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Re-evaluating green marketing strategy: a stakeholder perspective

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Abstract

Purpose – The present study aims to examine the influence of stakeholders on green marketing strategy (GMS). Marketing literature recognizes that stakeholders play a significant role in influencing organizations and markets, but has not targeted a single integrated approach to examine the relationship between stakeholder management and GMS.

Design/methodology/approach – This research comprised several phases, including the development of a typology of GMS, an analysis of how managers prioritize stakeholders, a study of the influence of stakeholders on GMS, and an analysis of the influence of the organizational context on managers' perception of the stakeholders. The hypotheses were validated using multivariate correlational techniques.

Findings – The study identified the stakeholders associated with GMS and their impact on the strategy adopted by the firms, and established how this is moderated by the firm's own economic sector and organizational characteristics.

Research limitations/implications – Future studies might replicate and extend the research in other industries and countries to ascertain whether environmental concerns have different effects in other contexts.

Practical implications – The surveys on GMS and stakeholder perception undertaken in the present survey are a potential source of information for managers – because they can be used as a self-diagnostic tool to determine if a firm's attitude to the environment is reactive or proactive.

Originality/value – Results show that the organizational "greening" process is not a linear, one-dimensional progression, rather an uneven process in which several GMS profiles prioritize different stakeholders. The results also reveal that underlying perceptual, behavioral, and organizational factors influence GMS implementation.

Keywords Green marketing, Environmental management, Stakeholder analysis, Spain

Paper type Research paper

Introduction

As the challenge of environmental pressures is added to the business and academic agenda, several studies based on the strategic management literature have been launched to determine the predictors of corporate environmental response (Aragon-Correa, 1998; Bowen, 2002; Sharma, 1997). Although there is still limited understanding as to why a firm adopts environmental management practices (Klassen, 2001), previous research on organizations suggests that stakeholder pressures are critical drivers of corporate environmental response (Berry and Rondinelli, 1998; Hoffman and Ventresca, 2002).

Marketing literature also recognizes that stakeholders play a significant role in influencing organizations and markets (Davis, 1992; McIntosh, 1990; Polonsky, 1994;

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Pujari *et al.*, 2003; Varadarajan and Menon, 1988) and past empirical research examines their influence on several aspects (e.g. purchase of green products, environmental new product development, and recycling programs). What marketing literature has not targeted, however, is a single integrated approach that examines the relationship between stakeholder management and green marketing strategies (GMSs). Various reasons have been advanced for this:

- that stakeholder theory is rarely applied to marketing practice (Polonsky, 1995);
- that there is no universally accepted definition of what constitutes a stakeholder (Polonsky *et al.*, 2003);
- that there is little research into the relative attention that companies give to their stakeholders (Greenley and Foxall, 1996); and
- that the marketing literature is biased in its orientation to one specific stakeholder – the consumer (Fitchett, 2004).

Apart from these possible considerations, the debate about "stakeholders" in the context of green marketing is different from that in mainstream environmental literature. This is because many of the "stakeholders" in green marketing – the planet, various animal and plant species, and future generations – are nebulous; and they cannot have a direct influence on marketing strategies. For example, all the iconic green marketing brands (Ben & Jerry's, Tom's of Maine, Bodyshop, Ecover, LL Bean, and Patagonia) were the result of the internally-oriented, value-driven strategy, usually from entrepreneurs with a vision and an idea – rather than being due to specific stakeholder pressure[1]. Thus, although it is apparent that stakeholders influence proactive corporate proactiveness, there is still little analysis of their impact on GMSs.

The purpose of the present study is to examine the influence of stakeholders on GMSs in a sample of Spanish firms. The paper begins with a summary of the theory behind the hypotheses. It then describes the chosen methodology and the main features of the sample. The results are then presented and analyzed. This is followed by a discussion of the theoretical and managerial implications of the study and proposed future areas of research.

