. (20,39)

- Revlon (July 17, 1991)

Revlon signed a consent agreement with the DCA agreeing to stop labeling its Flex and Almay hairsprays as *environmentally safe*. (20,39)

- S.C. Johnson and Son (July 17, 1991)

S.C. Johnson and Son signed a consent agreement to stop labeling its Pledge furniture polish, Glade and Potpourri air fresheners, and Edge shaving gel with a symbol of a sun across the horizon with the statement *contains no propellant alleged to damage ozone*. (19)

- Gillette Co. (July 17, 1991)

Gillette was charged by the NYC DCA with deceptive advertising for labels on its Foamy Shave Cream, Adorn, Dry Look, Mink hair spray, and Right Guard, Soft & Dri, and Dry Idea anti-perspirants claiming *ozone friendly — no CFCs*. (39)

- Procter and Gamble (July 17, 1991)

The DCA charged P&G with deceptive advertising for using the label *contains no CFCs which harm the ozone layer* on its aerosol anti-perspirants. Commissioner Green said that the company fell short of its obligations by failing to educate consumers about the differences between stratospheric and ground-level ozone. The DCA has taken no action on the case as of June 1992. (39)

4.4.4 Better Business Bureau's National Advertising Division Actions

The National Advertising Division (NAD) of the Better Business Bureau announced in July 1991 that it would expand its review of environmental labeling claims. NAD is promoting industry self-regulation by reviewing potentially misleading advertising and working with marketers to promote truth-in-advertising. The Division has so far come to agreements with seven advertisers to change or drop their labeling. In five other cases, the claims were found to be substantiated or the advertiser refused to change the label. A NAD spokeswoman said that several other cases were pending, but declined to provide details until the cases were settled. (6)

- Johnson Controls

Following a review by NAD, Johnson Controls agreed to revise the advertising of its recycled plastic containers. The original advertisement showed plastic (PET resin) bottles for food and beverages with the statement *environmental packaging...the 100 percent recycled container*. NAD reasoned that the advertisement could mislead consumers into believing that PET was used expressly for food and beverage containers because the statement was used in conjunction with these types of containers. (32)

- Rockline, Inc (October 15, 1991)

Rockline agreed to remove or change the label *environmentally friendly product and packaging* on the package of its coffee filters.

- Colgate-Palmolive (October 16, 1991)

Colgate-Palmolive agreed to change or remove the phrases *new bottle — with 20 percent recycled plastic* and *the only dishwashing liquid made with 20 percent previously used plastic* from its dishwashing liquid. NAD objected to the label because of the vague use of the word *new* and because of its unsubstantiated exclusivity claims.

- Sunshine Makers (March 1992)

Sunshine Makers labeled its household cleaner, Simple Green, with the claims *Simple Green is completely non-toxic, so it's safe, even for kids, without the chemical pollutants others contain, biodegradable and environmentally safe*. NAD felt that the

biodegradable, and *environmentally safe* claims were unsubstantiated, and that the data supplied by the manufacturer were insufficient to support its claim that the product contains no toxic chemicals. NAD also felt that when juxtaposed with the warning of a "mild eye irritant," the *non-toxic* claim may confuse consumers, and recommended that the advertising be modified or discontinued. Sunshine refused to do so, or to disclose the product formulation so that NAD could verify the claims. NAD was unsatisfied with the company's response, and referred the case to an undisclosed federal agency for further study. (27)

- Statler Industries (March 12, 1992)

Claims made by Statler Industries for its Tree Free Bathroom Tissue were substantiated in response to an inquiry from NAD. Package claims included *Made from 100 percent recycled material*, *The Tree Free company has been recognized...as having the lowest toxic emissions of any integrated tissue paper mill in the country*, and *No elemental chlorine is added in the manufacturing process to whiten our product*. Although the *recycled* claim was substantiated in this case, NAD "encourages paper product advertisers to state the percentage of postconsumer content in their *recycled* claims." (9)

- Fort Howard Corporation (March 13, 1992)

NAD investigated three claims made by Fort Howard for its Green Forest Paper Towels. Two claims were substantiated: (a) *Green Forest Paper Towels are made to our highest standards from 100 percent recycled paper fibers, including a minimum of 10 percent postconsumer content. Even the core is made from 100 percent recycled fibers, including a minimum of 10 percent post consumer paper content*, and (b) *Green Forest products help the environment in two ways; precious natural resources are saved and paper is recycled instead of entering landfills*. However, one claim for the plastic outer packaging was not substantiated: *This wrapper may be recycled where plastic film recycling facilities exist*. Although Fort Howard "submitted information as to the considerable current and growing recycling of this type of material [LDPE plastic]," they agreed to discontinue the use of the challenged statement. (12)

- Celestial Seasonings, Inc. (March 31, 1992)

NAD questioned Celestial Seasonings on several of its claims made on its herbal tea labels: *Now the first tea company in America to use only oxygen bleached tea bags...*, *we print our boxes on 100% recycled paperboard*, and *Our tradition of using English Pillow Style tea bags...saves 2 million pounds of packaging annually*. NAD found the first claim substantiated, but found only 80 percent recycled content substantiable, and recommended that the manufacturer clarify the source reduction claim. Celestial Seasonings stated that it "respectfully disagrees" with NAD's interpretations, but will take NAD's comments into consideration when making future similar claims. (13)

- A.V. Olsson Trading Company (April 1, 1992)

NAD conducted an inquiry into the claims made by A.V. Olsson on its If You Care Coffee Filters. The package included the logo *environmentally friendly products*, and the claims: *100% unbleached, What's an environmentally friendly cup of coffee? It's one made with If You Care premium quality, unbleached, beige coffee filters. As no chlorine is used to bleach them, no chlorine is dumped into our lakes and streams. If You Care coffee filters won't affect the taste of your coffee, but using them will have a positive effect on the environment.* NAD found that the 100 percent unbleached claim was substantiated, but recommended that the environmentally friendly claims be discontinued. The advertiser strongly disagreed with NAD's decision, arguing that (a) the label provides enough contextual information that the consumer will not be misled, and (b) the Canadian Ministry of Consumer and Corporate Affairs supports the use of environmentally friendly claims "as long as the phrase is backed up by a statement that tells consumers why this is so." The company is appealing the decision to the National Advertising Review Board (NARB). (7)

- 3M (April 8, 1992)

NAD investigated three claims made by 3M on its Scotch-Brite wool soap pads: *plastic fibers made from recycled PET, All detergents...are biodegradable, 0.0% phosphorus, and Packaging made with Recycled Paper and Paperboard.* After reviewing data sheets supplied by the manufacturer, NAD agreed that the claims were substantiated. (11)

- ICD Products/Confab Corporation (April 17, 1992)

NAD decided that revised claims made by ICD Products/Confab Corporation on Today's Choice paper towels were substantiated. The original claims included *environment friendly, even this wrapping is recyclable, and we add no...agents that can pollute the atmosphere.* These claims were voluntarily withdrawn by the manufacturer. Revised claims that NAD found substantiated included *this product is made from recycled fiber, And with every purchase, 1% will be donated to the National Audubon Society, to help protect our natural resources, and no new trees were destroyed to create this product. We add no inks, dyes, perfumes, or chlorine bleaching agents that can pollute the atmosphere.* (29,10)

- Stone Container Corporation (June 12, 1992)

Both NAD and the appeal board, NARB, determined that Stone Container should modify its *biodegradable* and *recyclable* claims for its paper Yard Master Lawn and Refuse Bags. The original claims included: *environmentally safe, biodegradable and recyclable paper, lawn, and refuse bags, paper, the natural package, recyclable, biodegradable, reusable, renewable, and, Compost — the 'Yard Master Refuse Bag' will*

biodegrade along with its green contents. NAD found that the *natural* claim was unsubstantiated because the manufacturing process used intensive physical and chemical treatments, and recommended that the other claims be qualified. Stone disagreed with the decisions regarding biodegradability and appealed to NARB, but agreed to modify the other claims.

A NARB panel found that the compostable claim was overbroad because it might suggest to consumers that the bags will degrade when containing non-lawn refuse, which is likely to be deposited in a landfill. The Panel also recommended that the *biodegradable* and *recyclable* claims be qualified with *when composted*.²⁴ Stone argued that the bags were purchased primarily for composting, and that consumers understood the claim as such. In addition, Stone provided data indicating that the paper bags did degrade in landfills. The Panel was not persuaded by these arguments. (8,28)

- Melitta USA, Inc. (June 25, 1992)

NAD investigated three sets of claims made by Melitta USA, Inc. for its Classic White and Natural Brown Cone Coffee Filters. (14) The first, pertaining to its Natural Brown Filters, stated that the filters were *made from unbleached pulp, carefully selected to meet Melitta's strict purity standards. And unbleached pulp is produced with no chemical beaches, thereby minimizing the release of unwanted by-products into the environment. Unbleached. No chlorine bleaching...* The advertiser supplied test results supporting the claims, and NAD agreed that the claims were substantiated.

NAD challenged two claims concerning Melitta's Classic White Filters. The first claim stated that *Oxygen cleansed filters are environmentally safer, using 40-50 percent less chlorine than traditional filters, minimizing the release of unwanted by-products into the environment.* While NAD agreed that the information Melitta submitted indicated that the alternative bleaching process used resulted in substantial reductions in the formation of toxic by-products, the Division was concerned that the data did not establish a direct relationship between reduced use of elemental chlorine and reduced risk. Melitta agreed to discontinue the use of generalized environmental-benefit claims in future labeling. The company also used the claim *Melitta's Purity Guarantee assures you that there is no better white filter paper being made today - safer for the environment, safer for you, plus delivering a better tasting cup of coffee.* NAD determined that the quality control data and taste test results submitted by Melitta were not appropriate to support the claim, and recommended that the advertiser discontinue comparative claims pending the completion of updated studies.

²⁴ Although recyclability generally refers to a product being used as a raw material for a second use, the Panel felt that the phrase *recyclable when composted* would be truthful and reasonably consistent with the common usage of *recyclable*.

NAD also challenged two general claims made by Melitta: *Recycled Paperboard*, *Environmentally Sound*, and *Produced to exacting standards so they are environmentally friendly, plus maximize coffee flavor*. NAD agreed that the *recycled paperboard* claim was substantiated, but noted that it encourages paper product advertisers to state the percentage of postconsumer content in their *recycled* claims.²⁵ NAD questioned the accuracy of the more general claim of positive environmental attributes, however, and the advertiser agreed that the claim would not be used in the future.

Melitta's statement in response to NAD's actions reads: "Melitta continues to believe that the environmental responsiveness and performance of its coffee filters remain unsurpassed. Melitta thinks, however, that recent NAD opinions clearly dictate a move away from common terminology such as *environmentally friendly* which Melitta agrees to refrain from using in the future. Melitta's updated packaging will specify environmental advantages as relevant but focus more on the performance benefits upon which consumers have always relied in their choice of Melitta products." (14)

4.5 Summary

Environmental marketing claims contain inherent ambiguities that make truth-in-advertising issues less clear-cut than in other forms of marketing. Because the implication "better for the environment" underlies all environmental marketing claims, even factually correct claims may be seen as misleading to consumers. In addition, the terms used in environmental marketing are often science-based, loosely defined, and poorly understood by consumers (see Chapter 2). Even when the terms themselves are used correctly, they may convey a misleading message to consumers who do not understand their implications.

Although some claims challenged by oversight groups were in fact objectively false, others were questioned for being used out of context or not following or furthering environmental policy goals. Regulatory bodies differ widely on their interpretations of misleading environmental advertising. The Better Business Bureau's National Advertising Division and the Federal Trade Commission tended to focus on conspicuously false or unsubstantiated claims. The State Attorneys General Task Force, in addition to challenging false or trivial claims, concentrated on context-specific terms, such as *biodegradable*, *compostable*, and *recyclable*. The New York City Department of Consumer Affairs has taken the strictest interpretation of false advertising law, arguing that even factually correct environmental claims are deceptive if they contain insufficient information.

Clearly, a gap exists between the perception of marketers making environmental claims for their products and consumer understanding. Although marketers may make what they consider to be a truthful and accurate claim, consumers frequently infer additional meaning from environmental claims based on their own understanding of environmental issues. For example,

²⁵ This recommendation was not directly related to the truth and accuracy of this claim, since Melitta showed that their paperboard included 100 percent recycled content.

a product may be accurately labeled as *containing no CFCs* and still contain other ozone-depleting chemicals. However, this claim may legitimately be interpreted by consumers as mitigating stratospheric ozone depletion and thus be misleading according to the broader interpretation of *ozone-safe*. As well, an aerosol containing smog-producing hydrocarbon propellants can be truthfully labeled *does not harm stratospheric ozone*, but would be misleading in the wider context of *does not contribute to atmospheric degradation*. More generally, unless specified in the advertising, consumers may mistakenly assume that a product labeled as *containing no CFCs* is either (a) environmentally preferable to competing unlabeled products, or (b) has recently been altered to remove CFCs. Where there is no such distinction among products, such as in the case of aerosols (which have not contained CFCs since 1978), consumers may be misled into basing their purchasing decisions on trivial or meaningless product claims.

A second perception gap has existed between marketers and regulatory agencies. Before the Federal Trade Commission released their guidelines for environmental marketing terms, states, consumer protection agencies and marketers all formulated their own definitions and guidelines for use of these terms. For marketers, the result has been a confusing and sometimes costly marketplace where relabeling, legal actions, and negative publicity can create additional costs and cause market share losses. Faced with multiple (and changing) definitions for each term and increasing scrutiny of claims, several major consumer products companies recently stated that they will stop making environmental claims altogether. (32) Although some marketers state that they will continue to make environmental improvements to their products, these efforts may wane without the benefits of marketplace incentives and rewards to do so. By issuing national guidelines, Barry Cutler, Director of Consumer Affairs for the FTC, hopes "that it will free up advertisers to make some claims that they have been afraid to in the past because they weren't sure what the standards were. And they'll now have the confidence that they're playing on a level playing field." (31)

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5. REGULATING ENVIRONMENTAL MARKETING TERMS

5.1 INTRODUCTION

Environmental marketing in the United States has arisen out of and benefitted from a marked increase over the last several years in consumer awareness and concern about environmental issues. Marketers have responded to consumer demand with a wide variety of claims and/or new 'green' products purporting to be environmentally superior to their competitors. The environmental marketing claims currently used to describe products and packaging range from vague, general terms such as *earth-friendly* or *natural* to more specific claims such as *made with x percent postconsumer recycled material*. The proliferation of poorly-defined or ambiguous environmental terms over the past several years has led to confusion in the marketplace, and has resulted in several marketers being sued for deception in advertising.

Environmental marketing terms contain several characteristics not necessarily associated with conventional marketing terms, which make them particularly prone to being ambiguous or misleading:

- Environmental claims often pertain to characteristics of a product with which a consumer has little or no experience. As a result, the consumer often cannot evaluate the truthfulness or desirability of the claim;
- Environmental claims pertain to more than just the inherent qualities of the product being promoted; they also reflect the context in which a product is sold, e.g., the availability of a recycling infrastructure (35); and;
- Many terms used in environmental labeling are not words normally used by consumers, and are often poorly understood. (35,117)

Due to a lack of standardized use and consumer understanding of environmental terms, (1,25) environmental claims are often perceived by consumers as generically "good for the environment," even though virtually all products are associated with some adverse environmental impacts. (25) With a limited understanding of the issues and vocabulary involved, consumers are usually unable to evaluate the validity of complex environmental claims and are arguably in need of government or other independent third-party assistance. (35,62,117) Several citizens groups advocated that the federal government provide standardized definitions for environmental labeling terms, just as the Food and Drug Administration has recently proposed standardized definitions for nutritional labeling. In this way, even if consumers do not entirely understand the terms, they can be assured that terms used by competing products are comparable and such terms meet independently-set standards.

Prior to the FTC guidelines, many state governments and private organizations had started to develop their own definitions and guidelines for environmental advertising (see Table 5.1). (146) These private and government actions pertaining to environmental marketing regulations are described in this chapter. Section 5.1 discusses private and governmental actions

proposed or taken that attempt to clarify environmental marketing terms. Section 5.2 examines proposed general guidelines and proposed definitions for the following categories of terms:²⁶

- General Terms
- Manufacturing/Production Process Terms
- Ozone Related Terms
- Source Reduction Terms
- Solid Waste Management Terms:
 - Reuse/Refill
 - Recycling terms
 - Disposable
 - Compostable
 - Degradable

The individual definitions summarized in Table 5.1 are listed in Appendix 2; authors or proponents are listed in Appendix 3.

| Table 5.1. Private and Government Actions Pertaining to Environmental Marketing Regulations | | |
|---|--|--|
| | Action | Content |
| Non-industry Groups | | |
| Coalition of Northeastern Governors (CONEG) | Definitions for Solid Waste Terms | defines solid waste terms such as source reduction |
| Northeast Recycling Council (NERC) | NERC Regional Labeling Standards | defines reusable, recyclable, postconsumer, preconsumer, recycled content; basis of ME,NH,CT,NY, and RI recycling laws |
| Recycling Advisory Council (RAC) | Evaluation of proposed new recycled paper standards and definitions October 8, 1991. | defines recycled paper terms |

²⁶ Inclusion of a marketing term in this chapter indicates that the term has been defined by organizations seeking to clarify environmental marketing terms; it does not imply endorsement of the use or validity of the term.

