A. Introduction

SUSTAINABLE TRAVEL INTERNATIONAL

The flight from Los Angeles to New York is a five-hour red-eye evening flight that can cost the traveler well over $1000. The financial and physical costs of this flight are tremendous, but many people forget about the substantial carbon cost of such an excursion. Clever marketers, however, are now enabling consumers to offset the cost of their travel. A recent review of the emerging industry examined 11 different firms that provide such a service.1 While these companies use different methods to determine offset prices and offer contrasting ways to offset carbon, the development of these firms is in response to a consumer need to reduce the environmental burden of travel.

Although the number of passengers willing to make this commitment is small, there is a growing number of true blue and LOHAS consumers that are willing to pay to offset the environmental cost of travel. Furthermore, there is also a growing breed of environmental entrepreneurs in the travel and hospitality industry. Hoteliers with conservation programs, taxi companies with hybrid automobiles, restaurateurs with large-scale recycling plans, and other eco-entrepreneurs are using new technologies to limit the toll that travel and tourism take on the environment.2

Sustainable Travel International (STI) is among this group of environmental entrepreneurs committed to enabling consumers to lower the carbon cost of travel (Figure 10-1). Founded in 2002, STI is a not-for-profit organization created to reduce the toll that travel and tourism take on the environment and local
cultures. Founding sponsors include Continental Airlines, United Airlines, Enterprise Car Rental, and several other firms. This firm estimates that the carbon cost of the Los Angeles–New York trip at 1.78 tons of carbon dioxide per person, and the cost to offset this price is around $45. This pricing strategy enables passengers to offset the carbon cost of this flight by making contributions to sustainable forests in the United States, China, Ghana, India, Madagascar, or Turkey. STI’s commitment to offsetting activity is not limited to airline travel; the company also offers similar offset programs for auto travel, gifts, events and conferences, home energy usage, and hotel stays. The company also provides a host of travel tools and tips designed to reduce the environmental cost incurred whenever anyone travels.

The Sustainable Travel International example underscores the role of pricing in the firm’s efforts to deliver sustainable product offerings to consumers. Although the components of the marketing mix are often presented independently, these marketing decisions must flow from organizational objectives and work together to yield desired outcomes for the firm. The proper pricing of an organization’s product offerings enables the firm to achieve its objectives, and the development of the pricing strategy must be derived from the overall strategy of the organization.

The development of the pricing strategy can be viewed as the multistage process outlined in Figure 10-2. The result of this process is the proclamation of value. The organization begins this process by determining the corporate mission and objectives. Once the objectives are established, then the organization develops a series of pricing objectives that complement the overall goals of the firm. These objectives are then converted to specific action that the firm will take to achieve pricing goals and the overall objectives of the firm. Before this conversion occurs, however, the firm must consider the internal and external constraints on this process. Internal constraints include costs of production, sales, and delivery; external constraints include customer demand, legal considerations, and competition influence. When all of these factors have been considered, the firm is in the position to proclaim the value of its product offerings in the form of pricing strategies. As a preface to our development of the pricing objectives and strategy, we outline these internal and external constraints on the price planning process.

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**FIG. 10-2 Price Planning Process**

- Internal constraints
- Legal constraints
- Corporate mission and objectives
- Pricing objectives
- Pricing strategy
- Customer demand
- Competitive action

B. Internal Pricing Constraints

The constraints within the firm reflect the costs incurred to produce, sell, and deliver a product. Many firms use cost as the basis for determining price, and costs must be covered if the firm is to generate a profit. Thus, it is essential to understand the components of cost. One can distinguish between fixed and variable costs associated with a product. Fixed costs refer to cost factors that do not change in the short run, whereas variable costs refer to costs that fluctuate with the amount of product sold. Fixed costs are exemplified by investments in real estate and equipment. By contrast, the electricity consumed on an auto assembly line is a variable cost that fluctuates with the number of cars produced. Efforts to enhance the sustainability of product offerings must consider both cost elements.

In addition to the fixed–variable cost dichotomy, it is also relevant to consider how costs are allocated among the products manufactured at a specific location. Ford’s efforts to enhance the sustainability of its operations and products exemplify these allocation considerations. In the Rouge River plant, for example, Ford has invested more than $2 billion to raise the sustainability of this facility. These investments accommodate the concerns of many interest groups related to the manufacturer such as employees, communities, and NGOs. The costs associated with the Rouge River plant are allocated across products that leave this assembly line. Regardless of their sentiments toward green marketing and production, buyers of cars from this facility must pay some portion of the cost of raising the sustainability. By contrast, Ford has also invested €332 million in a joint agreement with Peugeot to develop diesel engines. The investment in diesel engines is not carried to a large degree by all products coming off the assembly line, but it is allocated to the diesel vehicles. The investment in diesel engines can be allocated among a variety of users that have motivations to purchase fuel-efficient cars that produce relatively few carbon emissions. Given the breadth of consumer preferences in the auto industry, Ford faces a much tougher challenge to assess the consumer response to enhanced production sustainability in the Rouge River facility. By contrast, the consumer response to adding sustainable components to products enables the firm to estimate returns from specific segments of the auto market. Although the assembly line challenge is more daunting, in both cases the firm must consider customer demand in its allocation and pricing decisions.