Theoretical framework and research hypotheses

A typology of green marketing strategies

Because the size, technology, environmental impact, and international reach of companies varies, there is no generally accepted typology of corporate environmental strategies. A review of the different typologies of environmental strategies of firms (see Table I) reveals a scarcity of marketing literature despite decades of interest on the part of firms to integrate the general business environment into their strategies (see Pfeffer and Salancik, 1978; Miles and Snow, 1978).

Table I shows that the environmental strategies of firms were developed primarily with a strategic-management focus that emphasized operations function within firms. Several typologies that include marketing function have also been developed, but it is still difficult to find typologies based solely on a green marketing focus. Table I also shows that all of the typologies include certain steps taken by firms to achieve a proactive position in response to environmental demands, although the number and descriptions of these steps differ.

	Author	Steps
General management literature		
General business environment focus		
To managing environmental demands: adaptation and avoidance	Pfeffer and Salancik (1978)	2
Reactors, defenders, analyzers, prospectors	Miles and Snow (1978)	4
Coercive, mimetic and normative isomorphism	DiMaggio and Powell (1983)	3
Reactive, defensive, accommodative, proactive	Wartick and Cochran (1985)	4
Cost leadership strategy and differentiation strategy	Porter (1985)	2
Acquiescing, compromising, avoiding, defying, and manipulating	Oliver (1991)	5
Reactive and proactive perspective	Clark *et al.*(1994)	2
Reactive, proactive, strategic, and crisis-preventive	Vastag *et al.* (1996)	4
Strategic management literature		
Operations function focus		
From end-of-pipe strategies to cleaner technologies	OECD (1995)	2
From waste burden assessment to product design and production process	Sarkis (1995)	3
From environmentally responsible approaches towards product design to the design of industrial systems.	Shrivastava (1995)	5
From end-of-pipe approach to sustainable development	Hart (1995)	4
From fundamental process changes to improvement systems.	Klassen and Whybark (1999)	3
Operations and Marketing focus		
From beginners to proactivistis	Hunt and Auster (1990)	5
From why me's, smart movers, to enthusiasts	Simpson (1991)	3
From non-compliance to leading edge	Roome (1992)	5
From traditional management to environment-related management	Halme (1996)	2
From a compliance-based attitude to an innovative attitude	Azzone *et al.* (1997)	3
From traditional firms, preventive firms, to "cutting-edge firms"	Berry and Rondinelli (1998)	3
From deliberate reactive firm to deliberate proactive firm	Winn and Angell (2000)	2
From "green business" to "green-green business"	Isaak (2002)	2
Marketing literature		
General business environment focus		
Independent, cooperative, and strategic maneuvering	Zeithaml and Zeithaml (1984)	3
Defender-analyzer-prospector	Walker and Ruekert (1987)	3
	McDaniel and Kolari (1987)	3
Green marketing focus		
From defensive or reactionary to assertive or aggressive strategy.	McDaniel and Rylander (1993)	2
From consumption marketing to sustainable marketing	Sheth and Parvatiyar (1995)	2
From functional, business strategy level, to strategic level	Menon and Menon (1997)	3
From passive greening to collaborative greening	Crane (2000)	4

Table I.
Different approaches to environmental strategies of firms

In the marketing literature, the forerunners of environmental typologies (Zeithaml and Zeithaml, 1984) focused on the general business environment, rather than on a distinctively "green" marketing perspective. Similarly, McDaniel and Kolari (1987) and Walker and Ruekert (1987) adapted the Miles and Snow (1978) "reactor-defender-analyzer-prospector" classification to present their typologies for the general business environment. According to these authors, this classification is a useful theoretical framework for analyzing the interaction between organizations and their environment, and the marketing strategies they adopt according to their perception of their environment. Miles and Snow (1978) had classified firms according to adaptive decision patterns (including "reactors", "defenders", and "analyzers") and to a more adaptive category ("prospectors"). However, the "reactor" group should be excluded from the continuum, because it refers to organizations that have not actually identified any specific strategy. "Defenders" have narrow product-market domains, focus on maintaining their positions, and tend not to search outside these domains for new opportunities. "Analyzers" focus on maintaining their positions in core markets, but also want to innovate at the margins by selective searching for new product opportunities. "Prospectors" wish to have access to the largest possible market by making consistent efforts to innovate and produce changes in their industries. They frequently experiment with potential responses to emerging environmental trends.