Table 5.1. *continued*...

| Table 5.1. Private and Government Actions Pertaining to Environmental Marketing Regulations | | |
|---|---|---|
| | Action | Content |
| Environmental Defense Fund (EDF) | Testimony to the FTC July 17, 1991, and to the U.S. EPA, November 13, 1991 | defines implied attribute, degradable, generalized claims of environmental benefit, absolute claims of environmental benefits, environmentally safe, better for the environment, recycled, recyclable/compostable; recommended they be based on minimum standards |
| American Society for the Testing of Materials (ASTM) | Committee D10 recommendations 7-10-91 | defines source reduction, refillable, postconsumer material, recycled material, recycled content, recyclable |
| American Society for the Testing of Materials (ASTM) | Committee D10.19 Task group on packaging recycling and disposability: Proposed standards terminology relating to packaging recycling and disposability (proposed) undated | defines decomposition, biodegradable, biodegradability, photodegradable, photodegradability, postconsumer recycled materials, postconsumer waste, recyclable materials, recycled plastic, recycling, return, refillable, reuse, source reduction |
| American Society for the Testing of Materials (ASTM) | D06.40 Terminology Task Group Recycled Paper Terms (proposed) 2-14-91 | defines postconsumer recovered materials, recovered paper materials, recycled content paper, recycled fiber, recycled paper, biodegradable, biodegradation, preconsumer recovered material, recyclable, recycle, waste paper |
| American Society for the Testing of Materials (ASTM) | D20 Committee Standard Guide for the Development of Standards Relating to the Proper Use of Recycled Plastics 1990. | defines industrial plastic scrap, plastic recycling, postconsumer materials, recovered material, recycled plastic, reuse, source reduction |
| Industry | | |
| National Food Processors Association (NFPA) | Petition to the FTC | proposes guidelines on recyclable, recycled, compostable, source reduction, refillable, reusable, and general claims |
| Mobil Chemical Company | Petition to the FTC | petitions the FTC to define photo-, bio-, degradable, safe for the environment, recyclable, recycled, ozone friendly, landfill safe, environmentally friendly |
| First Brands Corporation | Petition to the FTC | petitions the FTC to define what can be claimed, and how it needs to be substantiated |

Table 5.1. *continued...*

| Table 5.1. Private and Government Actions Pertaining to Environmental Marketing Regulations | | |
|--|--|---|
| | Action | Content |
| Flexible Packaging Association | Position Statement on Environmental Labeling Programs | defines source reduced, recycled content, recycled material, postconsumer, recyclable, reusable |
| Institute of Packaging Professionals (IoPP) | IoPP Packaging Reduction Recycling and Disposal Guidelines. | defines source reduction, recyclable, degradable |
| Cosmetic, Toiletry, and Fragrance Association and Nonprescription Drug Manufacturers Association | Petition to the FTC | adds ozone friendly, recyclability, and recycled content to the NFPA petition |
| Advertising Age Environmental Marketing and Advertising Council | Guidelines | general guidelines for marketers |
| States | | |
| State Attorneys General Task Force (AsG) | Green Report, Green Report II | gives specific guidelines for truthful environmental marketing, calls on the federal government to make uniform definitions of environmental terms including testing protocol and standards |
| Rhode Island, New York, Connecticut, Wisconsin, New Hampshire | state laws | regulate the use of the terms recycled and recyclable on packaging and in advertising |
| Massachusetts Packaging Reduction and Recycling Act of 1991 | proposed state law | bans wasteful packaging in Massachusetts as of 1996, sets standards for allowable packaging |
| California | Assembly Bill 3994 of 1991 | defines ozone friendly, biodegradable, photodegradable, recyclable, and recycled, requires people making general claims to maintain supporting documentation |
| Connecticut | Public Act 89-385 | regulates the terms recyclable and recycled content |
| Idaho | 1990 state law | regulates the term organic |
| Illinois | SB 948 - not yet enacted | defines recyclable |
| Indiana | Indiana Deceptive Consumer Sales Act 1991 Ind. Code §§ 24-5-17-1 to 24-5-17-14 | generally follows CA AB 3994-self-destructs if federal guidelines are promulgated. Recycled means 10 percent postconsumer or postmanufacture |
| Indiana | HB 1307 | requires people making environmental claims to maintain supporting documentation |
| Iowa | SF-223 - introduced | creates a packaging review board to monitor the development of national standards; authorized to develop an eco-labeling program |

| Table 5.1. Private and Government Actions Pertaining to Environmental Marketing Regulations | | |
|---|--|---|
| | Action | Content |
| Maine | 1991 38 MRSA Section 2141 | sets up a waste reduction and recycling labeling program with a logo; follows NERC regulations; regulates recyclable, reusable, recycled, and recycled content |
| New Hampshire | RSA 149-N | defines postconsumer material, recyclable, recycled material used with logo |
| New Mexico | 1990 state law | regulates the term organic |
| New York | 6 NYCRR Part 368 | defines recyclable, recycled, reusable |
| New York | SB 5119/ AB 3632 - proposed | regulates biodegradable/ degradable/ photodegradable |
| New York | SB 2499-A/AB 8204 - proposed | substantially similar to CA AB 3994 statute except: 1. exempts beverage container holding devices 2. biodegradable/photodegradable allowable in the context of a factual statement |
| New York | AB 5547-A - proposed | bans use of the terms biodegradable, degradable, or photodegradable on plastic products (beverage holders exempted). Self-repealing if federal or state law adopts appropriate standards and products meet those standards |
| Oregon | proposed legislation | defines recyclable packages and packages made of recyclable materials |
| Pennsylvania | SB 920 - has been introduced into general assembly | gives PA DEP jurisdiction to regulate and AG jurisdiction to investigate environmental claims, bans misleading claims of environmental benefits, person responsible for labeling must maintain substantiation for the claims, requires all plastic bottles above 16 oz to identify plastic resin used |
| Rhode Island | Recycling Emblem Regulations | sets standards for recyclable, recycled, recycled content, and reusable |

Table 5.1. *continued...*

| Table 5.1. Private and Government Actions Pertaining to Environmental Marketing Regulations | | |
|--|--|---|
| | Action | Content |
| Rhode Island | H-6350-has been introduced | bans the terms biodegradable, degradable, photodegradable, and environmentally safe with plastic products. degradable plastics cannot be labeled recyclable |
| Virginia | 1990 state law | regulates the term organic |
| Wisconsin | Wisconsin Statutes, Chapters 100,295 | sets and enforces definitions for degradable, recyclable, and recycled |
| Federal Government | | |
| Title XXI Organic Certification: The Organic Foods Production Act of 1990 | federal law | establishes national standards governing marketing of certain agricultural products as organically produced |
| Environmental Claims Act of 1991 (S.615, HR 1408); included in House and Senate RCRA reauthorization bills | proposed; no action taken in 102nd Congress. May or may not be reintroduced in 103rd Congress. | defines and sets standards for the terms source reduced, reusable, refillable, recyclable, has recycled content, compostable, ozone safe, friendly, or neutral, non-toxic, or otherwise beneficial to the environment; authorizes U.S. EPA in consultation with the FTC to regulate environmental terms |
| U.S. Environmental Protection Agency | Guidance for the Use of the Terms "Recycled" and "Recyclable" and the Recycling Emblem in Environmental Marketing Claims EPA/OSW-FR-91-032 Notice of Public Meeting and Request for Comments; proposed definitions | defines home scrap, postconsumer, preconsumer, recycled materials, recyclables, recycled content, recycle, recycling rate |
| Federal Trade Commission | Hearings on Environmental Marketing and Advertising Guides - Washington, DC, July 17-18, 1991 | heard testimony to determine if and in what form the FTC should establish federal guidelines governing environmental marketing |
| U.S. Environmental Protection Agency | Public Meeting on Guidance for the Use of the Terms "Recycled" and "Recyclable" and the Recycling Emblem in Environmental Marketing - Washington, DC, November 13-14, 1991 | heard testimony on the meaning and use of these terms |
| U.S. Environmental Protection Agency | "Protection of stratospheric ozone," May 4, 1992. Notice of Proposed Rule | rule would require warning labels on consumer products containing or manufactured with class I and II ozone depleting substances. |

Table 5.1, *continued*...

| Table 5.1. Private and Government Actions Pertaining to Environmental Marketing Regulations | | |
|---|---|--|
| | Action | Content |
| U.S. Federal Trade Commission | Environmental Marketing Guidelines, July 28, 1992 | voluntary guidelines suggesting usage for general environmental benefit claims, photo- and biodegradable, compostable, recyclable, recycled content, source reduction, refillable, ozone safe and ozone friendly |

To date, all the proposals seeking to define or regulate environmental marketing claims contain the assumption that the use of environmental claims by marketers is voluntary. Marketers choosing not to make environmental claims would not be affected by the standards or guidelines; only those marketers that use environmental claims would be encouraged or required to follow national guidelines or regulations. This differs from mandatory negative labeling (e.g., health advisories on cigarettes), where marketers do not have the choice of whether or not to use the label. While California and Vermont have mandatory negative environmental labeling programs, and EPA has proposed a warning label for products made with or containing ozone-depleting substances, all the proposals discussed in this report involve voluntary labeling of positive environmental attributes by marketers.

Most of the environmental terms defined in regulations and proposals involve either general, vague terms such as *environmentally friendly*, or terms associated with solid waste management such as *source reduced* or *recycled*. (36) Terms dealing with other important environmental issues, such as biodiversity, resource conservation, and climate change, are notably underrepresented in the current debate.

Using the marketplace effectively to promote positive environmental change requires that environmental claims accurately reflect both the impact of the products being sold, and the particular policy goals being supported by scientific research and by society. (36) Market-driven environmental policies depend on the knowledge and awareness of environmental issues by consumers. When consumers are misled by false advertising, environmental policy goals driven by those concerns are undermined. In order to effectively use the marketplace as an environmental policy tool, marketing terms must reflect, if not promote, established environmental policy goals. (36)

5.1.1 State and Private Actions

State actions pertaining to environmental marketing have focused mainly on three areas: measures that prohibit unfair and deceptive advertising of environmental claims, legislation that restricts advertising of the recyclability of plastics; and bills and regulations that permit the

establishment of environmental logo programs. (144) Consumer and environmental groups have focused both on truth-in-advertising issues and the establishment of minimum standards for the use of certain terms. For the most part, they have rallied behind the recommendations outlined in the *Green Report II*, issued by a task force of state Attorneys General. Industry groups have focused mainly on guidelines for truth-in-advertising, and have been strong in their support of the National Food Processors Association (94) petition to the FTC. Industry groups are among the strongest supporters of the new FTC guidelines. A representative for the Grocery Manufacturers of America said, "We hope everyone — the states, the Congress and environmental organizations — will follow FTC's approach." (79)

While the various proposed state and private actions differ in their specifics, there has been near-universal consensus that the *status quo* has created unacceptable problems in the marketplace and that there was a need for definitive federal guidelines governing the use of environmental terms in advertising. (25,49,62,61,67,69,70,80,94,114,128,147) Prior to the FTC guidelines, individual states enacted a sometimes conflicting array of regulations defining and restricting different terms (see Table 5.1). Early reaction to FTC guidelines range from calling them "a good first step" (125) to saying that they will "have a profound impact on industry practices" and will "form a basis for a uniform, national regulatory scheme for environmental marketing" (79).

A common assumption contained in the regulations and proposals mentioned above is that consumers benefit from clear, complete, and truthful claims, and are harmed when producers make vague or deceptive claims about the environmental attributes of their products. (117) Consumer and environmental groups have expressed concern that without federal standards, consumers are not adequately protected from false or misleading advertising. Conversely, national marketers have complained that the "patchwork" of state regulations has become enormously expensive, making compliance difficult. (69,114,147) They argue that this situation both hurts interstate commerce and interferes with truthful, consistent communication of real environmental benefits to consumers. (69,94,111) The FTC hopes that standardized national guidelines will both assure consumers of consistent, truthful information, and will allow marketers to take credit for real environmental improvements without the fear of being sued.

5.1.2 Truth-in-Advertising Versus Environmental Policy

There are several possible approaches for national guidelines on environmental marketing. One approach promoted by many industry groups is that any national guidelines should be voluntary and should promote truth in advertising. (17,20,48,69,70,80,91,94,112,115,129) The other approach, commonly advocated by consumer and environmental groups and some state agencies, is that environmental labeling should not only be truthful, but can and should be used as an effective environmental policy tool to promote products that have fewer adverse impacts on the environment. (1,5,7,24,36,56,92,93,114,133, 147)

The industry view was expressed by Juanita Duggan of the National Food Processors Association. "The purpose of regulating environmental marketing claims is not to establish detailed environmental policy through minimum standards for product performance, but to encourage truthful consumer communications." (97)

Proponents of voluntary guidelines argue that national guidelines coupled with industry self-regulation are sufficient to allow manufacturers to receive credit for their actions without confusing or misleading consumers. (61,91,94) Common definitions of terms would increase consumers' understanding of the attributes being promoted, and would reduce the complexity of the marketplace facing manufacturers and marketers. (17,44,69,93) Several groups have expressed concern that legislated definitions or minimum standards for environmental marketing terms would stifle their use by industry. Such groups argue that by decreasing the amount of useful information reaching consumers, overly-strict definitions can be in themselves undesirable. (5,44,48,69,111) Also, guidelines should not mandate certain materials or processes over others, but should allow industry the flexibility for innovation. (5,70,112,97) The FTC guidelines in Appendix 4 are the first comprehensive action at the federal level to address these issues.

Advocates of strong governmental regulation of environmental advertising agree with the FTC petitioners that a primary reason for standardizing the use of environmental terms is to prevent consumer deception, but they also want to see regulations go beyond truth-in-advertising laws. (36,39,35,114,147). In response to the FTC guidelines, Richard Denison of the Environmental Defense Fund said, "The FTC has gone as far as it can go to make sure claims are truthful, but they have not ensured that the claims will deliver real benefits." (125) As an example, he noted that the guidelines would allow a paper company to claim that its products are degradable in a municipal composting program if it discloses the limited availability of such programs in the U.S., "but city composting programs serve only 1 percent of the nation's population, so the benefit is trivial for the majority of people."

Advocates for greater government involvement argue that environmental claims inherently affect environmental policy by affecting consumer purchasing decisions, and should therefore be allowed only on products that have meaningful environmental benefits. (1,36,56,92,133,147) They also point out that misleading or deceptive claims not only harm consumers, they can undermine broader environmental policy goals, such as encouraging recycling and responsible solid waste management. (5,7,24,36,56,93,147)

Those seeking to advance environmental policy through federal regulation of environmental marketing claims advocate that guidelines for the use of environmental claims should be defined in a way that expresses specific policy goals set by the federal government. Such definitions would not only require claims to be factual but would also require them to be desirable according to federal environmental policy. By doing so, they argue, environmental claims would more actively steer consumers toward products with a lower adverse environmental impact and would provide stronger incentives to manufacturers to improve industrial practices and advance environmental goals. (36,35,56,93,100)

The FTC guideline for *photodegradable* claims for "commercial agricultural plastic mulch film" (see Appendix 4) can be used to illustrate the difference between guidelines designed to promote truth in advertising and those designed to promote environmental policy. The claim for the product is that it "will break down into small pieces if left uncovered in sunlight." "Because the claim is qualified to indicate the limited extent of breakdown" it would not be considered a deceptive claim by the FTC. However, the plastic does not break down into soil or humus, but rather into very small pieces of plastic (after technical bonds of certain resins are altered by exposure to ultraviolet radiation). One problem with the FTC guideline for *photodegradability*, as noted in the *Green Report II*, is that "[photo]degradability claims may send the message that it is all right to litter such products." (62) FTC's guideline does not pass judgment on the merit of plastic photodegradability, allowing a claim that, while true, is arguably not always beneficial.

Enforcement actions of the FTC are not limited to what is presented in the guides. FTC will continue to determine if claims are false or misleading on a case by case basis, under the authority of the FTC Act. The guides do state that "Marketers should avoid implications of significant environmental benefit if the benefit is in fact negligible." (See Section F3 in Appendix 4.) What is considered a "significant" or "negligible" benefit will be determined as cases arise.

Some states, such as New York, have existing and proposed laws mandating that products or packages claiming recycled content must contain a minimum percentage of recycled material, or must disclose the source of recycled material (pre- or post-consumer). Andrea Levine, an assistant attorney general for New York, has indicated that the state may still enforce its law on environmental marketing claims, even though the FTC does not mention the use of minimum standards in their guidelines.(53)

5.1.3 The Role of the Federal Government

Most groups involved in environmental marketing issues agreed that initial federal actions should include guidelines for environmental marketing, largely because they are more easily and quickly developed and guidance was needed as soon as possible. (48,62) Many industry groups preferred industry self-regulation, and argued that federal regulations would stifle change. (48,114) One group suggested that the FTC issue short-term guidelines, to be evaluated in two years to decide if further action is needed. (128) More sophisticated guidelines or regulations could be promulgated later to more closely reflect environmental policy goals and technological advances as the government gains experience in the area of environmental advertising. (69) As issued, the FTC guidelines will be reevaluated in three years.

Which federal agency should govern the use of environmental marketing terms has also been debated. Industry groups tended to favor guidance coming from the FTC, arguing that the FTC has the most experience with trade and advertising issues. (6,91,129) The National Association of Attorneys General and the National Association of Consumer Agency

Administrators issued resolutions calling for FTC guidelines. (149) Consumer, environmental, and state groups tended to favor regulation by the U.S. EPA, arguing that they have the most experience dealing with environmental policy. (1,36) Consumer, state and environmental groups have strongly favored retention of states' authority to regulate environmental claims expecting states to adopt stricter definitions. This view reflects the fact that state and local governments have primary responsibility for dealing with solid waste, the focus of many of those claims. (36)

In addition, several groups suggested that the U.S. EPA and FTC work together to regulate environmental labeling, much in the same way as the FTC and the Food and Drug Administration work together to regulate nutritional labeling. (36,35,100) This approach would have the FTC enforce truth-in-advertising issues and publish guidelines for compliance; and the U.S. EPA develop definitions and promulgate regulations (if necessary). (36) The Environmental Marketing Claims Act, included in the Resource Conservation and Recovery Act (RCRA) reauthorization bill, would direct the U.S. EPA to promulgate regulations. (134) No action was taken on this bill in 1992; it may or may not be reintroduced in 1993. The FTC guidelines were developed in cooperation with the U.S. EPA and the U.S. Office of Consumer Affairs.

5.1.4 Other Forms of Environmental Marketing

In addition to environmental marketing terms, environmental labeling activities in the U.S. include certain logos and emblems that denote environmental attributes. One logo used nationwide is the Society of Plastics Industries (SPI) chasing arrows logo with numbers identifying the resin(s) used in plastic products. Over thirty states now require certain forms of plastic to carry the logo to facilitate recycling. In addition, glass bottlers have recently begun to use a modified recycling symbol with the words *Glass Recycles*.

Some states, such as Rhode Island and New York, have begun to require the use of a chasing arrows recycling logo, based on the American Paper Institute (API) symbol, to indicate that a product or package passes minimum state requirements for recyclability, recycled content, or reusability. A proposed Massachusetts law would use a similar logo to indicate that a product has passed standards for nonwasteful packaging. (87) The Environmental Protection Agency is currently considering issuing guidelines for the use of this emblem to indicate either recyclability or recycled content. In addition, the Institute for Local Self Reliance has developed a 4-star rating system for products and packaging, based on the use of recycled material. (146)

California, Vermont, and Seattle, Washington, have mandatory negative labeling programs. California requires warning labels to be placed on all consumer products containing known carcinogens or teratogens, as identified by the Governor's Scientific Advisory Committee. The program has directly caused several manufacturers to reformulate their products to avoid the label. Vermont's program identifies household product groups containing hazardous chemicals, and requires retailers to identify the products as hazardous with shelf labels. Products that fall under these categories but are not hazardous are labeled with exemption

stickers. Seattle's wastewater agency, Metro, has started a labeling program to help identify and reduce household sources of hazardous materials in non-industrial wastewater. Along with the Washington Toxics Coalition, Metro is evaluating the near-and long-term toxicity, flammability, and environmental hazards of specific consumer products. Metro then assigns a color-coded label: green for the least risk to the environment, yellow and red for progressively greater impact, and black for products with the greatest risk. The results are printed on fact sheets for local merchants to distribute to consumers. To date, 250 products have been rated, including household cleaners, laundry detergents, art and hobby markers, pesticides, and lighter fluids. The effect of this information on product formulations and consumer buying habits has not yet been ascertained. (58)

5.1.5 Eco-labeling Programs and Life Cycle Assessment

For the most part, the environmental labeling discussion in the United States has focused on defining environmental terms. Regulation of environmental labeling in other countries has taken a different approach, that of the eco-label. Eco-label programs seek to certify and label products that have met a set of minimum environmental standards based on an assessment of a product's environmental impacts. (85) The goals of such programs include: (a) providing science-based information for consumers and policymakers on the environmental impact of competing products; (b) stimulating investment in improved environmental policies and practices; and (c) shifting the marketplace to favor the least damaging products and practices. (60,140)

Germany, Canada, Japan, the European Community, the Nordic Council, and Australia have developed environmental seal-of-approval programs that identify products judged to be more environmentally benign than other products in their categories. (122) Other countries are in the process of developing similar programs. Typically, these programs (with the exception of Japan) have attempted to rate products on the basis of modified life cycle assessments (LCAs), which attempt to characterize the "cradle to grave" environmental impacts of a product. These impacts, from raw materials and energy consumption to pollutant releases and waste generation, are assessed as a product's development is tracked from a raw material through its production, use, and eventual reuse or disposal. Products within a certain product category are then ranked according to specific criteria that relate to the life cycle assessment. These criteria may include impacts such as resource use, toxic production, recyclability, durability, and energy efficiency. To minimize the research required for the abbreviated LCAs, however, products are generally ranked on the basis of only one or a few defining criteria, rather than on the basis of impacts from their entire life cycle. (122) Products meeting criteria thresholds are allowed to license the eco-label for a certain period of time, usually two or three years.

By the end of 1992, twenty-two countries are expected to be using some sort of government environmental seal-of-approval. However, eco-labels have yet to gain wide acceptance in the U.S. marketplace, at least in part due to the controversy surrounding life cycle assessment. (122) Groups have criticized the lack of recognized currency for comparing different environmental impacts (e.g., energy use versus toxics production) that can make life cycle assessment highly susceptible to subjective judgments. (34,140) In addition, corporations

have misused life cycle assessments to make comparative marketing claims by highlighting only those parameters that make their product look superior. (124) However, overseas labeling programs have begun to converge around a set of standardized methodologies that decreases the subjectivity of the life cycle assessment while retaining its multi-criteria approach.