C. Customer Demand

Grocery stores offer consumers a variety of products that offer differential levels of value. Most large retailers offer competitively priced private-label products that deliver the same ingredients as the nationally advertised brands. Private-label products such as Walmart’s Equate brand are sold at lower cost to the consumer, yet these products have higher gross margins than the advertised brand counterparts. The variety at the retail level enables the consumer to select among products with different levels of value, and this diversity enables the retailer serve multiple segments of the market. Grocers recognize that they can increase their revenues by offering multiple products directed at different market niches that desire different levels of value.

In order to assess the potential of a market or market segment, it is necessary to understand what is valued by the customer. Note that this call for understanding of the value derived from consumption does not necessarily include green marketing or sustainability considerations. The marketer of ecologically friendly products...
must recognize that consumers rarely cite green marketing issues as the primary motivation for consumption. Traditional selling considerations such as price, quality, and performance are often central motivations that are expressed prior to sustainability concerns. For example, Brita water filtration products offer consumers clean water that offers health, fitness, and vitality benefits to the body. In addition, the combined costs of tap water and these filtration products is frequently lower than the cost of bottled water. These biological and economic benefits are likely to prompt consumers to invest in Brita filtration devices. One primary sustainability benefit is the reduction in the size of landfills associated with fewer purchases (and disposals) of bottled water. While it is likely that consumers would have a strong interest in the stamina-related and biological benefits of the product without the sustainability benefit, it is unlikely that the reduction in landfills alone would prompt substantial purchases. The sustainability benefit does not stand alone and requires consideration of the broader value assessment.

An understating of value is necessary if one is to understand how green marketing benefits can be incorporated into product offerings. Value may be defined in the following manner:

\[
\text{Value} = \frac{\text{Desired benefits}}{\text{Relative costs}}
\]

The expression of value in this equation illuminates several important facets of consumption. Value inherently is associated with trade-offs. Purchase decisions ask the consumer to forego something of value (e.g., money) for something of superior value (product). Desired benefits refer to things that matter to the consumers. They are willing to pay for these things that they genuinely want. The benefits of a product speak to what the product does for the consumer rather than to the product components. The turbo diesel is a feature offered by many automobile companies, but the benefits of this component are the fuel savings and speed of the product.

Effective marketing campaigns move beyond the mere proclamation of product attributes and focus on the aspects of the product that are meaningful to the consumer. The green product proposition often fails to recognize that the promotion of green benefits alone will not stimulate consumption. The Ford plant on the Rouge River in Dearborn, Michigan, offers one example of the promotion of green benefits that do not resound with consumers. This 90-year-old plant was rebuilt to sustainability specifications at a cost of $2 billion. Although Ford’s investment in sustainability is admirable, improvements to the plant do not address the primary environmental issue in the industry: the burning of fossil fuels. More importantly, this benefit does not address issues at the heart of auto purchase and consumption decisions.

The analysis of benefits derived via purchasing must consider the breadth of motivations related to the purchase. Many consumers are concerned about the environment, yet they are also concerned about other matters at the point of purchase. The Tesla automobile, for example, may offer substantial ecological benefits, but the $109,000 base price makes the car infeasible for most consumers. The green benefits of products do not stand on their own but are incorporated into the value assessment made by the potential consumer. Marketers must understand the reasons behind consumption and present green benefits as they relate to these motivations for purchase.

Understanding of the purchase criteria enables the marketer to develop a sustainable competitive advantage that focuses on purchase, usage, and sustainability.
A sustainable competitive advantage refers to a company’s performance relative to competition and the ability to outperform competition along one or more aspects. The development of competitive advantage requires the firm to take stock of its product offerings and those of the competition. Importantly, this assessment should focus on the aspects of consumption most relevant to the consumption. The firm will realize that certain aspects of its product offerings will be superior to the competition’s, yet the competitive landscape usually presents alternatives that outperform the firm’s product along some dimension.

Consider, for example, the replacement of a worn-out water heater for the home. The purchase of this product presents the buyer with a number of options with respect to fuel alternatives and energy efficiency. The marketer of these products should understand that consumers seeking to replace this appliance face a unique set of circumstances. Because most homes have a single heater and the water heater purchase is only considered when this appliance fails, consumers are immediately aware of the benefits of heated water. The purchase decision is likely to give strong consideration to the heating capability of the alternative appliances. Consumers often rate gas heaters as superior to alternatives due to the consistency in their abilities to generate hot water. Marketing of the efficiency of solar power will not resonate with many consumers if other salient benefits are discounted. In short, the analysis of desired benefits must focus on the merits of the product for the consumer.