From a specifically green marketing focus, the typologies also present several evolutionary steps in proactive corporate environmental policies (see Crane, 2000; McDaniel and Rylander, 1993; Sheth and Parvatiyar, 1995). In this respect, Menon and Menon (1997) have identified a progression in so-called "enviro-preneurial" marketing strategies, including:

- functional or tactical level;
- quasi-strategic (or business-strategic level); and
- strategic level.

The first, the tactical level, is characterized by functional decisions (marketing or production managers) that are oriented to achieve specific objectives, and by strategies guided by economic adaptation. The second, the quasi-strategic level, is characterized by a lack of uniform organization-wide strategic efforts to integrate environmental issues with the marketing strategy, and by managerial decisions oriented to achieving competitive advantage in their markets. The third, the strategic level, reflects top management decisions in integrating environmental issues and goals in a firm's micro-organizational and macro-organizational systems. However, in general, these green marketing typologies reflect a normative approach without an empirical basis (Pecotich *et al.*, 2003), or are pertinent only to a particular study (Clemens, 2001).

The present research therefore addresses this gap by developing a three-step typology based on the green marketing concept (GMC). The number of steps of the proposed typology is based on the traditional literature of marketing concept implementation (see Lambin, 2000) and on the classic model of production-sales-marketing (Keith, 1960). A similar three-step approach was adopted by Menon and Menon (1997), whose framework of tactical, quasi-strategic, and strategic approaches linked marketing strategy to social issues. The proposed typology also integrates the steps of marketing strategies proposed by Miles and Snow (1978) in the "defender-analyzer-prospector" classification.

The use of GMC in the proposed typology is justified because this concept is environmentally sensitive and responsive to the environmental interest and concerns of consumers and other interest groups (Walker and Hanson, 1998) and it conceptually guides the implementation of environmental strategies using a marketing mix of:

- green products/services;
- communication;
- price; and
- distribution (Bohlen *et al.*, 1993; Davies, 1993; Kangun *et al.*, 1991; Polonsky, 1994; Pride and Ferrel, 1993).

Because the natural environment has only recently become an important issue in the marketing literature (see Fuller, 1999; Polonsky, 1994) and in marketing strategy (see Menon and Menon, 1997; Ottman, 1998), the GMC is not without its critics. Some assert that research on the subject is handicapped by weak conceptual and empirical development (Polonsky, 1994), and by limited applications to industry. GMC studies tend to focus on business-to-consumer (B2C) markets (Crane and Peattie, 1999), and ignore the fact that there is wide variation with respect to environmental awareness in business-to-business (B2B) markets, business-to-retailer (B2R) markets, and business-to-government (B2G) markets (Charter *et al.*, 2004). Additionally, diverse economic sectors should be considered, because they and all markets vary in terms of their exposure to consumer markets[1].

From a conceptual viewpoint, a broad definition of GMC containing all actions that take into account stakeholders and their needs as well as different markets and sectors would be ideal, but the literature has yet to produce such a definition. One reason for this is that there is no consensus regarding basic definitions for certain markets. For example, we find that markets B2B and B2C have opposing perceptions about environmental improvements (see Littig, 2000; Schrader, 1996). Within the B2B market there is also a lack of common understanding about eco-efficiency as an operational strategy, and no consensus on how to measure and interpret eco-efficiency as an indicator (SAT, 2003). Another reason is that it is too conceptually complex to integrate all markets and stakeholders needs in a single strategy. As far as complexity is concerned, Bunn *et al.* (2002) and Polonsky and Ottman (1998a) indicate that it is a complex task to identify and manage a wide range of stakeholders in marketing strategy and implementation processes.