The continued criticism in the United States in contrast to the acceptance of eco-label programs in other countries may be related to the fact that other countries each have a single governmental program, while two privately-run eco-labeling programs compete in the U.S. Green Seal and Scientific Certification Systems (SCS), formerly Green Cross, have both embraced a long term goal of developing eco-label programs based on life cycle assessments. In the short term, the two private organizations have adopted and are applying — though, in a slightly differing fashion — a streamlined life cycle inventory²⁷ approach for their programs. Green Seal is applying the life cycle inventory as a basis for a standards setting program which is followed by the majority of overseas governmental eco-labeling programs. Scientific Certification Systems, on the other hand, is using the life cycle inventory information to launch its "Environmental Report Card" program, which has been likened by SCS to the food nutritional labels. In addition to SCS and Green Seal, the California EPA is considering an eco-label program.

5.2 DEFINITIONS OF ENVIRONMENTAL MARKETING TERMS

To date, the major form of environmental advertising regulation in the United States has been that of defining the terms that can be used on product labels and in advertising campaigns. The broad range of strictness and the specificity of definitions proposed by different groups reflect their differing views on the role of environmental advertising. Proposed approaches to defining environmental terms vary in their specificity as well as in their ability to promote environmental policy goals. The analytic framework of this report considers three different definition types as they are used by regulators, marketers, and consumers. These types are demonstrated below, using differing definitions of the term *recyclable*:

Theoretical: not technically false, but does not define context in which attribute is true

EXAMPLE: RECYCLABLE: capable of being recycled — commercially practiced technology exists to recycle the material.

Contextual: defines both the attribute and the context in which the attribute is true

EXAMPLE: RECYCLABLE: an infrastructure exists and is available to the consumer to accomplish the above objective.

²⁷Life cycle inventory involves a systematic quantification of material inputs and outputs resulting from raw materials acquisition, manufacture, use, and ultimate disposal.

Policy Forming: sets minimum goals or standards that the product or package must meet in order for the term to be used

EXAMPLE: RECYCLABLE: an infrastructure is available to 75 percent of the population or a recycling rate of 50 percent has been achieved on a national basis within a material category.

The range of opinion on how context-dependent terms such as *recyclable* and *compostable* should be defined is notably broader, due to the inherent ambiguity of the terms. Several groups have argued that context-dependent terms should not be used on a national scale because they are dependent on local conditions. (36,38) Rather, these terms might be restricted to store shelf labeling, to correspond with the local solid waste management infrastructure. (107) Another possibility for using context-specific terms on a national scale would be to adopt a labeling scheme, as is currently being used in states with returnable bottles and cans. Products claiming recyclability, for example, would be required to label the states (or areas) in which adequate recycling infrastructures and collection systems exist to recycle that material.

The Federal Trade Commission (FTC) held a two-day public hearing in July 1991 to hear comments on the use and possible regulation of environmental labeling terms. They identified the following terms as being currently used in environmental marketing: *degradable* (biodegradable, photodegradable), *compostable*, *recyclable*, *recycled* (recycled content, contains recycled materials), *source reduction*, *ozone safe/ozone friendly*, *refillable/reusable*, *landfill safe/safe for incineration*, and *environmentally safe/environmentally friendly*. (36) All of these terms, except for *landfill safe/safe for incineration*, have been given specific meanings by state and regional organizations, and/or by consumer, environmental, and industry groups. The U.S. Environmental Protection Agency has proposed draft voluntary guidelines for two terms, *recyclable* and *recycled*, as well as for the use of the American Paper Institute (API) chasing arrows recycling emblem (140).

A year later, on July 28, 1992, the FTC released environmental marketing guidelines for all of the above terms except *landfill safe/safe for incineration*. These guidelines, it was pointed out, "are the most specific directions the Government has ever issued on what is and what is not a misleading environmental advertising claim." (125) Though FTC guidelines "do not rigidly define environmental terms" (41), the examples presented to illustrate appropriate uses for the terms constitute a type of definition. In drafting these guidelines, FTC relied on testimony from the public hearing, as well as such sources as *Green Report II*, petitions for environmental marketing guidelines from various groups, state laws and industry definitions, and direct input from EPA and the U.S. Office of Consumer Affairs.

In addition to the terms identified by the FTC, other environmental terms have been defined by various government and private proposals. Regulations, guidelines and certification programs involving environmental marketing claims include terms specific to recycling (especially paper recycling), *toxicity*, *energy efficiency*, *organic*, and *synthetic*, as well as variations on several of these terms. The following sections catalog the environmental terms

defined in existing or proposed guidelines and regulations. These terms are discussed in the text; proposed definitions of each term or group of terms are listed in Appendix 2. A complete list of groups included in this analysis is included in Appendix 3. Terms are discussed in the following order:

- 5.2.1 General Guidelines
- 5.2.2 General Terms
- 5.2.3 Manufacturing/Production Process Terms
- 5.2.4 Ozone Related Terms
- 5.2.5 Source Reduction
- 5.2.6 Solid Waste Management Terms
 - 5.2.6.1 Reuse/Refill
 - 5.2.6.2 Recycling terms
 - 5.2.6.3 Disposable
 - 5.2.6.4 Compostable
 - 5.2.6.5 Degradable

Tables are included for those terms that have been subject to wide debate to indicate the range of definitions that have been proposed for each term.

5.2.1 General Guidelines

As a journalist for *Advertising Age* contends, "Environmental advertising is a powerful tool, and done correctly, it can both educate consumers and bolster sales. Done improperly, it can lead to lawsuits, government investigations and boycotts." (3) Both consumer advocates and marketers have proposed general guidelines that attempt to delineate the legitimate uses of environmental marketing terms. Over 40 separate citizen, industry, state, regional, and federal groups had made formal proposals or actions between 1990 and the middle of 1992 (see Table 5.1).

Two documents that were influential in the composition of FTC guidelines were the *Green Report II* and the National Food Processors Association petition to the FTC. Both written in 1991, they represent the spectrum of views on regulating environmental terms in advertising. The NFPA petition advocates voluntary guidelines and industry self-regulation to promote truth-in-advertising. It attempts to provide "safe harbors" for manufacturers to be able to make environmental claims without fear of being sued. The *Green Report II* takes a more rigorous and proactive approach, seeking to prevent marketers from profiting from environmental claims that do not represent real environmental improvements.

The NFPA petition refers to both specific and general claims. For specific claims, it states simply that it is deceptive to misrepresent these environmental attributes, and gives specific cases of truthful and deceptive claims. Specific claims discussed by NFPA are outlined below in their respective sections. For general claims, it advocates a case-by-case approach, as is now being followed by the FTC.

FTC guidelines recommend some general principles to follow, in addition to recommendations for specific terms:

- Qualifications to claims and disclosures should be clearly stated and prominently displayed.
- Claims should be presented in a way that makes clear whether the benefit is for the product or the package.
- Marketers should not overstate the benefit of a claim, nor imply a benefit if the benefit is negligible.
- Comparisons between products should be clear and substantiated.

The *Green Report II* has five broad recommendations concerning environmental advertising: (140)

- Claims should be as specific as possible and not general, vague, incomplete or overly broad.
- Claims should be substantive.
- Claims should reflect current management options in the area where the product is sold.
- Claims should be supported by competent and reliable scientific evidence.
- Claims should be clear whether they refer to the package or to the product.

In addition, the *Green Report II* makes several specific recommendations about advertising positive attributes and about seals of approval.

- Only complete and full comparisons should be made among products.
- In advertising already existing but previously unadvertised positive environmental attributes, marketers should not create the perception that the product has been recently improved or modified.
- Life cycle analyses should not be used to advertise or promote specific products until uniform methods for conducting such assessments are developed and a general consensus is reached among government, environmental, business, and consumer groups on how this type of environmental comparison can be advertised non-deceptively.
- In promoting the removal of a single or a few harmful ingredients from a product or a package, care should be taken to avoid the impression that the product is good for the environment in all respects.
- Third party certifications and seals of approval must be designed and promoted with great care, to avoid misleading the public. Certifications could give a false impression that the product is wholly beneficial for the environment. In addition, certification programs could be driven by financial incentives on the part of private, for-profit certification firms.

Scott Paper Company echoes the *Green Report II* in its own recommendations. (126) It proposes that environmental claims be made only when the statement:

- is factual;
- is consistent with reasonable external standards or accepted definitions;
- is consistent with helping to solve a recognized environmental problem; and
- reflects a complete view of environmental considerations.

In June 1992, The *Advertising Age* Environmental Marketing and Advertising Council, created by *Advertising Age* magazine, came out with a list of guidelines designed to aid marketers in making truthful, informative environmental advertising claims. The council recommended that marketers ensure that claims are "specific, factual, and reflect a thorough understanding of the environmental problems and solutions associated with the product." The council also urged marketers to produce their advertising in an environmentally responsible manner, taking the environmental impact of the materials used in the advertisement into account. Other recommendations included not overpromising the environmental benefits of a product, and encouraging consumer involvement in finding solutions to environmental problems. (3)

The Environmental Marketing Claims Act of 1991 (S.615, HR.1408), included as Section 307 of the Resource Conservation and Recovery Act (RCRA) reauthorization bill (S.976) proposed in the 102nd Congress, also proposed general guidance for environmental advertising. The bill set standards for certain common terms and mandated the U.S. EPA to regulate environmental marketing. Under this bill, the EPA would set standards and criteria for environmental marketing terms based on best available scientific knowledge and technology, and the FTC would enforce standards under the Federal Trade Commission Act. (121) The bill would require claims to:

- be substantiated on the basis of the best available scientific information;
- make a clear distinction between the product and any accompanying packaging, unless the claim applies to both;
- not compare any environmental aspects of the life cycle of products (or different versions of the same product) unless the basis for the comparison is stated in the claim; and
- not state the **absence** of a particular attribute unless the statement would:
 - i) assist consumers to make value comparisons with respect to environmental claims among products and packaging;
 - ii) disclose that the environmental claim is not an unusual characteristic of the product or package; and
 - iii) not mislead consumers in light of another environmental characteristic of the product or package. (121)

The bill also included provisions for public petitioning for new environmental marketing terms, and for conducting public information and education campaigns. (121) No action was taken on the bill in the 102nd Congress. In order to be considered by the 103rd Congress, it will have to be reintroduced.

Others have echoed the general guidelines proposed in the *Green Report II* and the NFPA petition (see Table 5.1). In general, however, these proposals were not expected to preempt federal guidelines or regulations, but rather were seen by the authors as stopgap measures in order to provide some guidance to marketers prior to federal action. (62)

5.2.2 General Terms

Of all of the environmental terms being used in advertising, general terms have come under the most widespread criticism for being vague and virtually insupportable. (35,142,115) These terms include *environmentally better*, *environmentally friendly*, *environmentally safe*, *environmentally sound*, *green*, *green product*, and *natural*. Virtually every group attempting to define terms has condemned these terms as having no inherent meaning. General claims tend to give the impression that a product has no detrimental impact on the environment, even though this is almost always false. (36,35,62,85,118). For this reason, several groups have recommended that general claims be avoided or banned entirely. (25,62,120) Those who would allow the use of general claims strongly recommend that claims are substantiated (15,72,94) and qualified. (35)

Only one of these terms, *green product*, was specifically defined. The *Green Consumer Supermarket Guide* defined the term as a product having the following attributes:

- 1) is not dangerous to the health of people or animals;
- 2) causes minimal damage to the environment during its manufacture, use, and disposal;
- 3) does not consume a disproportionate amount of energy or other resources during its manufacture, use, and disposal;
- 4) does not cause unnecessary waste, due to either excessive packaging or to a short useful life;
- 5) does not cause unnecessary cruelty to animals;
- 6) does not use materials derived from threatened species; and
- 7) ideally does not cost more than its 'ungreen' counterpart. (85)

It should be noted that with highly subjective defining attributes such as "disproportionate amount of energy," and "unnecessary waste," arguably no manufactured product could meet this definition.

Several states have existing or proposed legislation regulating or banning the use of general environmental terms. California and Indiana require marketers to make supporting documentation available to support the truthfulness of their claim. New York and Pennsylvania have introduced similar legislation. Rhode Island has banned the use of the term *environmentally safe* on plastics.

5.2.3 Manufacturing/Production Process Terms

Environmental claims involving manufacturing or production include *energy efficient*, *non-toxic*, *organic*, and *synthetic*. Since they relate to the manner in which products are grown or manufactured, they are difficult or impossible for consumers to verify independently. For this reason, these terms are particularly susceptible to deceptive marketing. For example, a consumer cannot tell merely by looking at a head of lettuce whether or not the farmer who grew it practiced crop rotation or other sustainable agriculture techniques. With the exception of the term *energy efficient*, the manufacturing or production terms defined or regulated by state and private groups all have to do with product qualities undetectable by consumers.

However, surprisingly few state and private groups address terms specifically related to manufacturing processes. *Organic* is a notable exception. The Organic Foods Production Act, passed in 1990, established national standards governing the marketing of certain agricultural products as having been organically produced. (135) The act requires farmers wishing to be certified as organic to follow specific farming techniques, including complying with an organic farming plan worked out with a certifying agent. The act also defines the term *synthetic* in the context of what can or cannot be used on agricultural crops. These standards were designed to not only protect consumers, but to ensure that farmers adhering to stringent organic farming practices benefit from their efforts. Before the Organic Foods Production Act was passed, organic certification of agricultural products in the United States was accomplished by more than 30 independent associations. (85)

Other production-related terms have not been the subject of much debate, much less regulation. *Non-toxic* has not been formally defined, but relates to the absence of toxic substances associated with the product. With virtually all manufactured products associated with some production of toxic materials, the term *non-toxic* is almost inherently deceptive. The definitions of *energy efficient* range from broadly defining products as having reduced energy consumption over conventional alternatives, to products that give maximum energy savings during use. Both of these definitions are problematic, in that they do not specify an alternative with which the product is being compared. Neither do they specify the amount of energy saved or the time period over which the savings occurred. The term *source-reduced* has come under similar criticism for involving unspecified comparisons.

5.2.4 Ozone-Related Terms

The terms *CFC-free* and *ozone-friendly*, particularly when used on aerosol sprays, have also come under attack for being deceptive. Consumer aerosols sold in the United States do not contain chlorofluorocarbons, which were banned in 1978. Although the term *CFC-free* is factually accurate when used on these aerosols, the label may give the false impression that the product formulation is new or unique.

CFC-free objectively means that a product contains no chlorofluorocarbons. *Ozone-friendly* in a strict sense could imply that the product is actually good for ozone, i.e., using more

of the product would benefit the ozone layer. It has been used synonymously with *CFC-free*, on more than one occasion, on products containing other ozone-depleting chemicals. (118) Definitions for the term range from *does not contain CFCs* to *does not contain any chemical that could deplete ozone*. Two groups underscored the point that the term does not imply "good for the environment;" one group felt that the term should not be used without further explanation (See Table 5.2).

| Table 5.2. Ozone Related Terms | | | |
|--|-----------------------|-------------------------------------|--|
| Source | Does not contain CFCs | Does not contain any ozone depleter | Does not contain ozone depleters but contents are not necessarily benign |
| California AB 3994 | | X | |
| Cosmetic, Toiletry and Fragrance Association | X | X | X |
| Green Consumer Supermarket Guide | X | | X |
| Bob Rebak, Ogilvy and Mather | X | | |
| Note: X indicates criteria is included in the definition proposed by indicated author. Marks in parentheses indicate inferred meaning of actual definition. | | | |

In response to amendments to the Clean Air Act of 1990, EPA has proposed a rule requiring warning labels on consumer products containing or manufactured with Class I and II ozone depleting substances. Section 611 of the Act does not authorize EPA to regulate marketing claims, but EPA "believes...the warning label requirement will help to alleviate some of the confusion currently surrounding claims like *ozone friendly* and *contains no CFCs* by clearly informing consumers as to which products use ozone-depleting chemicals." EPA is also considering the use of a symbol to accompany the specific warning. Suggested is a stop sign with a view of Earth inside, accompanied by "Contains [Chlorofluorocarbon-11], a substance which harms public health and environment by destroying ozone in the upper atmosphere." (145)

5.2.5. Source Reduction

Source reduction in a general sense refers to the reduction in volume, mass, or toxicity in the manufacture or use of a product or package compared to its predecessors or competition. The phrases *source reduction* or *source-reduced* have two problems that make them potentially misleading: (a) they are not terms that consumers normally use, and may therefore be misunderstood; and (b) they involve time periods, and volume or mass reductions, that are unspecified. (36,25) The *Green Report II* suggests that source reduction claims be specific, give exact percentages for the reduction, be made for only a short time after the reduction occurs, and include complete information with respect to comparisons. The NFPA petition recommends that manufacturers include both the amount reduced and the time period over which the reduction occurred. For the term to have consistent meaning to the consumer across diverse products and

manufacturers, a standardized measure of reduction (e.g., weight, volume, toxic content), as well as a limit on time allowed to make the claim, are necessary.

The broad range of definitions for *source-reduced* reflects the inherent ambiguity of the term (see Table 5.3). The least specific definition simply states that source reduction involves less packaging. The strictest definition requires that "a significant reduction has recently taken place; the product must be labeled with the percentage reduced." Most definitions pertained to reductions in packaging and product volume, mass, and/or toxicity. Suggested reductions included changing product design, size, concentration, life span, and/or component materials in order to reduce the amount of resources used and discarded. None of the definitions require a minimum reduction to have taken place.

Related terms include *no packaging*, and *reduced packaging*. *No packaging* refers to products acquired, contained, and transported in bulk. *Reduced packaging* has been defined quite specifically in a proposed Massachusetts law as "packaging verified to have been reduced by 25 percent or more compared to same product five years earlier. Packager must reduce an additional 25 percent or more within five years to remain in compliance."

Table 5.3. Source Reduction

| Source | Uses less packaging (volume or weight) | Packaging is less toxic | Uses less material that will become solid waste | Less waste/solid waste is produced | Refers to reuse and repair of products | Reduced use of materials | Reduced use of energy | Less toxic materials used in product |
|--|--|-------------------------|---|------------------------------------|--|--------------------------|-----------------------|--------------------------------------|
| American Society for the Testing of Materials | X | X | | X | | X | | X |
| Council of New England Governors | X | X | | | | | | |
| Council on Plastics and Packaging in the Environment | X | X | | X | X | | | X |
| Flexible Packaging Association | X | X | X | X | | X | | |
| Grand Rapids Label Company | X | | | | | | | |

Table 5.3. Source Reduction, continued

| Source | Uses less packaging (volume or weight) | Packaging is less toxic | Uses less material that will become solid waste | Less waste/solid waste is produced | Refers to reuse and repair of products | Reduced use of materials | Reduced use of energy | Less toxic materials used in product |
|--|--|-------------------------|---|------------------------------------|--|--------------------------|-----------------------|--------------------------------------|
| Institute of Packaging Professionals | | | | X | | X | X | |
| MA Packaging Reduction and Recycling Act | X | | | | | | | |
| National Food Processors Association | X | | | | | | | |

Note: X indicates criteria is included in the definition proposed by indicated author.
 Marks in parentheses indicate inferred meaning of actual definition.

5.2.6 Solid Waste Management Terms

Solid waste management terms make up the largest group of environmental terms used and defined in green advertising. (36) Like other environmental terms, they reflect, to varying degrees, current societal perceptions of solid waste management options. Because these claims can drive consumers to promote certain solid waste management alternatives, it is important that they reflect real solid waste management options and stated societal priorities. (36) For solid waste terms to be used non-deceptively, it must hold true that the solid waste management options advertised are both (a) available to the consumer, and (b) recognized by scientists and policy makers as beneficial. (36)

Two groups of terms, context-dependent terms, and terms relating to plastic disposal, have come under particular criticism, either for having limited real value to consumers or for claiming questionable benefits. Context-dependent terms, such as *recyclable* or *compostable*, imply that the product is technically amenable to that solid waste management option and, furthermore, that the option is available to the consumer. For example, while most packaging materials are technically recyclable, the availability of a recycling infrastructure varies widely on a local level. Because national marketers cannot respond to local variations in availability, different groups have suggested either labeling the products at the point of purchase (e.g., on the supermarket shelf, not on the package itself); requiring minimum recycling rates to be established before the term can be used, or banning the use of these terms altogether. (36,107)

Definitions covering these terms differ mainly in the extent to which the option must be available to the consumer for the claim to be true. The NFPA petition would allow claims to be made if the claim included the words *where facilities exist*. The *Green Report II* recommends

that environmental recyclability or disposability claims clearly disclose the general availability of the advertised option where the product is sold. (62)

Claims relating to plastics, particularly to their degradability, have been attacked because of their questionable performance and/or benefits. When landfilled or incinerated, they have no clear benefit over other plastics because they may not degrade in either instance. When combined with other plastics in recycling programs they lower the quality of the end products. When they do degrade, they turn into plastic dust, which has the potential to interfere with living organisms on the molecular level. (118) The growing consensus is that in most cases, plastic degradability is not a beneficial product quality, and therefore should not be advertised as though it were a positive environmental attribute. (36) Rhode Island and New York have introduced legislation banning the use of the term *environmentally safe* or *biodegradable* on plastics.