Importantly, the relative cost of a product is substantially more than the price. To determine the value proposition, one must examine the acquisition, possession, usage, and opportunity costs. Acquisition cost refers to the energy expended to make the purchase as well as to the purchase price. This cost component includes the time dedicated to learning about the salient criteria associated with a purchase as well as the time dedicated to evaluating alternatives. Brands that have established themselves within a product class require less time for evaluation, and these reductions in cost are associated with increased revenue. If a new, fuel-efficient technology is presented to the consumer at the point of sale, the consumer will ordinarily need to develop an understanding of the technology prior to purchase. Effective advertising campaigns that make the consumer aware of the merits of the technology prior to purchase should lower acquisition costs and increase revenues.

Possession cost includes all expenditures associated with gaining possession of the product after the purchase decision has been made. These include taxes, insurance, and transportation. Possession is a substantial facet of cost in the water heater example. After the consumer realizes that the current heater is not working, there is an immediate desire to get a replacement as soon as possible. The transition from an electric device to more fuel-efficient alternatives may not be relevant to many consumers when the installation is prolonged. Although solar water heaters are highly efficient, the installation is likely to take more time and require more space on the consumer’s property. The consumer faced with making this purchase will be reluctant to consider alternative fuel sources or technologies.

Usage cost is the third facet of cost and includes the cost of operations as well as the disposal cost. In many cases, new technologies provide energy efficiency that yields lower costs in usage relative to alternatives. The marketer of such new technologies should present its products to illustrate the trade-off between acquisition costs and usage costs. The marketer of this product should prompt the consumer to consider the cost of use of the product over its lifetime rather than the initial purchase price. Promotion online and at the point of sale can illustrate to the consumer that an Energy Star appliance will be a less expensive alternative in the long run.
The disposal facet of cost is an increasingly important factor in many industries. The European Union and the United States have implemented regulations requiring electronics manufacturers to reclaim products. Because these products may still be functional, or contain valuable metals, policy makers in many countries have implemented policies requiring the end-of-life take-back of these products.

Many industries understand that they must either establish industry standards for waste or face regulatory action by government. The Product Stewardship Institute (PSI) is a United States-based NGO that seeks to reduce the health and environmental impacts of consumer products. PSI takes a unique product stewardship approach to solving waste management problems by encouraging product design changes and mediating stakeholder dialogues. PSI is supporting product end-of-life legislation in several American states. One initiative associated with this legislation concerns proper disposal of paint. In the United States alone, approximately 10% of the amount sold, or 64 million gallons of used paint, is left over annually. The disposal cost associated with proper handling of this product is $8 per can. PSI has similar initiatives addressing reclamation of medical waste, pharmaceuticals, fluorescent lamps, thermostat manufacturers, and phonebooks.

The final element of cost is the opportunity cost associated with one product over alternatives. Opportunity costs are forfeited by the consumer that incurs a cost. The purchaser of a gas appliance forfeits the chance to invest and learn about efficient solar water heaters. Since the average automobile lasts 17 years, the purchase of a new internal combustion engine commits to older technology and forfeits the opportunity to use more fuel-efficient transportation alternatives.

When the firm has properly identified the desired benefits and relative costs of a product, then the value assessment can be determined. For a product offering to be successful, it must be real, superior, and profitable. For the product to offer real value, it must have relevance to an identifiable market that has specific customers and segments. The desired benefits of a product offering must exceed the perceived costs of ownership. Note that although the ratio of benefits to costs must exceed one, different consumers have different value ratios. Research of the market should provide insight into the various market segments associated with different benefits and relative costs. The buyers of a Toyota Prius, for example, may be distinguished based on the perceived importance of the ecological performance of the vehicle as a benefit that augments its fuel efficiency merits.

Although a product may reflect the desired benefits sought by the consumer, the value offered by a product must also be superior to the value of competitive products. For example, the traveler between New York and Boston may consider alternative forms of mass transportation. Although the cost of the airline flight may be less than that of rail transportation, the consumer may elect to take the train because it is more convenient and has a lower carbon footprint. The advocate of sustainability that understands the breadth of benefits and costs of alternative product offerings is more likely to influence consumers to choose one product offering over another.

When the value of a product offering is real and superior to the competition, the marketer must also examine whether the value proposition is profitable. A value proposition that is profitable is consistent with the firm’s mission and objectives. The for-profit organization has a responsibility to earn a financial profit for the ownership. If the value of an offering does not help the firm realize its mission and objectives, then the firm needs to re-examine the offering.

An important facet of the value proposition is the recognition that different consumers have different value ratios. It is therefore salient to consider devising
multiple products with multiple value offerings and targeting different market segments. The green market segments described by the Roper Starch (i.e., true blues, greenback greens, sprouts, grousers, and basic browns) provide a starting point for analysis of the relevant green segments in a market.  

D. Legal Constraints

The legal constraints refer to the regulatory requirements associated with the marketing of products. To varying degrees, industries face regulations concerning sourcing of component parts, promotions, and postconsumption product disposal. The need to adhere to these regulations can result in higher costs of sourcing, production, distribution, promotion, and disposal. These constraints are established and regulated at the international, federal/regional, state, and local levels. The Kyoto Protocol discussed in Chapter 4 illustrates the influence of international environmental agreements. Adherence to Kyoto standards within in the EU has resulted in new regulation in 182 participating countries, and new standards for greenhouse gas emissions have been incorporated into municipal planning in more than 600 cities worldwide.

The U.S. Environmental Protection Agency (EPA) provides an illustration of national environmental regulation. The EPA creates and enforces regulations concerning environmental issues. The enforcement of environmental concerns is derived from the Clean Air Act (CAA) of 1970 and the Clean Water Act of 1972. The Clean Air Act placed control of air pollution and enforcement of air pollution regulations in the hands of the EPA. CAA regulates stationary and mobile sources of air emissions. Thus, the pollution control associated with auto assembly and auto operations are regulated as a result of the CAA. In 2007, the Supreme Court ruled that the CAA gives the EPA the authority to regulate carbon dioxide as a pollutant. The EPA also regulates vehicle emissions for hydrcarbons, carbon monoxide, and nitrogen oxides.

The Clean Water Act (CWA) provides standards, technical tools, and financial assistance to limit water pollution and enhance water quality. CWA requires major industries and municipalities to adhere to standards for water quality and pollution control. It sets state-level specific water quality criteria and provides funding to states and communities to help them meet their clean water infrastructure needs. In addition, it employs a permitting system that is designed facilitate development while simultaneously protecting wetlands and other aquatic ecosystems.

Organizations must also monitor and adhere to the regulations established at the state and local levels. For example, the state of California enacted the California Global Warming Solutions Act in 2006. This act strives to achieve gas emissions levels of 1990 throughout the economy by 2020. This goal represents approximately an 11% reduction from current emissions levels and nearly a 30% reduction from projected business-as-usual levels for 2020. The act also requires annual monitoring and reporting of greenhouse gas as well the accounting for greenhouse gas emissions from all electricity consumed in the state. The pursuit of these goals and requirements demands that firms operating in every sector of the California economy invest in energy-efficient technologies. These organizations must also attend to the regulations at the municipal level. San Francisco, for example, has implemented a green building ordinance that requires new buildings to meet or exceed the requirements established by Build It Green in the GreenPoint Rated (GPR) system or the U.S. Green Building Council’s Leadership in Engineering and Environmental Design (LEED) building rating system.
These regulatory conditions—from the Kyoto Protocol to the San Francisco green building ordinance—underscore the influence of legal requirements on pricing decisions. It is incumbent upon the firm to recognize current sustainability standards for operations in each geographic market it serves. In addition, organizations that monitor or participate in developing regulations have a greater opportunity to anticipate changes in environmental law.

E. Competitive Action

Our pricing model (see Figure 10-2) recognizes that pricing decisions must take into account the environment in which the firm operates. Decisions about the pricing strategy must consider the nature of the market as well as the nature of the competition.26 In Chapter 5, we characterized five segments of the consumer’s orientation to sustainability. This segmentation research illustrates the multiple orientations to the market, and it underscores the need to examine the extent to which consumers in a market value product offerings that offer heightened ecological benefits.

The organization should evaluate the size of the green consumer segment in the marketplace. Some markets are characterized by a strong preference for green products. For example, Starbucks recognizes that a strong portion of the retail coffee consumers have a preference for fair-trade, sustainably produced coffee.27 Because many of these consumers are willing to pay more for these coffees, Starbucks can retain a premium price for fair-trade coffee. By contrast, some markets are characterized by negative predisposition toward sustainability concerns.

The competitive landscape should be considered in conjunction with the consumer’s attitude toward green products. Thus, the organization must examine the differentiability based on greenness. To varying degrees, companies have resources that enable them to compete favorably based on the ecological sensitivity of the strategy. The competition to the firm also has resources that could be (or are already) committed to achieving sustainability. Thus, the Body Shop’s commitment to sustainability makes it difficult to compete with this firm based on the green marketing and production practices.