The ambiguity of context-dependent and technical terms relating to solid waste management has caused several groups to urge the establishment of science-based standards for these terms. (36) One group felt that claims should at least reflect, if not promote, national environmental policy goals, arguing that claims of environmental benefit that do not reflect real goals or options for solid waste management are inherently deceptive. (36,35)

Terms relating to solid waste management include *reusable*, *refillable*, *disposable*, *compostable*, and *degradable*; and recycling terms, which include a subcategory relating specifically to paper recycling. These terms are listed in detail below.

5.2.6.1 Reusable/ Refillable

Reusable and *refillable* are context-specific terms relating to the ability of a consumer to refill or reuse a product or package for its original use. Similar to other context-specific terms, the ability of a product or package to be reused or refilled is dependent not only on the inherent durability of the materials used, but also on the availability of a program allowing the package or product to be reused or refilled. While manufacturers can control the ability of a material to withstand reuse, they have less control over the availability to consumers of the infrastructure required to make this happen. Some definitions, such as those contained in the NFPA petition, require only honesty in representing the number of times a package may be refilled or reused without an adverse impact on the materials used. Other definitions specify a certain minimum number of times, usually five, that a product or package is able to be refilled or reused. (134,104,107,120)

Definitions of *reuse* or *reusable* involve using a product more than once in its original form (see Table 5.4). The loosest definition of *reusable* is a "package or material that can be reused for its original purpose or for a different purpose." This does not require that the material will in fact ever be reused. The strictest definition requires that a package is "designed to be refilled or reused for its original purpose a minimum of five times, and for which (a) a minimum of 50 percent of such packages used in Massachusetts are returned for reuse or refilling or (b) product refills designed to be put in such a packaging are sold in at least equal

numbers to sales of the original refillable package." One definition for cloth diapers requires that they be reusable at least 75 times and not include non-reusable components. Definitions range among the following requirements:

- a package or material is technically able to be reused,
- a product or package is reused at least five times,
- an available program set up by the manufacturer, distributor or retailer exists to reuse the product, and/or
- the national rate of reuse is also written on the label.

Most definitions require that the product or package is able to be reused a minimum number of times, and that a program for such reuse exists.

Refillable tends to be defined more specifically than *reusable*. Most definitions specify that *refillable* means a product or package can be refilled for the same or a substantially similar use. One definition specifies that the product must be able to be refilled for the original purpose an average of 5 times or more. Others specify that there must be a program established by a manufacturer, distributor, or retailer to refill the package or product.

| Table 5.4. Reusable/Refillable | | | | | | |
|--|--|------------------------------------|---------------------------------|--|-------------------------------|---------------------------|
| Source | Can be reused in original form for any purpose | Can be reused for original purpose | Can be reused for a new purpose | Can be refilled for similar use (containers) | Can be reused by manufacturer | Can be reused by consumer |
| Am. Society for Testing of Materials | X | (X) | (X) | X | X | X |
| Envr. Marketing Claims Act | | X | | | | |
| Flexible Packaging Assoc. | | X | X | | | |
| Grand Rapids Label Company | | X | | | | |
| MA Packaging Reduction and Recycling Act | | X | | | X | |
| Nat. Food Processors Assoc. | | X | | X | X | X |
| New York Dept. of Environmental Conservation | | | | | X | |
| Northeast Recycling Council | | | | | X | |

Table 5.4. *continued...*

| | | | | | | |
|--|---|-----|---|--|---|--|
| Oregon Dept. of Environment Quality, Wisconsin Dept. of Natural Resources | X | (X) | X | | | |
| RI Recycling Emblem Regulations | | | | | X | |
| Note: X indicates criteria is included in the definition proposed by indicated author. Marks in parentheses indicate inferred meaning of actual definition. | | | | | | |

5.2.6.2 Recycling Terms

Of all of the environmental terms used in advertising, *recyclable* and *recycled content* have received the most attention from marketers, government, and private groups. A separate set of terms has evolved pertaining to paper recycling. Recyclability claims, as mentioned before, have been criticized as being dependent on local conditions and, therefore, not useful, and may even be deceptive when used on a national scale. The debate over recycled content involves defining what types of materials qualify as recycled content, whether minimum standards should be set for recycled content, and whether the percentage recycled content must be clearly stated on the label. These issues are discussed in greater detail in the following sections on paper recycling and general recycling terms.

Paper Recycling Terms

Recycled Content

Feedstocks for recycled paper fall into two major groups: preconsumer and postconsumer material. Preconsumer material includes all paper materials, generated by paper manufacturers and intermediate users (such as printers and converters), that never reach consumers. In general, this excludes materials normally reused to make paper within the same paper mill, such as mill broke, or non-paper manufacturing wastes such as sawdust. Although preconsumer materials can contain contaminants such as inks, coatings or adhesives, they generally come to recycling mills in large homogeneous batches and are therefore easier and more economical to use as a feedstock than postconsumer materials. In contrast, postconsumer materials have reached consumers as an end-product and, following their intended use, are recovered for recycling. They can contain a heterogeneous assortment of contaminants, such as staples, rubberbands, adhesives, and inks, and are in most cases more difficult and expensive to recycle than preconsumer materials. While both types of secondary materials are technically recyclable, postconsumer materials often require more advanced processing equipment than preconsumer materials, which have been readily recycled for decades (108).

Defining paper recycling terminology involves not only communicating clearly to consumers; it directly affects the materials that will be used in the manufacture of recycled paper. A standard definition of recycled content may have greater direct impacts on the paper

industry infrastructure than definitions of other environmental terms will have in other arenas. For the paper industry to increase its use of postconsumer paper, mills using postconsumer feedstocks must realize a competitive advantage in order to justify increased processing costs. It has been argued by some that a definition that treats pre- and postconsumer recycled content equally gives no incentive to manufacturers to invest in new processing equipment to use postconsumer materials. (89,108) Treating preconsumer and postconsumer content equally would also have the effect of encouraging industry to use predominantly preconsumer materials, depressing the demand for postconsumer collected materials.

State and local governments have consistently written procurement requirements using postconsumer content standards in an attempt to stabilize markets for collected recyclables. (108) Proposed incentives to increase the use of postconsumer recycled materials include setting minimum content standards before a company can be eligible for procurement programs and, as many state and local governments have done, paying a premium for higher percentages of postconsumer recycled content paper. (108)

A second challenge with labeling recycled paper products is to communicate differences in recycled content without misleading consumers. Many of the terms used in paper recycling, such as *converting scrap*, *postconverting material*, or *preconsumer recovered material*, are potentially quite confusing to consumers. However, much of the paper used in the United States is bought not by individual consumers, but rather by purchasing agents, who could understand such terms and might benefit from added information. (108) Labeling requirements might therefore be different for products directed at consumers versus professional buyers. (108)

Related concerns in the recycled paper labeling debate involve how to measure the percentage of recycled content and what to include on the label. While there is general agreement that the percentage of recycled content should be based on weight, not volume, groups do not yet agree on the stage at which the percentage content should be measured. The percentage of recycled content can be measured in terms of the percentage of total feedstock weight, the percentage of total fiber weight (after reprocessing), or the percentage of total product weight. (50,127) The percentage of total feedstock weight yields the highest apparent percentage of recycled content, while the percentage of total product weight (including additives, such as clay, which are typically virgin materials) shows the lowest. The FTC guidelines suggest that the percentage of recycled content should be measured by "the amount, by weight, of recycled [material]...in the finished product of package." Measuring the percentage of recycled content from total product weight does not allow products with additives to achieve a recycled content of 100 percent, unless the additives are also derived from recycled materials. Requiring measurements to be taken from total product weight, therefore, has the potential to encourage recycling the non-fiber components of paper as well.²⁸ (108)

Recycled Content Sources

Table 5.5 shows the relationship between the various terms used in the manufacture of paper.

²⁸ Current economics, however, strongly favor the use of virgin materials over recycled additives.

Table 5.5. Relationship between preconsumer and postconsumer materials

| Mill Broke, Home Scrap, New Supply | RECYCLED MATERIALS | | |
|------------------------------------|--------------------------|---|---|
| | Processed Recycled Fiber | | |
| | Converting Scrap | Postconverting Materials (over-issue returns, unused stock, etc.) | Materials that have served their intended purpose (old newspapers, office waste, used cardboard, used books, etc) |
| | PRECONSUMER MATERIALS | | POSTCONSUMER MATERIALS |

Source: Table 1, Paper Definitions Working Group of the National Recycling Coalition, 1991.

Materials Not to be Included in Recycled Content

Some terms have been specifically defined as paper sources not to be included in recycled paper content. These terms include *mill broke*, *home scrap*, *new supply*, and *waste paper*. *Home scrap* or *mill broke* includes "products or by-products generated within an original manufacturing facility that the generating mill or parent company is capable of using economically in any manufacturing or converting process."²⁹ *New supply* is domestic paper production plus imports, minus exports. *Waste paper* was defined by EPA as pre- or postconsumer paper that has not been removed from the waste stream and some waste materials generated by mills. (144)

Total Recycled Fiber (Pre- and Postconsumer)

These terms apply to all paper sources included in recycled paper content, except virgin mill broke. The terms, including *processed recycled fiber*, *recovered paper materials*, *recycled fiber*, and *recycled material*, do not differ greatly, and in general combine both pre- and postconsumer recycled materials. *Processed recycled fiber* includes recovered fiber that at some point has been contaminated with inks, adhesives, or other noncellulosic materials. *Recovered paper materials* have been defined as those paper products that have been diverted for reuse or recycling and would otherwise enter the solid waste stream. Definitions for the term exclude mill broke; one definition also excludes paper waste generated and reused within the same paper company (NY DEC). Both definitions of *recycled fiber* specify that it means fiber derived from recovered paper. One states further that the fiber is processed into a feedstock or product. Finally, *recycled material* is defined as material "generated from a production process after leaving the original manufacturing facility and used in the production of a new product." The FTC guidelines define "recycled materials" as materials that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer), or after consumer use (post-consumer). (42)

²⁹ This definition is designed to promote materials that are not normally used to produce paper by not allowing mills to count materials that historically have been reused.

Preconsumer

There is more debate over what constitutes *preconsumer materials*. While groups tend to agree on what constituted different types of materials, they do not always agree on whether or not these materials should be included as recycled content. The broadest definition of *preconsumer materials* states that they are "all recovered materials excluding postconsumer recovered materials." The strictest definition designates *preconsumer materials* as those manufactured paper materials that have not reached their intended use and do not include "mill broke, rejected unused stock, obsolete inventories, butt rolls, or other paper waste generated by paper or paper product mills. Waste generated by converting operations that is used by the same parent company, whether for the same or different products, are also not included within this same definition." The broader definitions include all non-postconsumer recovered waste materials that can be made into paper, including forest residues. The stricter definitions would include only converting scrap and postconverting materials; the strictest would not allow waste reused within the same company to be called recycled material. The FTC guidelines define preconsumer material as material generated during the manufacturing process that "would otherwise have entered the solid waste stream." (42)

Related terms include industry terms such as *converting scrap*, *overissues/returns*, and *postconverting material*. *Converting scrap* is material generated in the process of converting paper to products. One definition would allow these materials to be counted towards recycled content only if they were used by a different parent company than that which produced them (NERC). *Overissues* or *returns* are finished products that do not reach the intended consumer and are returned to the producer or discarded by the distributor. *Postconverting materials*, similar to *overissues*, are products that have been converted and may have been contaminated with hard-to-reprocess materials such as inks or adhesives, but have not yet reached the consumer. The definition excludes any fiber that "can be, or is regularly, returned to the [same] pulping process (PDWG)."

Postconsumer

All groups defined *postconsumer materials* as including all paper products that have reached their intended consumers. Some definitions further dictate that the materials have been collected or diverted from the waste stream. The definitions do not vary much, indicating the consensus reached on this term. Most of the debate surrounding paper recycling terms pertains to materials recovered before they reach their end use, and not to post-consumer material. A related term is *file stock*, which means files removed from storage in offices. This paper can be contaminated with a variety of materials, including rubber bands, staples, and paper clips.

Recycled Paper Products

The debate surrounding recycled paper products includes the issue of whether or not the word *recycled* must be qualified with the percentage of pre- or postconsumer recycled content, or pertain to some minimum percentage of recycled content. The terms involved include *recycled paper*, *100 percent recycled paper*, and *recycled content paper*. *Recycled paper* in a strict sense could be considered to be synonymous with *100 percent recycled paper*. The FTC

guidelines also suggest that "[u]nqualified claims of recycled content may be made only if the entire product or package, excluding minor, incidental components, is made from recycled material." (42) However, recycled paper has also been used to mean *recycled content paper*, of which only a portion is made from recycled materials. Several definitions covering *recycled paper* and *recycled content paper*, such as those proposed by the American Society for the Testing of Materials (ASTM) and the Environmental Defense Fund (EDF), dictate that papers using those terms must also meet minimum percentages of total or postconsumer recycled fibers and label the product appropriately.

General Recycling Terms

Recycle

The term *recycle* refers to the general act of recycling. Definitions range from describing recycling as merely the activity of collecting materials to be made into new products, to defining recycling as "any process by which solid waste or secondary materials are collected, diverted from a waste stream, separated, or processed to reclaim useful materials which are used or reused as either a raw material or a product, including the adaptation of the material to a new use or function without processing, but such term does not include combustion of waste for purposes of energy recovery or volume reduction or use constituting disposal of any solid wastes or secondary material or hazardous secondary materials." (121) However, there is not nearly as much debate surrounding the term *recycle* as there is for the terms *recyclable* or *recycled content*.

Recyclable

The debate over recyclability of materials has focused on the availability of recycling collection and reprocessing facilities to the consumer buying the product. As mentioned before, the term *recyclable* has a significant potential to be ambiguous because it contains both an inherent and a contextual meaning. For a material to be realistically recyclable, it must (a) be technologically possible to be recycled into new products, and (b) be able to be returned by or collected from the consumer purchasing the product. Some definitions of recyclability also require that a minimum recycling rate for the material be achieved in order to use the term on a label. (83) Only one organization, the National Advertising Review Board (NARB), allowed *compostable* to be used synonymously with *recyclable*. (96)

Definitions of *recyclable* differ mainly in the extent to which recycling infrastructures must be available to consumers (see Table 5.6). The range of availability of an appropriate recycling infrastructure runs from zero (a material is recyclable if it is technologically possible to recycle) to 100 percent (a program that recycles the material must be available to all consumers purchasing the labeled product). The broad range of minimum availability requirements has caused confusion and difficulties for marketers. California's Assembly Bill 3994 requires that products bearing a claim of *recyclable* must be able to be "conveniently recycled" in every county with a population over 300,000. (146)

In February 1992, the Association of National Advertisers and eight other trade groups brought suit against the State of California, challenging AB 3994. On December 24, the U.S. District Court in San Francisco ruled that the definition of *recyclable* was "unconstitutionally vague." At the same time, the court upheld definitions of *ozone friendly*, *biodegradable*, *photodegradable*, and *recycled*. (148)

Those supporting the use of the word *recyclable*, even in areas where no infrastructure is available to consumers, argue that informing consumers that a material is recyclable provides an incentive for them to pressure local officials to start recycling collection programs. (48,69,142) Others argue that calling a product recyclable where no infrastructure exists is deceptive, and gives the product an undeserved environmentally beneficial image. (118) Some suggest that qualifying the term with the phrase "where facilities exist" serves to educate consumers, while avoiding the misleading image that the material is recycled everywhere. (94,112,142)

The FTC guidelines straddle the fence, stating that a *recyclable* claim should be qualified to explain which portions of a product are recyclable, and to make clear any "limited availability of recycling programs." FTC suggests language such as "Check to see if recycling facilities are available in your area" or "Recyclable in the few communities with facilities" for recycling a particular material. The FTC does not, however, require any statement of a minimum recycling rate. (See Appendix 4.)

Table 5.6. Recyclable

| Source | Transformed to another useful purpose through human intervention | Technologically possible to recycle | Facilities are available for collection of material | Has achieved a specified rate of recycling | Disclosure of the number of facilities or rate of recycling within a specified area | Claim should be banned |
|--|--|-------------------------------------|---|--|---|------------------------|
| Am. Assoc. of Advertising Agencies | | | X | | | |
| American Society for Testing of Materials | | | X | | | |
| Brenda Cude, Univ. of Illinois | | | X | | | |
| California AB 3994 (overturned) | | | X | | X | |
| Canadian Guiding Principles | | | | | X | |
| Cosmetic, Toiletry and Fragrance Association | | | X | X | | |

Table 5.6 continued...

| Table 5.6. Recyclable | | | | | | |
|--|--|-------------------------------------|---|--|---|------------------------|
| Source | Transformed to another useful purpose through human intervention | Technologically possible to recycle | Facilities are available for collection of material | Has achieved a specified rate of recycling | Disclosure of the number of facilities or rate of recycling within a specified area | Claim should be banned |
| Cosmetic, Toiletry and Fragrance Association | | | X | | | |
| Council on Plastics and Packaging in the Environment | | | X | | | |
| Dunkin Donuts | | X | | | | |
| Environmental Marketing Claims Act (proposed) | X | | | X | | |
| Environmental Defense Fund | | | X | | | X |
| Flexible Packaging Association | | X | | | | |
| Fort Howard Corporation | | | X | | | |
| Grand Rapids Label Company | | | X | | | |
| Green Report II | | | X | X | | |
| Green Cross | | X | | | | |
| Green Consumer Supermarket Guide | | | X | | | |
| Illinois SB 948 | | | X | X | X | |
| INDA: Association of Nonwoven Fabrics Industry | | X | | | | |
| Indiana State Code | | X | X | | | |
| Institute of Packaging Professionals | | | X | | | |

Table 5.6 continued...

| Table 5.6. Recyclable | | | | | | |
|---|--|-------------------------------------|---|--|---|------------------------|
| Source | Transformed to another useful purpose through human intervention | Technologically possible to recycle | Facilities are available for collection of material | Has achieved a specified rate of recycling | Disclosure of the number of facilities or rate of recycling within a specified area | Claim should be banned |
| Lever Brothers Co. | | X | | | | |
| Mass. Packaging Reduction and Recycling Act | | | | X | | |
| National Advertising Review Board | X | | | | | |
| National Food Processors Assoc. | | | X | | | |
| National Retail Federation | | | X | X | | |
| New York Department of Environmental Conservation | | | X | X | X | X |
| New Jersey Department of Consumer Affairs | | | X | | | |
| Northeast Recycling Council | | | X | X | X | |
| Paper Recycling Coalition | | | X | | | |
| Pepsi Co. | | X | | | | |
| Polystyrene Packaging Council | | X | X | | | |
| Rhode Island H-6350 | | X | | | | |
| Scott Paper Company | | | X | | | |
| Society of Plastics Industry, Inc. | | X | | | | |

Table 5.6 continued...

| Table 5.6. Recyclable | | | | | | |
|--|--|-------------------------------------|---|--|---|------------------------|
| Source | Transformed to another useful purpose through human intervention | Technologically possible to recycle | Facilities are available for collection of material | Has achieved a specified rate of recycling | Disclosure of the number of facilities or rate of recycling within a specified area | Claim should be banned |
| U.S. Environmental Protection Agency (Proposed) | | | X | | X | |
| U.S. Federal Trade Commission | | X | X | | X | |
| U.S. Office of Consumer Affairs | | | X | | | |
| Note: X indicates criteria is included in the definition proposed by indicated author. Marks in parentheses indicate inferred meaning of actual definition. | | | | | | |

Several critics have proposed banning the use of the term in environmental advertising altogether, arguing that while virtually all products are potentially recyclable, realistically the recyclability of a material is dependent on local recycling programs, which themselves inform residents what can and cannot be recycled. (38,104) Others feel that the term should be used only if recycling of the material is widespread; and then it still should be qualified by stating local availability, the national recycling rate, and/or conditions under which the material can be recycled. (6,20,24,25,38,49,62,93,102,104,127,121) The U.S. EPA held a public hearing in November 1991 to hear comments on proposed guidance for the use of the terms *recycle*, *recyclable*, and the recycling emblem. Their preference for labeling a product *recyclable* would be for marketers to use a combination of qualified claims and the disclosure of the national recycling rate of the product. Qualified claims would be those "that do not lead consumers to assume that the product is recyclable everywhere, and that provide consumers with information that helps them recycle the material." (141) They preferred this labeling format because it would be easy to implement and would improve understanding of the term. (141)

The FTC guidelines would allow recyclability claims that are qualified "to the extent necessary to avoid consumer deception about any limited availability of recycling programs" or about the technological feasibility of recycling all or part of a product or package. (42) Guidelines from the *Green Report II* and the Environmental Defense Fund would require labels to bear additional information about how consumers can learn about the local availability of recycling facilities (i.e., more than "recyclable where facilities exist"). The Canadian Guiding Principles established by the Canadian government go one step further, requiring that at least one-third of the population across Canada or in a given regional market has access to recycling facilities before the label can be used. (37,83)

The Northeast Recycling Council has proposed two possible approaches for labeling products with the term *recyclable*: (107)

- **Point of purchase:** a shelf emblem states that an approved recycling program exists for that material category in the community where the product is labeled;
- **Statewide emblems:** manufacturer must meet at least one of the following criteria in at least five NERC states that, taken together, represent at least 75 percent of the region's population:
 - 1) 75 percent of the communities or 75 percent of the population in the state have approved recycling programs for this material category;
 - 2) the material category has achieved a greater than 50 percent recycling rate statewide; or
 - 3) the brand-specific package or product has achieved a statewide recycling rate of more than 50 percent (by weight) for that product or package.