Analysis of the competitive landscape should incorporate consideration of the market factors outlined in Chapter 5. These factors include the ability to differentiate based on sustainability and the size of the green market segments. Lean green and defensive green marketing strategies are appropriate where the ability to distinguish market offerings based on ecological considerations is modest. For example, consumers in the heavy-duty pickup truck market may not be favorably disposed to hybrid technology. Although there may be many consumers with strong (favorable or unfavorable) attitudes toward sustainability, consumers are indifferent to green marketing concerns when making purchases. In such cases, the firm is likely to benefit from a pricing strategy that does not ask the consumer to invest more for green technology. Similarly, Nike introduced the Considered brand of footwear in 2005. This environmentally friendly shoe made from brown hemp fibers was marketed at $110 per pair. Ecological concerns were not salient to consumers in this marketplace. The consumers in the market purchased shoes to make them feel slick, fast, and hip. Nike learned from this product launch that most consumers do not use sustainability criteria when they purchase footwear. Nike continues to enhance the sustainability of its product offerings, but new products do not emphasize green factors.28

In markets characterized by marked opportunities to distinguish product offerings based on sustainability, the firm must also consider the size of the green
market. The extreme green strategy reflects a competitive situation in which there is substantial demand for green products and the firm has appreciable ability to differentiate based on the green qualities of its products.

Consider, for example, Stonyfield Farms, the New Hampshire producer of organic dairy products. This firm has the fourth largest market share in the yogurt industry, trailing only Yoplait, Dannon, and private-label products. Stonyfield recognizes that one segment of the yogurt market is highly cognizant of the merits of organic food, and it has crafted its product line to address the demand in this segment. The organic label is a form of sustainable differentiation that enables the firm to offer products at a price premium. The average price of their products is $1.56 per unit—greater than twice the price of Yoplait at $0.71 per unit. The price premium of such a firm must exceed the cost incurred to differentiate based on the organic quality of the products. It is therefore essential for a firm that uses this pricing strategy to monitor its cost position. The firm using this strategy attempts to achieve price parity by reducing costs in areas other than the source of the differential competitive advantage. Firms such as Stonyfield can pare down promotional and supply chain costs relative to their competition. Companies that are able to control these costs and maintain their competitive advantages can be strong performers in the industry.

The shaded green strategy refers to a market in which the demand for ecologically sensitive products is low, yet there is a substantial opportunity to differentiate based on the environmental merits of a product. For example, in the clothing market, roughly 0.1% of the cotton products sold are organic. Organic products tend to be more expensive than competitive products that use inorganic fertilizers. Nonorganic cotton farming has substantial implications for the environment. The nonorganic industry covers 2.4% of the world's farmland, but it uses 25% of the world's pesticides and 10% of the world's synthetic fertilizers. Large quantities of defoliants, fungicides, and herbicides are sprayed into fields, causing harm to other crops, farm workers, and neighbors.

Patagonia serves this niche market by marketing jeans, hats, shirts, and undergarments made exclusively from organic cotton. The firm's products command prices roughly 20% higher than those of other outdoor wear specialists. Patagonia customers tend to be better educated and have higher incomes than most consumers in the markets served by the firm. Patagonia earns revenues of about $250 million per year and donates 1% (or 10% of pretax profits if they are greater than 1% of revenue) to environmental organizations. It also tries to reduce the environmental impact of its products and processes. The majority of Patagonia's costs of goods sold are attributable to the garments' raw materials. Fabric accounts for about 80% of the total costs of raw materials, and the firm estimates that its fabric costs can be as much as 20% to 30% higher than those of its competitors. Patagonia's primary marketing vehicle is a series of catalogs that display men and women using the products in spectacular settings. The catalogs also offer essays about environmentalism and cultural values. In contrast to competition that uses less than 10% of catalog space for nonselling activities, Patagonia dedicates roughly 50% of the catalog space to nonselling activities.

In 1996, Patagonia made the decision to convert to organic cotton. This decision demanded attention to consumer attitudes, retail prices, and costs of goods sold. The spring 1996 catalog featured an opening article from Patagonia's founder concerning the switch to organic cotton, and the description of such organic products offered repeated references to organic components. The firm recognized that its
consumers were sensitive to organic products, but it also modified prices. Patagonia
reduced margins on most cotton sportswear products so that the retail price on an or-
ganic product would not be more than 20% more than the price of the conventional
product. Products that could not meet the goal were eliminated, resulting in organic
cotton garments selling for not more than 8% above comparable garments made
from conventional cotton. Although the cost of goods sold increased, the additional
average willingness to pay for the organic cotton exceeded the costs incurred.

The Patagonia example underscores a situation in which the market for green
products is modest, yet the firm has the ability to offer a product with sustainable
competitive advantage to the market. By understanding the needs of the consumer
base and its responsiveness to price and quality modifications, firms can success-
fully implement strategies to accommodate shaded green markets.

F. Corporate Mission and Pricing Objectives

It is vital to recognize that the outcome of the marketing mix embodies the only
manner by which the firm can achieve objectives. If each element of the mix, and
notably price, does not reflect the mission and objectives of the firm, then there is
little likelihood that these goals of the firm will be obtained. When the firm estab-
ishes a clear mission and objectives, the pricing strategy must be designed to com-
plement these goals. For example, Procter and Gamble places a heavy emphasis on
the desire for the firm to grow via innovation. Across the multiple brands of this
firm, the goal is increased revenues by a steady flow of innovative ideas with respect
to products, their delivery, and their consumption. In many markets, price is an im-
portant means for differentiation among branded products and retailers’ private-
label brands. The constant pursuit of innovation enables Procter and Gamble to
compete with premium and mid-tier-priced products. Thus, the pricing strategy
can be implemented because it is consistent with the innovation goals of the firm.

The pricing strategy should be consistent with the overall objectives of the firm.
The specific pricing strategy may focus on multiple objectives and varying levels of
these potentially inconsistent objectives. Organizations that have corporate objec-
tives that revolve around the targeted return on investment or targeted profit levels
are likely to adopt pricing objectives that are consistent with these corporate objec-
tives. One objective of the pricing strategy concerns the extent to which the firm
seeks a targeted return on investment. Firms that focus on this objective determine
their costs and then establish prices based on a desired rate of return. Similarly,
some firms rely on targeted level of profitability. These firms estimate costs and
then add a margin designed to yield a level of profit.

The organizational goal to achieve some level of market share may not be com-
patible with targeted ROI or profits. Firms with a market share objective will have
pricing strategies that ensure they attain or maintain a presence in the market.
Companies with a targeted market share are likely to charge lower prices than firms
that are focused on the return on investment. Note that firms can either engage in
these strategies to maintain a position in the market, increase market share, or pre-
vent competition from gaining a foothold in the market.

In addition to targeted returns and market share, an organization also seeks to
covey an image about the firm and its products. Thus, pricing objectives are devel-
oped that focus on the image that firm seeks to convey. Some firms such as Gucci
are inclined to price to convey the luxury associated with the company’s product
offerings. In contrast, firms such as Costco seek to convey that they are the low-price leader in a market.

Firms are increasingly incorporating sustainability goals into their objectives, and this enhancement to strategy has strong implications for the pricing objectives of the firm. For example, Timberland’s mission is to equip people to make a difference in the world, and it seeks to approach this mission by becoming carbon neutral. Firms with the objective to achieve higher levels of sustainability can engage in multiple strategies that must take into consideration other aspects of the competitive marketplace and consumer preferences.

G. Pricing Strategies

Because different market segments have different value ratios, one needs to prepare a wide arsenal of strategies for approaching a market. In this section, we address several strategies that enable firms to increase revenues and simultaneously address the firm’s sustainability objectives.

We distinguish among three pricing strategies. First, we discuss the use of carbon offset pricing. We then outline pricing strategies associated with the competitive position and product line pricing.

Carbon Offset Pricing

Carbon offset pricing refers to situations under which the marketer of a product enables the purchaser to compensate for the greenhouse gas emissions associated with consumption. This pricing strategy places the cost of sustainability directly in the hands of the consumer. Two parameters associated with determining the offset price are the determination of the carbon-related cost of a product and the determination of the cost of the offset investment. For example, Continental Airlines has joined the joint Sustainable Travel International (STI) and offers passengers the opportunity to offset the carbon dioxide-related costs of air travel. To determine the carbon-related cost of air travel, STI determines the average quantity of greenhouse gases emitted per passenger. It estimates that on short-distance domestic flights, approximately 0.64 metric tons are discharged per passenger, whereas 2.75 metric tons of carbon dioxide (CO2) are emitted per passenger on long-distance flights. The second consideration is the cost of the offset. STI offers different offset programs that vary based on the location of the offset and the form of service. The Conservation Carbon offset supports reforestation projects in Africa and Asia and costs whereas the Green Tag program for renewable energy projects in North America is more than twice as expensive per unit of travel.