NERC's options represent a policy-setting approach, requiring the solid establishment of recycling in a region before a product may be called recyclable.

Related terms include *effectively recycled* and *recycling rate*. *Effectively recycled* is a term used in a proposed Massachusetts law that sets high, specific minimum recycling rates for materials. *Recycling rate* is defined by several groups as the percentage by weight of a product or material category that is recycled. One definition specifies that this does not include using the material as a fuel to produce heat or power.

Recycled

The term *recycled* in a broad sense means that a product or package is made of recycled materials. However, since products or packages often contain less than 100 percent recycled materials, using the term without qualifying it in some way is potentially misleading. Definitions of the term *recycled* vary from defining how to measure recycled content, to setting minimum standards for the use of the term (see Table 5.7). The strictest definitions require that a product or package contain 100 percent postconsumer recycled materials in order to use the term without qualification. The general consensus is that the unqualified term *recycled* should be replaced with the term *recycled content* accompanied by contextual information in order to avoid consumer deception. (38,85)

| Table 5.7. Recycled/Recycled Content | | | | | | |
|--|--|--|-------------------------------------|--|---|---|
| Source | No virgin material used in manufacturing | Must specify amount of recycled material | Contains only postconsumer material | Must specify amounts of pre- and postconsumer material | Contains material that would have otherwise been disposed of as solid waste | Does not contain manufacturer waste used within the same facility |
| Am. Society for the Testing of Materials | X | X | | | X | |

Table 5.7 continued.

| Table 5.7. Recycled/Recycled Content | | | | | | |
|---|--|--|-------------------------------------|--|---|---|
| Source | No virgin material used in manufacturing | Must specify amount of recycled material | Contains only postconsumer material | Must specify amounts of pre- and postconsumer material | Contains material that would have otherwise been disposed of as solid waste | Does not contain manufacturer waste used within the same facility |
| Bio Clinic | | | | | X | |
| Brenda Cude, Univ. of Illinois | | | | X | | |
| California AB 3994 | | | | X | | |
| Canada's Environmental Choice | | X | | | | |
| Cosmetic, Toiletry and Fragrance Assoc. | | X | | | | |
| Council of New England Governors | | | | | X | |
| Council on Plastics and Packaging in the Envir. | | X | | X | | |
| Environmental Marketing Claims Act (proposed) | | | X | X | X | X |
| Environmental Defense Fund | | X | | X | | |
| Flexible Packaging Assoc. | | X | | X | X | |
| Fort Howard Corp. | (X) | X | | X | | |
| Green Consumer Supermarket Guide | | X | | | X | |
| Green Report II | | | X | | | |
| <u>In Business</u> magazine | X | | | | (X) | |
| Indiana State Code | | | | X | | |
| National Food Processors Assoc. | | X | | | X | |

Table 5.7 continued...

| Table 5.7. Recycled/Recycled Content | | | | | | |
|--|--|--|-------------------------------------|--|---|---|
| Source | No virgin material used in manufacturing | Must specify amount of recycled material | Contains only postconsumer material | Must specify amounts of pre- and postconsumer material | Contains material that would have otherwise been disposed of as solid waste | Does not contain manufacturer waste used within the same facility |
| New Jersey Dept. of Consumer Affairs | | | | X | | |
| New York Dept. of Environmental Conservation | X | X | | X | X | X |
| New Hampshire | | | | X | | |
| Northeast Recycling Council | | | | X | X | |
| Paper Recycling Coalition | (X) | X | | | | |
| Paper Definitions Working Group (NRC) | | X | | | | |
| Rhode Island Recycling Emblem Regulations | | | | X | X | X |
| Scott Paper Co. | | | X | X | | |
| U.S. Environmental Protection Agency (proposed) | | X | | | (X) | X |
| U.S. Federal Trade Commission | | X | | | X | X |
| U.S. Office of Consumer Affairs | | X | | | | |
| Note: X indicates criteria is included in the definition proposed by indicated author. Marks in parentheses indicate inferred meaning of actual definition. | | | | | | |

Recycled Content

Defining *recycled content* for materials other than paper tends to be simpler because there is not as great an array of different sources of feedstock materials. Discussion focuses around what should be counted toward recycled content, how the label should be qualified, and how the percentage content should be measured. The FTC has set up guidelines for recycled content

claims. Several states, including California, Indiana, Maine, New Jersey, and Rhode Island, have established labeling requirements that marketers must follow in order to use the term. The New York DEC suggests also that the U.S. EPA require companies claiming *recycled content* to document their claims. (104)

Most groups recommend at a minimum that labels using the term *recycled content* should identify the percentage and component of the product and/or package that is made of recycled materials. (20,24,37,49,94,141,142) The FTC guidelines advise that "[u]nqualified claims of recycled content may be made only if the entire product or package, excluding minor, incidental components, is made from recycled material." For products not entirely made of recycled material, the FTC guidelines suggest that the claims "should be adequately qualified to avoid consumer deception about the amount, by weight, of recycled content in the finished product or package." Others would further require listing separate percentages for total and postconsumer recycled materials (see paper recycling discussion). (25,38,107,109,120,121) Still others, such as the state Attorneys General in the *Green Report II*, would allow only postconsumer materials to be referred to as recycled materials, with preconsumer materials referred to by some other term, such as reprocessed or recovered materials. (134,62,127) Again, however, without consumer education, a multiplicity of terms specific to recycled content has the potential to confuse the public further. (25)

As in the case of recycled paper content, groups differ on how to measure percentage recycled content. New York, Rhode Island, and the Northeast Recycling Council have established specific guidelines for determining percentage preconsumer and postconsumer recycled materials, based on annual mass balances of all feedstocks and outputs of a particular manufacturing process. (104,120) The FTC, on the other hand, prefers recycled content to be measured by weight in the finished product.

Some groups have suggested setting minimum percentages for postconsumer and/or total recycled content, below which the term may not be used. (25,102) These percentages range from 10 to 15 percent, (38) to 25 percent now, and 35 to 50 percent by the year 2000. (134,87) These standards are designed to increase the market for recycled materials, as well as ensure that the products marketed with the term represent real environmental improvements. However, minimum standards can also have the opposite effect, that is, potentially to set a *de facto* ceiling for recycled content above which marketers will have no incentive to go. (141)

At a public meeting in November 1991, EPA suggested three alternatives for labeling products or packages with the term *recycled content*:

- Marketers clearly and prominently state the percentage of recycled content (by weight) of recycled materials in the product;
- Marketers promote recycled content only when a product meets a specified minimum percentage of recycled material; or
- Marketers use a combination of the two.

EPA preferred the first option because it is less burdensome to administer than the other two, provides consumers with useful information, and does not set minimum standards (which could be considered a ceiling by marketers) for the use of the term. (141)

Materials Not to be Included in Recycled Content

Home scrap, *manufacturing scrap*, and *industrial scrap* all refer to the same types of materials; that is, scraps left over from a manufacturing process that can be (and commonly are) reused in the same or a similar process to make more product. Definitions of materials that should not be considered to be *recycled* materials range from those able to be used in the original manufacturing product to materials able to be used in a different process by the same parent company. These terms have been addressed by groups specifically to prevent manufacturers from counting these types of materials toward percentage recycled content.

Preconsumer

The main points of debate over the definition of *preconsumer material* is whether or not it excludes home scrap, and whether or not materials used for separate processes within the same parent company qualify.

Postconsumer

The characteristic that distinguishes postconsumer from preconsumer materials is the fact that postconsumer materials have reached consumers and fulfilled their intended uses.³⁰ For this reason, groups working to further recycling efforts have sought to favor postconsumer over preconsumer recycled materials, in an attempt to encourage industry investment in the necessary reprocessing facilities that would create demand for materials collected in local recycling programs. While preconsumer and postconsumer materials may not differ significantly in form (an unread versus a read magazine, for example), postconsumer materials generally reach reprocessing facilities in a more heterogeneous and contaminated condition, and are therefore more difficult and expensive to recycle. Others, particularly some in the paper industry, have argued that the distinction between pre- and postconsumer materials on the sole basis of collection point is not useful, and distinguishing between the two only adds to the cost of recycling. (49,109)

5.2.6.3 Disposable

The term *disposable* as it is used as an environmental marketing claim refers to a material's impact on the environment when discarded. The phrases *safe-for-disposal* or *landfill/incineration safe* are potentially misleading because they infer that a product's disposal

³⁰ *Postconsumer waste* is a product or package that has served its intended use and has been discarded. *Postconsumer material* is defined as material that has served its intended use and has been diverted from the waste stream for the purposes of recycling.

is environmentally benign, when virtually no products are without adverse impacts. The *Green Report II* recommends that these terms be avoided, and that labels instead disclose specific reductions in toxics use or other environmental improvements. (62) They recommend that if disposability claims are used, they should state the availability of the solid waste management option being promoted. (62)

5.2.6.4 Compostable

Compostable is another environmental term with both inherent and context-dependent meanings. As with the term *recyclable*, definitions of *compostable* reflect this ambiguity, with the range of definitions dependent on both feasibility and availability. In addition, some definitions of compostability refer to the time required and the extent to which the material will decompose. Definitions of *compostable* range from "commercially practiced technology exists to do so," to "a material that will decompose into soil-like material in less than one year under controlled biological conditions" (see Table 5.8). The RCRA Reauthorization Bill (S.976) would require compostable claims to clearly identify the national rate at which the product or packaging is recycled or composted. (121)

Use of the term is complicated further by the fact that it is understood differently by consumers and marketers. A University of Illinois study indicated that consumers understand the term only as it relates to backyard composting, while marketers use the term in association with municipal composting facilities. (25)

| Table 5.8. Compostable | | | |
|--|--|--|---|
| Source | May be composted using commercial technology | May be composted within some communities | Will degrade into humus in a limited amount of time |
| Environmental Defense Fund | | X | |
| Envr. Marketing Claims Act (proposed) | X | X | X |
| Green Consumer Supermarket Guide | | | X |
| INDA: Association of Nonwoven Fabrics Industry | X | | |
| Indiana State Code | | | X |
| MA Packaging Reduction and Recycling Act | | | X |
| Polystyrene Packaging Council | X | X | |
| Society of the Plastics Industry, Inc. | X | | |
| Note: X indicates criteria is included in the definition proposed by indicated author. Marks in parentheses indicate inferred meaning of actual definition. | | | |

The NFPA petition and FTC guidelines require disclosure in claims of the potential ability and actual feasibility of composting a material, although the NFPA would allow the less stringent phrase, "where facilities exist." (83) In addition, the FTC guidelines advise that compostable claims should be qualified to avoid consumer deception regarding: (a) the availability of municipal composting facilities to a substantial majority of customers where the product is sold, (b) the environmental benefit provided when the product is disposed of in a landfill, and (c) the possibility of composting the product in a home compost pile when in fact it cannot. (42) The *Green Report II* recommends that claims be accompanied with clear disclosures of the limited availability of the management option. (62) EDF would require disclosure of the local availability of the option, and would limit the term to instances where it is shown to be advantageous. (35) The Canadian Guiding Principles would allow the terms to be used only in the context of backyard composting. (83)

5.2.6:5 Degradable

The growing consensus among groups seeking to clarify environmental marketing terms is that *degradable* (and associated terms such as *biodegradable* and *photodegradable*) should either be limited or banned from use in environmental advertising. (83) The term has been banned or restricted by a number of states, including New York and Rhode Island, especially in the context of the degradability of plastics. The *Green Report II* would not allow the term to be used on products normally landfilled or incinerated. (25,62) Others would allow use of the term if information is included stating the circumstances under which the product degrades (27) and the extent to which the degradation products are hazardous. (35,105) The Canadian government does not allow the term to be used on packaging materials. (83) In contrast, the FTC guidelines only advise that a product with a degradable claim must "break down and return to nature, *i.e.*, decompose into elements found in nature within a reasonably short period of time after customary disposal." (42) Degradable claims need only be qualified regarding "(a) the product[s] ability to degrade in the environment where it is customarily disposed; and (b) the rate and extent of degradation." The toxicity of degradation products is not brought up as an issue in the FTC guidelines.

The debate surrounding the use of this term relates to the fact that while a material may be degradable under certain conditions, those conditions are rarely present under the most common solid waste management methods, namely, landfilling and incineration (see Table 5.9). Because the degradability of materials is irrelevant or even undesirable under current management options, use of this term to imply environmental benefits is seen by many as having a great potential for deception. (25,85)

The definition proposed in the Environmental Marketing Claims Act, considered by the 102nd Congress, would be the most specific and restrictive of the proposals to date. Products bearing the label *biodegradable*, *compostable*, *decomposable*, *degradable*, or *photodegradable* would have to meet all four of the following criteria: (134)

- Will decompose completely and safely in a waste management system or systems through natural chemical and biological processes into basic natural constituents, containing no synthetic or toxic residues, within an amount of time compatible with such system or systems;
- Will not release or produce at any time toxic or synthetic substances that may be harmful to humans, other organisms, or natural ecological processes, including during the management process and any subsequent application or use of products or by-products of the process, such as use of the product or by-product of composting as a soil amendment or mulch;
- Shall be managed, at a minimum rate of 25 percent per year until 2000, 50 percent after, in a waste management system or systems that are protective of human health and the environment, and for which the Administrator determines the claim is a relevant and environmentally desirable and significant characteristic; and
- Claim must clearly specify the applicable system or systems and specify that such claim applies only to such systems, and cannot be used where the community is not served by such a program.

Closely related to *degradable* are the terms *biodegradable*, *photodegradable*, and *decomposition*. All groups agree that biodegradability pertains to the ability of a material to be broken down into simple substances by microorganisms. Some further require that the breakdown products are non-toxic, and that the time period within which complete biodegradation takes place is short; either in one year, or quickly enough so that harmful substances do not build up in the environment. Other definitions also specify that the materials must be able to biodegrade in the most common environment where the material is disposed. This would prevent products or packages that are ordinarily disposed of in landfills or incinerators from being able to be labeled with the term. *Photodegradable* means that a material is degradable when exposed to light. Similar to *biodegradable*, several groups have specified that a photodegradable material must break down within a year in the most common environment where it is disposed. *Decomposition* is the reduction in net energy and chemical complexity of organic matter, as by microorganisms.

Table 5.9. Degradable

| Source | Able to be broken down by basic elements or microorganisms | Able to be broken down within a limited time frame | Able to be broken down in the most common place of disposal | Able to degrade into non-toxic natural constituents |
|--|--|--|---|---|
| Am. Society for the Testing of Materials | X | X | | |
| California AB 3994 | X | X | X | |
| Envr. Marketing Claims Act (proposed) | X | X | X | X |
| Green Consumer Supermarket Guide | X | X | | |

Table 5.9. *continued...*

| | | | | |
|--|---|---|---|--|
| Green Cross | X | | | |
| Indiana State Code | X | X | X | |
| Institute of Packaging Professionals | X | | X | |
| Oregon Dept. of Environmental Quality, Wisconsin Dept. of Natural Resources | X | | | |
| Bob Rehak, Ogilvy and Mather | X | | | |
| <p>Note: X indicates criteria is included in the definition proposed by indicated author. Marks in parentheses indicate inferred meaning of actual definition.</p> | | | | |

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Appendices

Appendix 1. Category Classifications from Productscan Search

| Category | MIS Product Classification |
|------------------------------------|---|
| Foods | All types of food |
| Beverages | All types of beverages, including alcoholic beverages |
| Health & Beauty | Personal hygiene, vitamins, non-prescription drugs. |
| Paper Products | Facial tissues and paper handkerchiefs Toilet tissue Paper towels; paper napkins Other paper and plastic |
| Bags | Bags |
| Laundry & Cleaners | Floor care Rug shampoos and fresheners Toilet cleaners Scouring pads Other special purpose cleaners and disinfectants Leather, suede, cleaners, etc. General purpose cleaners and disinfectants Cleaning accessories Deodorizers and air fresheners Bleach and fabric brighteners Fabric softeners and conditioners Spot removers and preventatives General purpose and special purpose laundry soaps and detergents Miscellaneous laundry products Dish soaps and detergents Heavy duty hand cleaners |
| Pet & Other Miscellaneous Items | Wood and metal care Foil products Barbecue, fireplace, and woodstove items Glues, adhesives, tapes Household maintenance and energy conservation Miscellaneous: tobacco products, stationery, gardening, automotive Pet food and other pet products |
| Insecticides & Pesticides | Insecticides and pesticides |

Appendix 2. List of Proposed Definitions for Environmental Marketing Terms

Specific definitions of environmental marketing terms are listed below in order of least to most strict and specific. Each term is discussed in Section 5.2. Abbreviations of the authors or proponents of the definitions are listed in parentheses next to each definition. A complete list of groups included in this analysis is included in Appendix 3. Definitions of terms are listed in the following order:

- I. General Terms
- II. Manufacturing/Production Process Terms
- III. Ozone Related Terms
- IV. Solid Waste Management Terms
 - A. Source Reduction
 - B. Reusable/Refillable
 - C. Recycling terms
 - D. Disposable
 - E. Compostable
 - F. Degradable

I. General Terms

ENVIRONMENTALLY BETTER

1. implies better in every way than competing products. Deceptive unless true. Must specify ways in which, and how much product is better than specific substitutes. Must specify context in which product is better (EDF)

ENVIRONMENTALLY FRIENDLY

1. environmental buzzword; environmental equivalent of oat bran. (Marketing News)
2. (also, safe for the environment) general term, implies product has no negative or adverse impact on the environment (GR II)

ENVIRONMENTALLY SAFE

1. an absolute claim that, unless backed by specifics, is so vague it is meaningless (Rehak)
2. vague, too simplistic to accurately, and perhaps truthfully, explain a product's effect on the environment (OCA)
3. untrue: nothing is safe for the environment; everything has some impact (GCSG)
4. deceptive in virtually all circumstances (EDF)