Competitive Pricing

In many cases, the specific strategies the firm will use are based on the firm’s position in the market. Consider how these pricing strategies have been used in conjunction with products that offer sustainability advantages:

Break-even pricing. The break-even pricing strategy attempts to establish a price that covers all costs of operations. To use this pricing strategy, the firm must determine its fixed and variable costs. The organization then estimates demand for the product. The price is then determined as the sum of the fixed and variable costs divided by the number of units sold. This strategy is essential to the success of many pricing decisions regardless of whether the consumer base is favorably disposed to...
green products. The strategy forces the firm to determine its costs, and green technologies that lower the cost of operations are implemented. For example, propane is a variable cost that poultry farmers face in the operation of their facilities. These farmers are switching to biofuels to lower their costs of operation and to reap the ecological benefits of renewable fuel.41

Cost-based pricing. A cost-based pricing program adds a markup to the cost of the product to establish the price. This strategy is used by many firms to establish pricing structures. For example, utility companies use their cost structures as bases for determining the cost of water within the municipalities they serve.42 The marketer of green technology can influence purchasing by illustrating how the investment in green technology can lower their overall cost of operations. Because price is directly linked to cost, lower costs translate to lower prices for consumers. For example, Staples is committed to lowering its energy to 7% below 2001 levels. It is retrofitting lighting systems and using biogas, wind, solar, and biomass for more than 14% of its energy needs. Its integrated strategy for energy conservation has enabled it to reduce its net greenhouse gas emissions by nearly 5% as compared with 2001. These cost reductions help Staples to remain competitive in a volatile retail market.43

Value-based pricing. This pricing strategy uses the consumers’ perceived value of a good to establish price. In contrast to the preceding strategies that focus on cost to determine price, this strategy addresses the relative value of the product to the consumer. The firm begins by identifying the desired benefits and relative costs of a product; then the value assessment can be determined. Thus, the various facets of benefits and the multiple facets of cost are used to determine the price. Products that feature the Energy Star label offer one example of value-based pricing. Energy Star-qualified refrigerators, for instance, are 20% more efficient than other products, but the initial cost of the Energy Star product is typically higher than the cost of other models.44 Consumers evaluating Energy Star products weigh initial cost and value in use over the productive life of the appliance versus the alternative, non-Energy Star appliances.

Status quo price. The status quo price refers to charging a price that is consistent with the competition. Firms can effectively use this strategy to offer a product that is superior in terms of green marketing, yet the product sells at the same price point as the alternative. For example, Starbucks has made a corporate commitment to sustainability throughout its supply chain. The company has also employed a status quo pricing strategy in which it charges $1 for an 8-ounce cup of coffee.45 This pricing strategy enables the firm to remain price competitive while still pursuing the company’s sustainability objectives.

Skimming pricing. This pricing strategy refers to setting a price to reach consumers willing to pay a higher price for a product prior to marketing the product to more price-sensitive consumers.46 For example, Seventh Generation is committed to becoming the world’s most trusted brand of authentic, environmentally responsible products for the home.47 The household cleaners offered for sale by this company tend to be higher priced than the products sold by competitors such as Procter and Gamble.48 The skimming strategy would seem to work best when there is a sizeable group of consumers in the true blue market segment. In contrast to the skimming strategy, P&G has adopted a status quo pricing strategy for Bounty Select. These paper towel sheets are 45% smaller than regular towels and enable the consumer to use a smaller amount of paper with every cleaning task. The innovations in product design and logistics enable P&G to market a relatively eco-friendly product at a competitive price.
Penetration pricing. A penetration pricing policy sets a low initial price in an attempt to increase market share rapidly. This policy is effective if demand is perceived to be fairly elastic. For example, the three largest utilities in California were instructed in 2007 to reduce the amount of energy consumed or face strong financial penalties. Pacific Gas and Electric and other utilities elected to pour millions of dollars into subsidizing the cost of compact fluorescent light (CFL) bulbs. As a result, bulbs that were sold for $5 to $10 in 1999 could be purchased for 25 cents to 50 cents. This strategy resulted in sales of more than 7.6 million CFL bulbs in 2007 in California alone.

Product Line Pricing
In some cases, the specific strategies the firm will use are not based on the firm’s position in the market, but they primarily focus on relationships among products in the product line. Consider how these product line strategies have been used to market products with ecological benefits:

Price lining. This strategy refers to the offering of merchandise at a number of specific predetermined prices. By offering ecological benefits at several price points, the marketer grants the consumer the flexibility to engage in green consumption action that is consistent with the consumer’s budget. For example, the carbon offset programs offered by Sustainable Travel enable consumers to select from among several plans. These plans vary in price based on the level and location of the offset carbon activity.

Bundling. Bundling is the practice of offering two or more products or services for sale at one price. Bundling can be used across contexts to lower consumers’ overall costs and enhance sustainability. For example, retailers that market personal electronic devices such as cameras can market product bundles that include rechargeable batteries. By bundling the batteries to the electronics, consumer satisfaction is raised and the product yields a lower carbon footprint due to the rechargeable devices. This strategy is also used in the construction industry to bundle sustainable products within a new building. Construction certified by the U.S. Green Building Council receives leadership in energy and environmental design (LEED) certification. The certification ensures that all the products (e.g., lighting, windows, heating/air conditioning) are sustainable.