ENVIRONMENTALLY SOUND

1. illusory and problematic — it is impossible to substantiate that something is environmentally beneficial in a global sense (RF)

GREEN

1. relative term with many meanings — marketing term (GCSG)

GREEN PRODUCT

1. a product with the following attributes:
 - 1) is not dangerous to the health of people or animals
 - 2) causes minimal damage to the environment during its manufacture, use, and disposal
 - 3) does not consume a disproportionate amount of energy or other resources during its manufacture, use, and disposal
 - 4) does not cause unnecessary waste, due to either excessive packaging or to a short useful life
 - 5) does not cause unnecessary cruelty to animals
 - 6) does not use materials derived from threatened species
 - 7) ideally does not cost more than its 'ungreen' counterpart (GCSG)

NATURAL

1. widely overused and abused with little meaning. There are many natural ingredients that are extremely poisonous (e.g., lead) (GCSG)
2. no definitions/standards have been established in natural foods industry or FDA (Garbage)

II. Manufacturing and Production Related Terms

ENERGY EFFICIENT

1. products that reduce energy consumption over standard alternatives (GCSG)
2. products manufactured for maximum energy savings during use (GC)

NON-TOXIC

1. no legal definition exists: things that are not poisonous to people can be extremely poisonous to other species (GCSG)

ORGANIC

1. derived from living organisms (OR DEQ/WI DNC)

2. certified by one of about 30 private and public certification organizations with specific standards; grown without chemical pesticides and has lower impact on the environment (GCSG)
3. an agricultural product that:
 - 1) has been produced and handled without the use of synthetic chemicals
 - 2) excluding livestock, has not been produced on land to which any prohibited substances, including synthetic chemicals, have been applied during the three years immediately preceding the harvest of the agricultural products
 - 3) is produced and handled on a certified organic farm in compliance with an organic plan agreed to by the producer and handler of such product and the certifying agent (Organic Certification)
4. a processed agricultural product that contains at least 50 percent organically produced ingredients (can be prominently labeled organic to describe the organically produced ingredients) (Organic Certification)

SYNTHETIC

1. a substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral sources, except that such term shall not apply to substances created by naturally occurring biological processes (Organic Certification)

III. Ozone Related Terms

CFC-FREE

1. contains no chlorofluorocarbons. Misleading to use as an environmental label, since CFCs have been banned in aerosols since 1978 (Rehak)

OZONE FRIENDLY

1. (or any term that connotes that stratospheric ozone is not being depleted), means that any chemical or material released into the environment, as a result of the use or production of a product, will not migrate to the stratosphere and cause unnatural and accelerated deterioration of ozone. (CA AB 3994)
2. usually indicates product does not contain CFCs, but that does not make the product environmentally benign (e.g., foam cups, aerosols) (GCSG)
3. does not contain CFCs, or Class I or Class II ozone depleters — does not imply 'good for the environment' (CTFA)
4. should include explanation (CSMA)
5. also "ozone safe": a claim applied to a product that does not contain any ozone-depleting substance, i.e. substances listed as Class I or Class II chemicals in Title VI of the Clean Air Act Amendment of 1990, or others subsequently designated by EPA as ozone-depleting substances (FTC)

IV. Solid Waste Management Terms

A. Source Reduction

SOURCE REDUCTION

1. less packaging (NFPA)
2. downsizing of packaging materials not integral to a product's adequate containment, protection, preservation, marketing, and information presentation (GR)
3. the elimination of packaging or reduction of the weight, volume, and/or toxicity of packaging (CONEG, ASTM)
4. a reduction in the weight or volume of material or toxic constituents that will ultimately become solid waste. This includes the reformulation or redesign of packaging products (FPA)
5. a system that includes design, manufacturing, acquisition, and reuse of materials (including product and packaging) so as to reduce the quantity or toxicity of waste produced (ASTM)
6.
 - (a) a collection of activities and actions that lead to a reduction in the quantity and/or toxicity of municipal solid waste; a resource conservation measure
 - (b) reductions in weight, volume, changes in the use of materials, use of composite materials, changes in package or product design, bulk packaging, and materials substitution, especially replacement of toxic materials with non-toxic components
 - (c) prolonging the useful life of products by reuse, repair, and rehabilitation (COPPE)
7. an on-going materials and energy conservation process to reduce postconsumer solid waste by developing and adopting a wide variety of functional systems and techniques that minimize the use of materials and energy resources (IoPP)
8. a significant reduction has recently taken place; label with percentage (NRF)
9. a reduction in weight, volume, or toxicity of a product or package, qualified to the extent necessary to avoid consumer deception about the amount of the source reduction and about the basis for any comparison asserted (FTC)

Related Terms

NO PACKAGING

1. acquisition, containment, and transportation of content in bulk, either in no container, or in a container provided by the consumer (GR)

REDUCED PACKAGING

1. packaging verified to have been reduced by 25 percent or more compared to same product five years earlier. Packager must additionally reduce by 25 percent or more within five years to remain in compliance (MA PRRA)

B. Reusable/Refillable

REUSE

1. extend the life of an item by repairing or modifying it or by creating new uses for it, generally in its original form (OR DEQ/WI DNR)
2. the use of a product more than once in its original form (ASTM)

REUSABLE

1. any package or material that can be reused for its original purpose or for a different purpose (FPA)
2. reusing package for same product (GR)
3. product or package is reused for the original purpose of the product or package, an average of 5 times or more (EMCA)
4. there is in existence a program for: (a) the collection and return of such packages to the manufacturer for reuse in a manufacturing process or for reuse and refill without remanufacture; or (b) the later use of the package by consumers to mix, cook, use, or store product subsequently sold in another package. (NFPA)
5. original package or material is used or refilled a minimum of five times in a program established by a manufacturer, distributor, or retailer (NERC, RI RER, NY DEC)
6. for cloth diapers: must be able to endure 75+ uses and must not include non-reusable components (CEC)
7. technically possible and a significant national program exists — should also include national recycling, etc. rate for the package or product. (NRF)
8. designed to be refilled or reused for its original purpose a minimum of five times, and for which (a) a minimum of 50 percent of such packages used in MA are returned for reuse or refilling or (b) product refills designed to be put in such a packaging are sold in at least equal numbers to sales of the original refillable package. (MA PRRA)

REFILLABLE

1. able to refill package for same product (GR)
2. containers that can be returned to the economic stream unchanged (except for minor processes such as cleaning and sanitizing) after having served their packaging purpose to the consumer. Examples include drums, barrels, and several types of glass beverage bottles. (ASTM)
3. product or package is reused for the original purpose of the product or package, an average of 5 times or more (EMCA)
4. an original package which can be refilled for a substantially similar use by manufacturers or consumers for a product in a program established by the manufacturer, distributor, or retailer (NFPA,ASTM)

5. a package that is refillable, and a system that provides for (1) the collection and return of the package for refill; or (2) the later refill of the package by consumers with product subsequently sold in another package (FTC)

C. Recycling Terms

i. Paper Recycling Terms

a. Materials Not to be Included in Recycled Content

HOME SCRAP

1. products or by-products generated within an original manufacturing facility — whether or not such material is sold or traded to another facility — that the generating mill or parent company is capable of using economically in any manufacturing or converting process (PDWG)

NEW SUPPLY

1. domestic [paper] production plus imports minus exports. For many paper grades, new supply is not greatly different from production, but for newsprint, imports make up close to 60 percent of new supply (RAC)

WASTE PAPER

1. paper or paper products that have not been removed from the waste stream. Note: "waste paper" and "recovered paper" are erroneously used interchangeably (ASTM)

b. Total Recycled Fiber

PROCESSED RECYCLED FIBER

1. fiber derived from recovered paper which during or subsequent to its manufacture has been treated with, or become contaminated by noncellulosic materials such as inks, dyes, coatings, fillers, adhesives, additives, or other extraneous substances which have become connected to or are a part of the paper, including postconsumer materials as defined within RCRA Sec. 6002. (RAC)

RECOVERED PAPER MATERIALS

1. paper materials and paper by-products with known recycling potential, and which have been removed or diverted from the solid waste stream, or which have never been discarded as solid waste, and are intended for sale, use, re-use, or recycling, whether or not such materials or by-products require subsequent separation and processing, excluding the virgin content of mill

broke. [The purpose of this definition is describing those materials which, if not recovered, would otherwise enter the solid waste stream.] (ASTM)

2. paper waste generated after the completion of a papermaking process, such as postconsumer materials, envelope cuttings, bindery trimmings, printing waste butt rolls, and mill wrappers, obsolete inventories and rejected unused stock. Does not include fibrous waste generated during the manufacturing process such as fibers recovered from wastewater or trimmings from paper machine rolls (mill broke) regardless of whether such materials are used by the same or another company, and shall also not include fibrous by-products of harvesting, extractive or woodcutting processes or forest residues such as bark. Paper waste generated and reused within operation of the same parent company are excluded from this definition. (NY DEC)

RECYCLED FIBER

1. fiber derived from recovered paper from all sources except the virgin component of mill broke (RAC)
2. fiber derived from recovered paper material which is processed into product or a form usable in the manufacture of a product. (ASTM)

RECYCLED MATERIAL

1. any material generated from a production process after leaving the original manufacturing facility and used in the production of a new product.. Recycled material excludes home scrap (Note: companies that neither purchase nor produce virgin fiber to manufacture paper products are exempt from the home scrap exclusion.) Recycled material includes postconsumer and preconsumer material. [The purpose of this definition is to include only materials produced after paper has left a manufacturing mill in the definition of recycled material.] (PDWG)
2. material that has been recovered or otherwise diverted from the solid waste stream, either during manufacturing process (pre-consumer) or after consumer use (post-consumer) (FTC)

c. Preconsumer

PRECONSUMER MATERIAL

1. all recovered materials excluding postconsumer recovered materials. (ASTM)
2. manufacturing wastes like paper and paperboard waste, bag, box, and carton waste, printed paper that never reached the consumer, overruns on printing and obsolete inventories of paper, fibrous by-products and other forest residues from manufacturing or wood cutting processes and wastepaper generated by the conversion of goods made from fibrous materials (FHC)
3. includes recycled materials such as postconverting materials, clean and contaminated converting scrap, but does not include postconsumer materials (PDWG)
4. does not include mill broke, rejected unused stock, obsolete inventories, butt rolls, or other paper waste generated by paper or paper product mills. Waste generated by converting operations that are used by the same parent company whether for the same or different product are also not included within this same definition (NERC)

5. material recovered or diverted from the waste stream during manufacturing (FTC)

Related Terms

CONVERTING SCRAP

1. scrap paper generated in the process of converting paper and paperboard to products. Example include cuttings from plants making boxes and trimmings from printers of magazines, newspapers, etc. (RAC)
2. fragments or trimmings, printed or unprinted, from fabricators or printers who do not have the capability to use these materials themselves or elsewhere in the same company or parent company (PDWG)

OVER ISSUE/RETURNS

1. paper products that are not purchased/used by the intended customer, and are returned to the producer or discarded by the retailer or distributor. Includes newspapers and magazines from newsstands, unsold books, undistributed telephone books, and obsolete business forms (RAC)

POSTCONVERTING MATERIAL

1. products that have completed the converting or assembly process and that contain printing, coating, adhesives, or other difficult to reprocess materials but that have not yet reached the consumer. [Note: this includes unsold magazines, spoiled or outdated packaging, out-of-date business forms, and other preconsumer materials that are printed on or require special technology to recycle. It does not include any fiber that can be, or is regularly, returned to the pulping process (PDWG)]

d. Postconsumer

POSTCONSUMER MATERIALS

1. paper, paperboard, computer printouts, corrugated containers, newspapers, magazines, and fibrous waste from retail stores, office buildings and homes after they have passed through their end usage as a consumer item (FHC)
2. paper, after it has passed through its end use in the consumer chain, and has been removed, separated, or diverted from the solid waste stream, including recovered printed paper and deinked fiber from all sources (ASTM)
3. paper and paperboard products discarded by the ultimate consumer (RAC)
4. products generated by a consumer which have served their intended end use, and which have been separated or diverted from solid waste. Wastes generated during production of an end product are excluded. [Note: this includes wastepaper collected from offices and homes, as well as paper products that have met their end uses as business and institutional items, such as packaging materials.] (PDWG)

5. material recovered from the solid waste stream after consumer use (FTC)

Related Terms

FILE STOCK

1. files removed from storage in offices. Includes business forms, reprographic paper, manila folders, other mixed papers, and some non-paper items such as rubber bands and paper clips (RAC)

e. Recycled Paper

RECYCLED PAPER

1. the strict definition is that product containing fiber content consisting totally of recycled fiber. However, the common usage of this term refers to a product defined as "recycled content paper" (ASTM)
2. a product containing those percentages of pre- or postconsumer recycled materials required by applicable standards (outlined by PDWG). Such product or package shall be labeled as appropriate (PDWG)

100 PERCENT RECYCLED PAPER

1. no virgin pulp used in processing of that paper (In Business)
2. 100% by weight of the fiber in the finished product is recycled (FTC)

RECYCLED CONTENT PAPER

1. paper containing those percentages of recycled fiber required by applicable specifications and so labeled (ASTM)
- 2a. paper containing those percentages of pre-consumer or post-consumer recycled fiber (FTC)
- 2b. paper that comes from a source whose annual weighted average of recycled material purchased is equal to the percentage of recycled material claimed for the product (FTC)

ii. General Recycling Terms

a. Recycle

RECYCLE

1. to collect materials for reuse or use in the form of raw materials for the manufacture of new products (ASTM)

2. to collect, separate, or process and reuse or return to use in the form of raw materials or products, solid waste, or materials that would otherwise become solid waste (D10 definition as compromised) (ASTM, MA PRRA, OR DEQ/WI DNR)
3. the series of activities, including collection, separation, and processing, by which products or other material are recovered from or otherwise diverted from the solid waste stream for use in the form of raw materials in the manufacture of new products other than fuel for producing heat or power by combustion (U.S. EPA)

b. Recyclable

Definitions of *recyclable* are split into three levels of stringency: 1) technologically feasible; 2) feasible and available; and 3) feasible, available, and currently being recycled at a minimum rate.

RECYCLABLE

1) technologically possible to recycle material:

1. capable of being recycled — commercially practiced technology exists to recycle the material (SPI, INDA, GC, FPA, PPC, DD, Pepsi, LBC)
2. does not contain additives which degrade material and interfere with the recyclability of the package or product (RI H-6350)
3. materials identified as recyclable by the Department of Environmental Services (NH)
4. product is transformed to another useful purpose through a process that includes human intervention, and that is not added to the waste stream once its initial use is completed (NARB)

2) feasible and available:

1. accessible to a significant portion of the consumers who use the product (NJ DCA)
2. infrastructure exists and is available to the consumer to accomplish the above objective (ASTM, IoPP, GR, NY DEC, GCSG, PRC)
3. can be redeemed or returned at an identifiable recycling location for the purpose of transforming the material into raw substance for new, reused, or reconstituted materials (Indiana)
4. can be conveniently recycled in every county in California with a population over 300,000 people (CA AB 3994)
5. can wear the recycling emblem in at least 5 of the Northeast Recycling Council region states (ME, NH, VT, MA, CT, RI, NY, PA, NJ, DE), which represent at least 75 percent of the population of the Northeast Recycling Council region, the material can wear the recyclable emblem in Rhode Island even if it is not recyclable in Rhode Island as defined in this regulation (RI RER)
6. an infrastructure is available to 75 percent of the population or a recycling rate of 50 percent has been achieved on a national basis within a material category (NY DEC)
7. a product or package (in whole excluding minor incidental components) that can be collected, separated or otherwise recovered from the solid waste stream for use in the form of raw

materials, in the manufacture or assembly of a new package or product; claims should be qualified to the extent necessary to avoid consumer deception about any limited availability of recycling programs and collection sites (FTC)

3) feasible, available, and is already being recycled at a certain rate:

1. is currently recycled in significant amounts across the country (GR II, NRF)
2. recycled nationally; qualify with "where facilities exist" (CTFA)
3. material for which any of the following standards are met:
 1. access to community recyclable recovery programs for that material is available to no less than 75 percent of the population of the state
 2. a statewide recycling rate of 50 percent has been achieved within the material category
 3. a manufacturer, distributor, or retailer achieves a statewide recycling rate of 50 percent for the product or package sold within the state
 4. a product or package may be recyclable within the jurisdiction of a municipality where an ongoing source separation and recycling program provides the opportunity for recycling of the product or package (IL SP 948, NY DEC)
4. the material is recyclable as defined in this regulation, or the material can be returned to a person for the purposes of recycling provided that the person achieves at minimum a 50 percent recycling rate for the material. The same material not sold or distributed for sale by the person but recycled by the person may be counted towards the 50 percent recycling rate (Rhode Island)
5. product or package will be recycled at a rate of at least 25 percent by 2000, 50 percent after 2000 (EMCA)
6. material that will have achieved a recycling rate in the state of at least 35 percent before the year 2000 and 50 percent after that (MA PRRA).
7. package itself included in an effective recycling program or is made of materials that are effectively recycled in Oregon — 15 percent by 1993, 30 percent by 1996, 45 percent by 1999, 60 percent by 2002 (OR)

Related Terms

EFFECTIVELY RECYCLED

1. meets either of the following conditions:
 - 1) made of materials which are being recycled at 25 percent by 12/31/95, 35 percent by 12/31/98, and 50 percent by 12/31/01 or;
 - 2) 50 percent by weight of all such packages discarded during previous year was recycled (MA PRRA)

RECYCLING RATE

1. percentage by weight of a given product category sold or distributed for sale in the state that would otherwise be destined for the waste stream, including postconsumer and preconsumer materials, that is collected or otherwise returned for processing or refabrication into marketable end products other than fuel for producing heat or power by combustion. (NY DEC, RI RER)
2. the percentage by weight of the total production of a given product or material category that is recycled (NY DEC, U.S. EPA)

c. Recycled

RECYCLED

1. a material or product containing a specified minimum percentage by weight of secondary materials content and minimum percentage by weight of postconsumer material as described in subdivision 368.4 (a). The percentage of secondary material content shall be that portion of a package or product that is composed of secondary material as demonstrated by an annual mass balance of all feedstocks and outputs of the manufacturing process. The weight of secondary material use in any month shall be no less than 80 percent of the average monthly secondary material usage during the corresponding calendar year (NY DEC)
2. an article's contents contain at least 10 percent by weight, postconsumer material (California, IN)
3. product produced from at least 50 percent postconsumer material (NH)
4. made of 100 percent recycled materials (PRC)
5. made from substantially all recycled material, and raw material is recycled material versus virgin materials (FHC)
6. substantially all of the product is made from recycled materials. Must specify percentage by weight/volume of product that is made from recycled materials. Must label source of recycled material unless all is postconsumer (EDF)
7. product or package made from materials that have been recovered or otherwise directed from the solid waste stream, either during the manufacturing process or after consumer use (FTC)

d. Recycled Content

e. Materials Not to be Included in Recycled Content

HOME SCRAP/MANUFACTURING SCRAP/INDUSTRIAL SCRAP

1. home scrap — scrap materials, virgin content of a material, or by-products generated from, and commonly reused within, an original manufacturing process (U.S. EPA)
2. manufacturing scrap — material that has been generated as a by-product of a given process which has properties allowing it to be recycled back through the same general process (GC, NRF, NY DEC)

3. industrial scrap — industrial by-product of any kind used as a feedstock in the same or another process within the same parent company (EDF)

f. Total Recycled Content

RECYCLED CONTENT

1. percentage of material or packaging that is composed of materials that otherwise would have been thrown away (SPI)
2. percentage of material or packaging that is composed of recycled materials (NFPA, ASTM, FPA)
3. percentage of material or packaging that is composed of recycled materials by weight (GCSG)
4. percentage of material or packaging that is composed of preconsumer and postconsumer recycled materials (NY DEC, COPPE)
5. percentage of material or packaging that is composed of preconsumer and postconsumer recycled materials by weight (FPA, RI RER, U.S. EPA, FHC, SPC)

RECYCLED MATERIALS

1. materials that otherwise would have entered the solid waste stream (NFPA)
2. postconsumer and preconsumer industrial materials that otherwise would have entered the solid waste stream (BioClinic)
3. preconsumer and postconsumer materials, not home scrap/manufacturing scrap (U.S. EPA, NY DEC)
4. material that would otherwise be destined for disposal as solid waste but instead is remade into marketable end products. This includes but is not limited to material disposed of by consumers, industrial waste, overstock, or obsolete inventories from distributors, wholesalers, and other companies. This does not include materials and by-products generated from and commonly reused within the original manufacturing process (FPA, CONEG, ASTM)

SECONDARY MATERIAL/RECOVERED MATERIAL

1. any preconsumer material, postconsumer material, or any combination thereof (EMCA)
2. material recovered from or otherwise destined for the waste stream, including preconsumer material and postconsumer material but such term does not include those materials and by-products generated from and commonly reused within an original manufacturing process or separate operations within the same parent company (NY DEC)
3. materials and by-products that have been recovered or diverted from solid waste, but not including those materials and by-products generated from, and commonly reused within, an original manufacturing process (ASTM)

g. Preconsumer

PRECONSUMER

Includes home scrap:

1. any scrap diverted from the landfill before it enters the consumer waste stream (In Business)
2. reusable cleaning waste from floor created during the processing process (In Business)
3. waste material that is generated in the manufacturing process and must be reconstituted to be used again (NRF)
4. (also postindustrial) manufactured but never sold — i.e. factory floor scraps (GCSG)

Does not include home scrap, but can be used in same parent company:

5. a material generated as a by-product of a given process, which has properties significantly different from those of the original material and therefore, in its current form, cannot be recycled back through the same general process (GC, BioClinic)
6. those materials generated during any step in the production of a product and that have been recovered from or otherwise diverted from the solid waste stream for the purpose of recycling, but does not include those scrap materials, virgin content of a material, or by-products generated from, and commonly reused within, an original manufacturing process (U.S. EPA)

May not be used in the same parent company:

7. any material generated during any step in the production of an end product, but does not include any waste material or by-product that can be reused or has been normally reused within the same plant or another plant of the same parent company (107, RI)
8. waste generated through production, which cannot be returned to the same production process, used by another company to make a product similar to the original product, or used by the same parent company to manufacture a different product, and includes all wastes generated during the intermediate steps in producing an end product by succeeding companies (EMCA)
9. those materials, generated during any step in the production of a product, that have not served their end use and that have been recovered from or otherwise diverted from the solid waste stream for the purpose of recycling, and excluding those scrap materials, virgin content of a material, or by-products generated from, and commonly reused within, an original manufacturing process. Waste generated and reused within operations of the same parent company are also excluded from this definition. For example, a package that has not been purchased by a consumer as a covering for a product [even though it may have been sold to a retailer for distribution] is considered preconsumer material (NY DEC)

h. Postconsumer

POSTCONSUMER WASTE³¹

1. material or product that has served its intended use and has been discarded for disposal after passing through the hands of a final user (ASTM, BioClinic, GCSG)
2. product or packaging material discarded by an individual, commercial enterprise, or other public or private entity after having fulfilled its intended application or use (GC)

POSTCONSUMER MATERIAL

1. materials collected after satisfying their intended end use (NY DEC, In Business)
2. those products or other materials generated by a business or consumer that have served their intended end uses and that have been recovered from or otherwise diverted from the solid waste stream for the purpose of recycling (U.S. EPA)
3. products, packages, or materials generated by a business or consumer, which have served their intended end uses, and which have been separated or diverted from the waste stream for the purposes of collection, recycling, and disposition (NY DEC, ASTM, FPA)
4. those products or packages, generated by a business or consumer, which have served their intended end uses, and which have been separated or diverted from solid waste except that such term shall not include wastes generated during the production of an end product. Examples of exclusions include: printers' waste, undistributed finished products, or lathe wastes (NERC, EMCA, RI RER)

D. Disposable

No specific definitions were found for the term.

E. Compostable

COMPOSTABLE

1. commercially practiced technology exists to do so (INDA, SPI)
2. commercially practiced technology exists to compost the material — should include "where facilities exist" (PPC)
3. implies a program or facility exists, is accessible, and is economically and technically feasible within the consumer's community that will accept the product to be recycled or composted (EDF)
4. able to be turned into humus (GCSG)
5. a process of accelerated biodegradation and stabilization of organic material under controlled conditions (MA PRRA)
6. material, that will decompose into soil-like material in less than one year under controlled biological conditions (IN)

³¹ Postconsumer waste is not an environmental marketing term. However, it has been included in this analysis of terms in order to clarify the term postconsumer material.

7. a product or package that will break down into, or otherwise become part of, usable compost in a safe and timely manner; claims should be qualified to avoid deception if municipal composting facilities are not available to a substantial majority of consumers, if the claim misleads consumers about the environmental benefit provided when the product is composted, or if consumers misunderstand the claim to mean that the product can be safely composted in their home compost pile or device, when in fact it cannot (FTC)

F. Degradable

BIODEGRADABLE

1. capable of being broken down into simple substances or basic elements by microorganisms (OR DEQ/WI DNR)
2. ability of something to break down into particles small enough for bacteria to eat. This is not necessarily a good thing, as when plastic bags turn into plastic dust (Rehak)
3. capable of undergoing a natural process in which materials are broken down by the metabolic processes of living organisms, principally bacteria and fungi; primary biodegradation refers to the initial changes or simplification of organic material, whereas ultimate or secondary biodegradation refers to complete mineralization of organic material, typically to carbon dioxide and water in the presence of oxygen, or to methane and water in the absence of oxygen (ASTM)
4. breaks down completely through natural processes into harmless matter, and the rate of degradability shouldn't allow harmful substances to build up in the environment before breakdown can catch up (GC)
5. the physical and or chemical structure of a compound is able to be substantially broken down by microorganisms within a specified period of time under defined environmental exposure conditions (ASTM)
6. material has proven capability to decompose in the most common environment where the material is disposed within one year (IN)
7. material has proven capability to decompose in the most common environment where the material is disposed within one year through natural biological processes into non-toxic carbonaceous soil, water, or carbon dioxide (CA AB 3994)
8. the entire product or package will break down and decompose into elements found in nature within a reasonably short period of time after customary disposal; claims should be qualified to explain the product's ability to degrade in the environment where it is customarily disposed, and the rate and extent of degradation.

BIODEGRADABILITY

1. the capability of a physical and or chemical structure of a material to be incorporated into the environmental processes through the action of microorganisms (ASTM)
2. the rate and thoroughness with which a substance breaks down into carbon dioxide, water, and salts. Process must take place quickly enough to avoid causing harm before the biodegradation is complete (GCSG)

DEGRADABLE

1. material is technically degradable, and is disposed of under the right environmental conditions to degrade. May not be desirable or successful (IoPP)
2. currently being questioned and denounced by environmentalists, especially in regard to plastics. No consistent definition of conditions under which to measure degradability, time intervals, identity of decomposition products, determination of environmental effects exists (U.S. EPA)

PHOTODEGRADABLE

1. the primary attribute of a photodegradable material. Can be inherent in the material or imparted to the material by formulation, construction, or additive combinations (ASTM)
2. a physical or chemical structure of a material capable of being broken down in reactions precipitated, initiated, or driven by light, solely or in combination with other causative environmental factors within a specified time, under specific exposure conditions (ASTM)
3. material has proven capability to decompose in the most common environment where the material is disposed within one year (IN)
4. material has the proven capability to decompose in the most common environment where the material is disposed within one year through physical processes, such as exposure to heat and light, into non-toxic carbonaceous soil, water, or carbon dioxide (CA AB 3994)
5. product or package that will break down in a reasonably short period of time after being exposed to sunlight and into sufficiently small pieces to become part of the soil (FTC)

DECOMPOSITION

1. the reduction of the net energy level and change in chemical composition of organic matter, as by microorganisms (ASTM)

Appendix 3. List of Individuals or Organizations Proposing Definitions for Environmental Marketing Terms

The following is a list of all the individuals or organizations cited in Chapter 5 as formally proposing a definition of one or more environmental marketing terms. Abbreviations used in the text and in Appendix 3 are shown in parentheses following the author.

Consultants

Brenda Cude, University of Illinois Cooperative Extension Service (U IL)
Robert Morse, Galland, Kharasch, Morse, and Garfinkle, P.C. Washington, DC (Morse)
Reason Foundation (RF)
Bob Rehak, Ogilvy and Mather, Houston, TX (Rehak)
Andrew Stoeckle, Abt Associates (Abt)
David Swankin, Swankin and Turner, Washington DC (Swankin)

State Government

California AB 3994 — passed (CA AB 3994)
Green Report II (GR II)
Illinois SB 948 — not yet enacted (IL SP 948)
Indiana State Code §§ 24-5-17-1- > 14 — enacted (IN)
Massachusetts Packaging Reduction and Recycling Act — proposed (MA PRRA)
Minnesota Attorney General Hubert Humphrey III (MN AG)
New Hampshire (NH)
New Jersey Department of Consumer Affairs (NJ DCA)
New York City Department of Consumer Affairs (NYC DCA)
New York Department of Environmental Conservation Division of Solid Waste (NY DEC)
Oregon (OR)
Oregon DEQ, Wisconsin DNR educational materials (OR DEQ/WI DNR)
Pennsylvania SB 920 — proposed (PA)
Rhode Island H-6350 — proposed (RI H-6350)
Rhode Island Recycling Emblem Regulations — enacted (RI RER)

Federal Government

The Environmental Marketing Claims Act (S.615/HR 1408) — proposed under RCRA Reauthorization Bill (S. 976) (EMCA)
Title XXI Organic Certification: The Organic Foods Production Act of 1990 — enacted (Organic Certification)
U.S. Environmental Protection Agency (U.S. EPA)

U.S. Office of Consumer Affairs (OCA)

Canada

Canada's Environmental Choice (CEC)
Canadian Guiding Principles (CGP)

Independent Organizations

American Society for the Testing of Materials
National Advertising Review Board (NARB)
Paper Definitions Working Group of the National Recycling Coalition (PDWG)
Paper Recycling Coalition (PRC)
Recycling Advisory Council (RAC)

Magazine Articles

Garbage magazine. 2(4): 57-64 (Garbage)
In Business magazine. Nov/Dec 1990. pp. 36-8 (In Business)
Marketing News magazine. April 19, 1990. pp. 1,16 (Marketing News)
Resource Recycling magazine. 10(2): 36-40 (RR)

Not for Profit Consumer and Environmental Organizations

Environmental Action Foundation (EAF)
Environmental Defense Fund (EDF)
The Green Consumer Supermarket Guide (GCSG)
Green Cross (GC)
Green Seal (GS)
National Toxics Campaign (NTC)
Northeast Recycling Council (NERC)

Industry Members and Trade Associations

American Association of Advertising Agencies (AAAA)
American Marketing Association (AMA)
American Paper Institute (API)
Association of National Advertisers, Inc (ANA)
Chemical Specialty Manufacturers Association (CSMA)
Council on Plastics and Packaging in the Environment (COPPE)
Cosmetic, Toiletry, and Fragrance Association (CTFA)
Degradable Plastics Council (DPC)
Dunkin Donuts (DD)
Flexible Packaging Association (FPA)

Food Marketing Institute (FMI)
Fort Howard Corporation (FHC)
Fred Meyer, Inc (FM)
Grand Rapids Label Company (GR)
INDA, Association of the Nonwoven Fabrics Industry (INDA)
Independent Cosmetic Manufacturers and Distributors (ICMD)
Institute of Packaging Professionals (IoPP)
Lever Brothers Company (LBC)
National Association of Convenience Stores (NACS)
National Association of Manufacturers (NAM)
National Food Processors Association (NFPA)
National Retail Federation (NRF)
Pepsi Cola Co (Pepsi)
Polystyrene Packaging Council (PPC)
Procter and Gamble (P+G)
Scott Paper Company (SPC)
Soap and Detergent Association (SDA)
Society of the Plastics Industry, Inc. (SPI)
Sunrise Medical Bio Clinic (BioClinic)
Webster Industries (Webster)

Appendix 4: Federal Trade Commission Environmental Marketing Guidelines

GUIDES FOR THE USE OF ENVIRONMENTAL MARKETING CLAIMS

**THE APPLICATION OF SECTION 5
OF THE FEDERAL TRADE COMMISSION ACT
TO ENVIRONMENTAL ADVERTISING AND MARKETING PRACTICES**

**Federal Trade Commission
July 1992**

| | | |
|----|--|-----|
| A. | <u>STATEMENT OF PURPOSE:</u> | 167 |
| B. | <u>SCOPE OF GUIDES:</u> | 167 |
| C. | <u>STRUCTURE OF THE GUIDES:</u> | 167 |
| D. | <u>REVIEW PROCEDURE:</u> | 167 |
| E. | <u>INTERPRETATION AND SUBSTANTIATION OF ENVIRONMENTAL MARKETING CLAIMS:</u> | 168 |
| F. | <u>GENERAL PRINCIPLES:</u> | 168 |
| | 1. <i>Qualifications and Disclosures</i> | 168 |
| | 2. <i>Distinction Between Benefits of Product and Package</i> | 169 |
| | 3. <i>Overstatement of Environmental Attribute</i> | 169 |
| | 4. <i>Comparative Claims</i> | 170 |
| G. | <u>ENVIRONMENTAL MARKETING CLAIMS:</u> | 170 |
| | 1. <i>General Environmental Benefit Claims</i> | 170 |
| | 2. <i>Degradable/Biodegradable/Photodegradable</i> | 171 |
| | 3. <i>Compostable</i> | 172 |
| | 4. <i>Recyclable</i> | 173 |
| | 5. <i>Recycled Content</i> | 175 |
| | 6. <i>Source Reduction</i> | 177 |
| | 7. <i>Refillable</i> | 177 |
| | 8. <i>Ozone Safe and Ozone Friendly</i> | 178 |

A. **STATEMENT OF PURPOSE:**

These guides represent administrative interpretations of laws administered by the Federal Trade Commission for the guidance of the public in conducting its affairs in conformity with legal requirements. These guides specifically address the application of Section 5 of the FTC Act to environmental advertising and marketing practices. They provide the basis for voluntary compliance with such laws by members of industry. Conduct inconsistent with the positions articulated in these guides may result in corrective action by the Commission under Section 5 if, after investigation, the Commission has reason to believe that the behavior falls within the scope of conduct declared unlawful by the statute.

B. **SCOPE OF GUIDES:**

These guides apply to environmental claims included in labeling, advertising, promotional materials and all other forms of marketing, whether asserted directly or by implication, through words, symbols, emblems, logos, depictions, product brand names, or through any other means. The guides apply to any claim about the environmental attributes of a product or package in connection with the sale, offering for sale, or marketing of such product or package for personal, family or household use, or for commercial, institutional or industrial use.

Because the guides are not legislative rules under Section 18 of the FTC Act, they are not themselves enforceable regulations, nor do they have the force and effect of law. The guides themselves do not preempt regulation of other federal agencies or of state and local bodies governing the use of environmental marketing claims. Compliance with federal, state or local law and regulations concerning such claims, however, will not necessarily preclude Commission regulatory action under Section 5.

C. **STRUCTURE OF THE GUIDES:**

The guides are composed of general principles and specific guidance on the use of environmental claims. These general principles and specific guidance are followed by examples that generally address a single deception concern. A given claim may raise issues that are addressed under more than one example and in more than one section of the guides.

In many of the examples, one or more options are presented for qualifying a claim. These options are intended to provide a "safe harbor" for marketers who want certainty about how to make environmental claims. They do not represent the only permissible approaches to qualifying a claim. The examples do not illustrate all possible acceptable claims or disclosures that would be permissible under Section 5. In addition, some of the illustrative disclosures may be appropriate for use on labels but not in print or broadcast advertisements and vice versa. In some instances, the guides indicate within the example in what context or contexts a particular type of disclosure should be considered.

D. REVIEW PROCEDURE:

Three years after the date of adoption of these guides, the Commission will seek public comment on whether and how the guides need to be modified in light of ensuing developments.

Parties may petition the Commission to alter or amend these guides in light of substantial new evidence regarding consumer interpretation of a claim or regarding substantiation of a claim. Following review of such a petition, the Commission will take such action as it deems appropriate.

E. INTERPRETATION AND SUBSTANTIATION OF ENVIRONMENTAL MARKETING CLAIMS:

Section 5 of the FTC Act makes unlawful deceptive acts and practices in or affecting commerce. The Commission's criteria for determining whether an express or implied claim has been made are enunciated in the Commission's Policy Statement on Deception.¹ In addition, any party making an express or implied claim that presents an objective assertion about the environmental attribute of a product or package must, at the time the claim is made, possess and rely upon a reasonable basis substantiating the claim. A reasonable basis consists of competent and reliable evidence. In the context of environmental marketing claims, such substantiation will often require competent and reliable scientific evidence. For any test, analysis, research, study or other evidence to be "competent and reliable" for purposes of these guides, it must be conducted and evaluated in an objective manner by persons qualified to do so, using procedures generally accepted in the profession to yield accurate and reliable results. Further guidance on the reasonable basis standard is set forth in the Commission's 1983 Policy Statement on the Advertising Substantiation Doctrine. 49 Fed. Reg. 30,999 (1984); appended to Thompson Medical Co., 104 F.T.C. 648 (1984). These guides, therefore, attempt to preview Commission policy in a relatively new context — that of environmental claims.

F. GENERAL PRINCIPLES:

The following general principles apply to all environmental marketing claims, including, but not limited to, those described in Part G below. In addition, Part G contains specific guidance applicable to certain environmental marketing claims. Claims should comport with all relevant provisions of these guides, not simply the provision that seems most directly applicable.

1. *Qualifications and Disclosures:* The Commission traditionally has held that in order to be effective, any qualifications or disclosures such as those described in these guides should be sufficiently clear and prominent to prevent deception. Clarity of language, relative type size and proximity to the claim being qualified, and an absence of contrary claims that could undercut

¹ Cliffdale Associates, Inc., 103 F.T.C. 110, at 176, 176 n.7, n.8, Appendix, reprinting letter dated Oct. 14, 1983, from the Commission to The Honorable John D. Dingell, Chairman, Committee on Energy and Commerce, U.S. House of Representatives (1984) ("Deception Statement").

effectiveness, will maximize the likelihood that the qualifications and disclosures are appropriately clear and prominent.

2. Distinction Between Benefits of Product and Package: An environmental marketing claim should be presented in a way that makes clear whether the environmental attribute or benefit being asserted refers to the product, the product's packaging or to a portion or component of the product or packaging. In general, if the environmental attribute or benefit applies to all but minor, incidental components of a product or package, the claim need not be qualified to identify that fact. There may be exceptions to this general principle. For example, if an unqualified "recyclable" claim is made and the presence of the incidental component significantly limits the ability to recycle the product, then the claim would be deceptive.

Example 1: A box of aluminum foil is labeled with the claim "recyclable," without further elaboration. Unless the type of product, surrounding language, or other context of the phrase establishes whether the claim refers to the foil or the box, the claim is deceptive if any part of either the box or the foil, other than minor, incidental components, cannot be recycled.

Example 2: A soft drink bottle is labeled "recycled." The bottle is made entirely from recycled materials, but the bottle cap is not. Because reasonable consumers are likely to consider the bottle cap to be a minor, incidental component of the package, the claim is not deceptive. Similarly, it would not be deceptive to label a shopping bag "recycled" where the bag is made entirely of recycled material but the easily detachable handle, an incidental component, is not.

3. Overstatement of Environmental Attribute: An environmental marketing claim should not be presented in a manner that overstates the environmental attribute or benefit, expressly or by implication. Marketers should avoid implications of significant environmental benefits if the benefit is in fact negligible.

Example 1: A package is labeled, "50% more recycled content than before." The manufacturer increased the recycled content of its package from 2 percent recycled material to 3 percent recycled material. Although the claim is technically true, it is likely to convey the false impression that the advertiser has increased significantly the use of recycled material.