Summary
A. Introduction
The purpose of this chapter has been to outline the relationship between pricing strategies and green marketing. Because the pursuit of green marketing may not be paramount to the consumer, the green pricing strategy must be incorporated into the overall strategy and planning process. We therefore outlined the influences of internal constraints, customer demand, legal constraints, and competitive action on the price planning process. We then outlined the relationship between corporate strategy and pricing objectives. The internal and external constraints and the corporate strategy provided a basis for development of the pricing objectives and the pricing strategy. We finished our treatment of pricing by outlining specific carbon offset, competitive, and product line pricing tactics.

B. Internal Pricing Constraints
The constraints within the firm reflect the costs incurred to produce, sell, and deliver a product. Fixed costs refer to cost factors that do not change in the
short run, whereas variable costs refer to costs that fluctuate with the amount of product sold. It is also relevant to consider how costs are allocated among the products manufactured at a specific location. Firms that invest in technology and infrastructure to enhance sustainability should recognize that this cost burden is carried by all products leaving a facility or location.

C. Customer Demand
In order to understand the role of consumers, it is essential to frame value as the relationship between desired benefits in relation to the relative cost. Desired benefits refer to things that consumers are willing to pay for and that they genuinely want. These benefits must weighed against the acquisition, possession, usage, and opportunity cost associated with a product. The value offered by a product offering must also be superior to the value of competitive products, and the marketer must ensure that the value proposition generates a profit.

D. Legal Constraints
Legal constraints refer to regulatory requirements associated with the marketing of products. Industries face regulations concerning sourcing of component parts, promotions, and postconsumption product disposal. The need to adhere to these regulations can result in higher costs of sourcing, production, distribution, promotion, and disposal. These constraints are established and regulated at the international, federal/regional, state, and local levels.

E. Competitive Action
The role of competition should be considered in conjunction with the consumer’s attitude toward green products. The organization must examine the differentiability based on greenness. Companies have resources that enable them to compete favorably based on the ecological sensitivity of the strategy. The competition to the firm also has resources that could be (or are already) committed to achieving sustainability. By understanding the needs of the consumer base and the influence of competition, firms can successfully develop strategies that lead to increased market share.

F. Corporate Mission and Pricing Objectives
The pricing strategy should be consistent with the overall objectives of the firm. The specific pricing strategy may focus on multiple objectives and varying levels of these potentially inconsistent objectives. Firms that have objectives that emphasize market share or a level of profitability will price their products with these goals in mind. Similarly, firms that seek to raise perceptions of sustainability will similarly adjust price to achieve these objectives.

G. Pricing Strategies
Three types of pricing strategies include carbon offset pricing, competitive pricing, and product line pricing. Carbon offset pricing refers to situations under which the marketer of a product enables the purchaser to compensate for the greenhouse gas emissions associated with consumption. Competitive pricing is a pricing strategy based on the firm’s position in the market. These strategies include break-even pricing, cost-based pricing, value-based pricing, status quo pricing, skimming, and penetration pricing. Product line pricing includes price lining and bundling techniques that use the relationships among products in the product line to establish prices.

Keywords
- acquisition cost, 200
- break-even pricing, 206
- bundling, 208
- carbon offset pricing, 206
- cost-based pricing, 207
- fixed costs, 198
- opportunity cost, 201
- penetration pricing, 208
- possession cost, 200
- price lining, 208
- Product Stewardship Institute (PSI), 201
- skimming pricing, 207
- status quo price, 207
- usage cost, 200
- value, 199
- value-based pricing, 207
- variable costs, 198
Questions

1. How does Sustainable Travel International enable consumers to reduce the environmental cost of air travel? What does such action do to the overall cost to the consumer?

2. Why is it necessary for companies to incorporate product, promotion, and distribution considerations into pricing decisions?

3. How can a company determine the desired benefits and costs inherent to a pricing decision?

4. Distinguish among four costs that factor into value decisions.

5. Name and describe an international, national, and local sustainability based regulation that influences a firm’s pricing strategy.

6. How does the level and form of competition influence pricing decisions?

7. How do the objectives and mission of the firm influence the pricing strategy?

8. Describe the two parameters associated with determining the offset prices, and explain why different firms come up with different estimates for these parameters.

9. Describe a skimming strategy and a penetration strategy used by a company to help it increase sales of sustainable products.

10. How do firms use price lining and price bundling to increase the market share of sustainable products?

Endnotes

2 Rebecca Knight, “Green Entrepreneurs with the Drive to Transform Travel,” Financial Times, September 26, 2008, 16.
10 See Note 5 above.
11 See Note 9 above.
12 Kevin Lane Keller, Strategic Brand Management (Englewood Cliffs, NJ: Prentice Hall, 2008), 635.
17 See Note 9 above.
49 See Note 46 above.