Example 2: A trash bag is labeled "recyclable" without qualification. Because trash bags will ordinarily not be separated out from other trash at the landfill or incinerator for recycling, they are highly unlikely to be used again for any purpose. Even if the bag is technically capable of being recycled, the claim is deceptive since it asserts an environmental benefit where no significant or meaningful benefit exists.

Example 3: A paper grocery sack is labeled "reusable." The sack can be brought back to the store and reused for carrying groceries but will fall apart after two or three reuses, on average. Because reasonable consumers are unlikely to assume that a paper grocery sack is durable, the unqualified claim does not overstate the environmental benefit conveyed to

consumers. The claim is not deceptive and does not need to be qualified to indicate the limited reuse of the sack.

4. Comparative Claims: Environmental marketing claims that include a comparative statement should be presented in a manner that makes the basis for the comparison sufficiently clear to avoid consumer deception. In addition, the advertiser should be able to substantiate the comparison.

Example 1: An advertiser notes that its shampoo bottle contains "20% more recycled content." The claim in its context is ambiguous. Depending on contextual factors, it could be a comparison either to the advertiser's immediately preceding product or to a competitor's product. The advertiser should clarify the claim to make the basis for comparison clear, for example, by saying "20% more recycled content than our previous package." Otherwise, the advertiser should be prepared to substantiate whatever comparison is conveyed to reasonable consumers.

Example 2: An advertiser claims that "our plastic diaper liner has the most recycled content." The advertised diaper does have more recycled content, calculated as a percentage of weight, than any other on the market, although it is still well under 100% recycled. Provided the recycled content and the comparative difference between the product and those of competitors are significant and provided the specific comparison can be substantiated, the claim is not deceptive.

Example 3: An ad claims that the advertiser's packaging creates "less waste than the leading national brand." The advertiser's source reduction was implemented sometime ago and is supported by a calculation comparing the relative solid waste contributions of the two packages. The advertiser should be able to substantiate that the comparison remains accurate.

G. ENVIRONMENTAL MARKETING CLAIMS:

Guidance about the use of environmental marketing claims is set forth below. Each guide is followed by several examples that illustrate, but do not provide an exhaustive list of, claims that do and do not comport with the guides. In each case, the general principles set forth in Part F above should also be followed.²

1. General Environmental Benefit Claims: It is deceptive to misrepresent, directly or by implication, that a product or package offers a general environmental benefit. Unqualified general claims of environmental benefit are difficult to interpret, and depending on their context, may convey a wide range of meanings to consumers. In many cases, such claims may convey that the product or package has specific and far-reaching environmental benefits. As explained in the Commission's Ad Substantiation Statement, every express and material, implied claim that

² These guides do not address claims based on a "lifecycle" theory of environmental benefit. Such analyses are still in their infancy and thus the Commission lacks sufficient information on which to base guidance at this time.

the general assertion conveys to reasonable consumers about an objective quality, feature or attribute of a product must be substantiated. Unless this substantiation duty can be met, broad environmental claims should either be avoided or qualified, as necessary, to prevent deception about the specific nature of the environmental benefit being asserted.

Example 1: A brand name like "Eco-Safe" would be deceptive if, in the context of the product so named, it leads consumers to believe that the product has environmental benefits which cannot be substantiated by the manufacturer. The claim would not be deceptive if "Eco-Safe" were followed by clear and prominent qualifying language limiting the safety representation to a particular product attribute for which it could be substantiated, and provided that no other deceptive implications were created by the context.

Example 2: A product wrapper is printed with the claim "Environmentally Friendly." Textual comments on the wrapper explain that the wrapper is "Environmentally Friendly because it was not chlorine bleached, a process that has been shown to create harmful substances." The wrapper was, in fact, not bleached with chlorine. However, the production of the wrapper now creates and releases to the environment significant quantities of other harmful substances. Since consumers are likely to interpret the "Environmentally Friendly" claim, in combination with the textual explanation, to mean that no significant harmful substances are currently released to the environment, the "Environmentally Friendly" claim would be deceptive.

Example 3: A pump spray product is labeled "environmentally safe." Most of the product's active ingredients consist of volatile organic compounds (VOCs) that may cause smog by contributing to ground-level ozone formation. The claim is deceptive because, absent further qualification, it is likely to convey to consumers that use of the product will not result in air pollution or other harm to the environment.

2. Degradable/Biodegradable/Photodegradable: It is deceptive to misrepresent, directly or by implication, that a product or package is degradable, biodegradable or photodegradable. An unqualified claim that a product or package is degradable, biodegradable or photodegradable should be substantiated by competent and reliable scientific evidence that the entire product or package will completely break down and return to nature, *i.e.*, decompose into elements found in nature within a reasonably short period of time after customary disposal.

Claims of degradability, biodegradability or photodegradability should be qualified to the extent necessary to avoid consumer deception about: (a) the product or package's ability to degrade in the environment where it is customarily disposed; and (b) the rate and extent of degradation.

Example 1: A trash bag is marketed as "degradable," with no qualification or other disclosure. The marketer relies on soil burial tests to show that the product will decompose in the presence of water and oxygen. The trash bags are customarily disposed of in incineration facilities or at sanitary landfills that are managed in a way that inhibits degradation by minimizing moisture and oxygen. Degradation will be irrelevant for those trash bags that are

incinerated and, for those disposed of in landfills, the marketer does not possess adequate substantiation that the bags will degrade in a reasonably short period of time in a landfill. The claim is therefore deceptive.

Example 2: A commercial agricultural plastic mulch film is advertised as "Photodegradable" and qualified with the phrase, "Will break down into small pieces if left uncovered in sunlight." The claim is supported by competent and reliable scientific evidence that the product will break down in a reasonably short period of time after being exposed to sunlight and into sufficiently small pieces to become part of the soil. The qualified claim is not deceptive. Because the claim is qualified to indicate the limited extent of breakdown, the advertiser need not meet the elements for an unqualified photodegradable claim, *i.e.*, that the product will not only break down, but also will decompose into elements found in nature.

Example 3: A soap or shampoo product is advertised as "biodegradable," with no qualification or other disclosure. The manufacturer has competent and reliable scientific evidence demonstrating that the product, which is customarily disposed of in sewage systems, will break down and decompose into elements found in nature in a short period of time. The claim is not deceptive:

3. Compostable: It is deceptive to misrepresent, directly or by implication, that a product or package is compostable. An unqualified claim that a product or package is compostable should be substantiated by competent and reliable scientific evidence that all the materials in the product or package will break down into, or otherwise become part of, usable compost (*e.g.*, soil-conditioning material, mulch) in a safe and timely manner in an appropriate composting program or facility, or in a home compost pile or device.

Claims of compostability should be qualified to the extent necessary to avoid consumer deception. An unqualified claim may be deceptive: (1) if municipal composting facilities are not available to a substantial majority of consumers or communities where the package is sold; (2) if the claim misleads consumers about the environmental benefit provided when the product is disposed of in a landfill; or (3) if consumers misunderstand the claim to mean that the package can be safely composted in their home compost pile or device, when in fact it cannot.

Example 1: A manufacturer indicates that its unbleached coffee filter is compostable. The unqualified claim is not deceptive provided the manufacturer can substantiate that the filter can be converted safely to usable compost in a timely manner in a home compost pile or device, as well as in an appropriate composting program or facility.

Example 2: A lawn and leaf bag is labeled as "Compostable in California Municipal Yard Waste Composting Facilities." The bag contains toxic ingredients that are released into the compost material as the bag breaks down. The claim is deceptive if the presence of these toxic ingredients prevents the compost from being usable.

Example 3: A manufacturer indicates that its paper plate is suitable for home composting. If the manufacturer possesses substantiation for claiming that the paper plate can be converted safely to usable compost in a home compost pile or device, this claim is not deceptive even if no municipal composting facilities exist.

Example 4: A manufacturer makes an unqualified claim that its package is compostable. Although municipal composting facilities exist where the product is sold, the package will not break down into usable compost in a home compost pile or device. To avoid deception, the manufacturer should disclose that the package is not suitable for home composting.

Example 5: A nationally marketed lawn and leaf bag is labeled "compostable." Also printed on the bag is a disclosure that the bag is not designed for use in home compost piles. The bags are in fact composted in municipal yard waste composting programs in many communities around the country, but such programs are not available to a substantial majority of consumers where the bag is sold. The claim is deceptive since reasonable consumers living in areas not served by municipal yard waste programs may understand the reference to mean that composting facilities accepting the bags are available in their area. To avoid deception, the claim should be qualified to indicate the limited availability of such programs, for example, by stating, "Appropriate facilities may not exist in your area." Other examples of adequate qualification of the claim include providing the approximate percentage of communities or the population for which such programs are available.

Example 6: A manufacturer sells a disposable diaper that bears the legend, "This diaper can be composted where municipal solid waste composting facilities exist. There are currently [X number of] municipal solid waste composting facilities across the country." The claim is not deceptive, assuming that composting facilities are available as claimed and the manufacturer can substantiate that the diaper can be converted safely to usable compost in municipal solid waste composting facilities.

Example 7: A manufacturer markets yard waste bags only to consumers residing in particular geographic areas served by county yard waste composting programs. The bags meet specifications for these programs and are labeled, "Compostable Yard Waste Bag for County Composting Programs." The claim is not deceptive. Because the bags are compostable where they are sold, no qualification is required to indicate the limited availability of composting facilities.

4. Recyclable: It is deceptive to misrepresent, directly or by implication, that a product or package is recyclable. A product or package should not be marketed as recyclable unless it can be collected, separated or otherwise recovered from the solid waste stream for use in the form of raw materials in the manufacture or assembly of a new package or product. Unqualified claims of recyclability for a product or package may be made if the entire product or package, excluding minor incidental components, is recyclable. For products or packages that are made of both recyclable and non-recyclable components, the recyclable claim should be adequately

qualified to avoid consumer deception about which portions or components of the product or package are recyclable.

Claims of recyclability should be qualified to the extent necessary to avoid consumer deception about any limited availability of recycling programs and collection sites. If an incidental component significantly limits the ability to recycle the product, the claim would be deceptive. A product or package that is made from recyclable material, but, because of its shape, size or some other attribute, is not accepted in recycling programs for such material, should not be marketed as recyclable.

Example 1: A packaged product is labeled with an unqualified claim, "recyclable." It is unclear from the type of product and other context whether the claim refers to the product or its package. The unqualified claim is likely to convey to reasonable consumers that all of both the product and its packaging that remain after normal use of the product, except for minor, incidental components, can be recycled. Unless each such message can be substantiated, the claim should be qualified to indicate what portions are recyclable.

Example 2: A plastic package is labeled on the bottom with the Society of the Plastics Industry (SPI) code, consisting of a design of arrows in a triangular shape containing a number and abbreviation identifying the component plastic resin. Without more, the use of the SPI symbol (or similar industry codes) on the bottom of the package, or in a similarly inconspicuous location, does not constitute a claim of recyclability.

Example 3: A container can be burned in incinerator facilities to produce heat and power. It cannot, however, be recycled into new products or packaging. Any claim that the container is recyclable would be deceptive.

Example 4: A nationally marketed bottle bears the unqualified statement that it is "recyclable." Collection sites for recycling the material in question are not available to a substantial majority of consumers or communities, although collection sites are established in a significant percentage of communities or available to a significant percentage of the population. The unqualified claim is deceptive since, unless evidence shows otherwise, reasonable consumers living in communities not served by programs may conclude that recycling programs for the material are available in their area. To avoid deception, the claim should be qualified to indicate the limited availability of programs, for example, by stating, "Check to see if recycling facilities exist in your area." Other examples of adequate qualifications of the claim include providing the approximate percentage of communities or the population to whom programs are available.

Example 5: A soda bottle is marketed nationally and labeled, "Recyclable where facilities exist." Recycling programs for material of this type and size are available in a significant percentage of communities or to a significant percentage of the population, but are not available to a substantial majority of consumers. The claim is deceptive since, unless evidence shows otherwise, reasonable consumers living in communities not served by programs may understand this phrase to mean that programs are available in their area. To avoid

deception, the claim should be further qualified to indicate the limited availability of programs, for example, by using any of the approaches set forth in Example 4 above.

Example 6: A plastic detergent bottle is marketed as follows: "Recyclable in the few communities with facilities for colored HDPE bottles." Collection sites for recycling the container have been established in a half-dozen major metropolitan areas. This disclosure illustrates one approach to qualifying a claim adequately to prevent deception about the limited availability of recycling programs where collection facilities are not established in a significant percentage of communities or available to a significant percentage of the population. Other examples of adequate qualification of the claim include providing the number of communities with programs, or the percentage of communities or the population to which programs are available.

Example 7: A label claims that the package "includes some recyclable material." The package is composed of four layers of different materials, bonded together. One of the layers is made from the recyclable material, but the others are not. While programs for recycling this type of material are available to a substantial majority of consumers, only a few of those programs have the capability to separate out the recyclable layer. Even though it is technologically possible to separate the layers, the claim is not adequately qualified to avoid consumer deception. An appropriately qualified claim would be, "includes material recyclable in the few communities that collect multi-layer products." Other examples of adequate qualification of the claim include providing the number of communities with programs, or the percentage of communities or the population to which programs are available.

Example 8: A product is marketed as having a "recyclable" container. The product is distributed and advertised only in Missouri. Collection sites for recycling the container are available to a substantial majority of Missouri residents, but are not yet available nationally. Because programs are generally available where the product is marketed, the unqualified claim does not deceive consumers about the limited availability of recycling programs.

5. Recycled Content: A recycled content claim may be made only for materials that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer), or after consumer use (post-consumer). To the extent the source of recycled content includes pre-consumer material, the manufacturer or advertiser must have substantiation for concluding that the pre-consumer material would otherwise have entered the solid waste stream. In asserting a recycled content claim, distinctions may be made between pre-consumer and post-consumer materials. Where such distinctions are asserted, any express or implied claim about the specific pre-consumer or post-consumer content of a product or package must be substantiated.

It is deceptive to misrepresent, directly or by implication, that a product or package is made of recycled material. Unqualified claims of recycled content may be made only if the entire product or package, excluding minor, incidental components, is made from recycled material. For products or packages that are only partially made of recycled material, a recycled

claim should be adequately qualified to avoid consumer deception about the amount, by weight, of recycled content in the finished product or package.

Example 1: A manufacturer routinely collects spilled raw material and scraps from trimming finished products. After a minimal amount of reprocessing, the manufacturer combines the spills and scraps with virgin material for use in further production of the same product. A claim that the product contains recycled material is deceptive since the spills and scraps to which the claim refers are normally reused by industry within the original manufacturing process, and would not normally have entered the waste stream.

Example 2: A manufacturer purchases material from a firm that collects discarded material from other manufacturers and resells it. All of the material was diverted from the solid waste stream and is not normally reused by industry within the original manufacturing process. The manufacturer includes the weight of this material in its calculations of the recycled content of its products. A claim of recycled content based on this calculation is not deceptive because, absent the purchase and reuse of this material, it would have entered the waste stream.

Example 3: A greeting card is composed 30% by weight of paper collected from consumers after use of a paper product, and 20% by weight of paper that was generated after completion of the paper-making process, diverted from the solid waste stream, and otherwise would not normally have been reused in the original manufacturing process. The marketer of the card may claim either that the product "contains 50% recycled material," or may identify the specific pre-consumer and/or post-consumer content by stating, for example, that the product "contains 50% total recycled material, 30% of which is post-consumer material."

Example 4: A package with 20% recycled content by weight is labeled as containing "20% recycled paper." Some of the recycled content was composed of material collected from consumers after use of the original product. The rest was composed of overrun newspaper stock never sold to customers. The claim is not deceptive.

Example 5: A product in a multi-component package, such as a paperboard box in a shrink-wrapped plastic cover, indicates that it has recycled packaging. The paperboard box is made entirely of recycled material, but the plastic cover is not. The claim is deceptive since, without qualification, it suggests that both components are recycled. A claim limited to the paperboard box would not be deceptive.

Example 6: A package is made from layers of foil, plastic, and paper laminated together, although the layers are indistinguishable to consumers. The label claims that "one of the three layers of this package is made of recycled plastic." The plastic layer is made entirely of recycled plastic. The claim is not deceptive provided the recycled plastic layer constitutes a significant component of the entire package.

Example 7: A paper product is labeled as containing "100% recycled fiber." The claim is not deceptive if the advertiser can substantiate the conclusion that 100% by weight of the fiber in the finished product is recycled.

Example 8: A frozen dinner is marketed in a package composed of a cardboard box over a plastic tray. The package bears the legend, "package made from 30% recycled material." Each packaging component amounts to one-half the weight of the total package. The box is 20% recycled content by weight, while the plastic tray is 40% recycled content by weight. The claim is not deceptive, since the average amount of recycled material is 30%.

Example 9: A paper greeting card is labeled as containing 50% by weight recycled content. The seller purchases paper stock from several sources and the amount of recycled material in the stock provided by each source varies. Because the 50% figure is based on the annual weighted average of recycled material purchased from the sources after accounting for fiber loss during the production process, the claim is permissible.

6. Source Reduction: It is deceptive to misrepresent, directly or by implication, that a product or package has been reduced or is lower in weight, volume or toxicity. Source reduction claims should be qualified to the extent necessary to avoid consumer deception about the amount of the source reduction and about the basis for any comparison asserted.

Example 1: An ad claims that solid waste created by disposal of the advertiser's packaging is "now 10% less than our previous package." The claim is not deceptive if the advertiser has substantiation that shows that disposal of the current package contributes 10% less waste by weight or volume to the solid waste stream when compared with the immediately preceding version of the package.

Example 2: An advertiser notes that disposal of its product generates "10% less waste." The claim is ambiguous. Depending on contextual factors, it could be a comparison either to the immediately preceding product or to a competitor's product. The "10% less waste" reference is deceptive unless the seller clarifies which comparison is intended and substantiates that comparison, or substantiates both possible interpretations of the claim.

7. Refillable: It is deceptive to misrepresent, directly or by implication, that a package is refillable. An unqualified refillable claim should not be asserted unless a system is provided for: (1) the collection and return of the package for refill; or (2) the later refill of the package by consumers with product subsequently sold in another package. A package should not be marketed with an unqualified refillable claim, if it is up to the consumer to find new ways to refill the package.

Example 1: A container is labeled "refillable x times." The manufacturer has the capability to refill returned containers and can show that the container will withstand being refilled at least x times. The manufacturer, however, has established no collection program.

The unqualified claim is deceptive because there is no means for collection and return of the container to the manufacturer for refill.

Example 2: A bottle of fabric softener states that it is in a "handy refillable container." The manufacturer also sells a large-sized container that indicates that the consumer is expected to use it to refill the smaller container. The manufacturer sells the large-sized container in the same market areas where it sells the small container. The claim is not deceptive because there is a means for consumers to refill the smaller container from larger containers of the same product.

8. Ozone Safe and Ozone Friendly: It is deceptive to misrepresent, directly or by implication, that a product is safe for or "friendly" to the ozone layer. A claim that a product does not harm the ozone layer is deceptive if the product contains an ozone-depleting substance.

Example 1: A product is labeled "ozone friendly." The claim is deceptive if the product contains any ozone-depleting substance, including those substances listed as Class I or Class II chemicals in Title VI of the Clean Air Act Amendments of 1990, Pub. L. No. 101-549, or others subsequently designated by EPA as ozone-depleting substances. Class I chemicals currently listed in Title VI are chlorofluorocarbons (CFCs), halons, carbon tetrachloride and 1,1,1-trichloroethane. Class II chemicals currently listed in Title VI are hydrochlorofluorocarbons (HCFCs).

Example 2: The seller of an aerosol product makes an unqualified claim that its product "Contains no CFCs." Although the product does not contain CFCs, it does contain HCFC-22, another ozone depleting ingredient. Because the claim "Contains no CFCs" may imply to reasonable consumers that the product does not harm the ozone layer, the claim is deceptive.

Example 3: A product is labeled "This product is 95% less damaging to the ozone layer than past formulations that contained CFCs." The manufacturer has substituted HCFCs for CFC-12, and can substantiate that this substitution will result in 95% less ozone depletion. The qualified comparative claim is not likely to be deceptive.