Given the current theoretical and empirical development of GMC, the present research operationalizes the definition of GMC on the basis of essential strategic and operative marketing-management actions that can be applied to any type of industrial market. Operationalization of this type is supported by Charter *et al.* (2004). These authors suggest that green marketing should evolve from its preoccupation with B2C markets to become a general management process that enables firms to satisfy all their target markets (B2B, B2R, and B2G) with the right product (or service), at the right price, in the right place, in the right way.

The present operationalization of GMC is based on the following actions of strategic marketing management:

(1) an analysis of the potential of green markets;

(2) actions oriented towards satisfying green market needs; and

(3) an analysis of competitors' green behavior.

These three actions are key steps in the process of developing and implementing a marketing strategy (Hooley *et al.*, 2004). In addition, analysis of green consumer behavior is included because it is a crucial factor in industrial policy (Giuliettia *et al.*, 2001), and consumer demand for goods ultimately leads to environmental problems (Polonsky, 1994).

At the operative level of marketing management, the GMC was operationalized using the following marketing-mix actions:

(1) politics of green product design;

(2) distribution with green criteria;

(3) pricing of green products; and

(4) green publicity and green sponsoring.

The present operationalization includes green product design (no. (1)), although the study of the relationship between green products and industry from a marketing perspective is relatively new (Baumann *et al.*, 2002). The literature also recognizes that managers should be aware that green marketing begins with green design (Vasanthakumar, 1993), and that product design constitutes an active interface between demand (consumers) and supply (manufacturers) (Baumann *et al.*, 2002). For example, super-concentrated laundry detergents are associated with energy saving, reduced packaging and space, and money (Ottman and Terry, 1998).

Green distribution (no. (2)) was included because product distribution systems can constrain green design solutions (OTA, 1992) since they must guarantee the tangible "ecological nature" of the products on the market (Italia Imballagio, 2002).Additionally, distribution often increases the environmental impact of products, and is constantly regulated for environmental compliance. This is a common situation in the United States (Isherwood, 2000). Green products pricing (no. (3)) was included because green industrial differentiation works only when green products reduce clients' costs (Wohlgemuth *et al.*, 1999). Similarly, we added green publicity (no. (4)), because consumers and industrial buyers can be influenced by advertising that reflects a company's commitment to the environment (Polonsky, 1994). Recent studies have confirmed this in various sectors including electronics and furniture industries (SAT, 2003; Shaw, 2000), and the automobile industry (De Cicco and Thomas, 1999). In summary, these eight actions associated with the strategic and operative level of marketing management form the basis of the present analysis of the GMS profiles in the study sample.

A stakeholder management approach to GMS

Stakeholder management is the process oriented to identify, to conceptualize and even prioritizes stakeholders in order to address environmental demands (Lamberg *et al.*, 2003; Maignan and Ferrell, 2004). Given that this process starts with the identification of groups affected by and capable of influencing organizations (Andriof and Waddock, 2002, USAID, 2004), our first step was to identify the stakeholders of the Spanish firms.

The identification of stakeholders

The environmental and marketing literatures recognize the need to address the interests of a wide diversity of relevant stakeholders (Garrod, 1997). However, the

theory is often unable to distinguish those who are stakeholders from those who are not (Phillips and Reichart, 2000). Stakeholder identification is thus obviously a problem, and the conceptualization of a "stakeholder" has generated many articles (see Agle *et al.*, 1999; Clarkson, 1995; Carroll, 1999; Mitchell *et al.*, 1997) and classifications.

Generic classifications of stakeholders assume that there are groups of stakeholders common to all organizations. For example, Porter's (1980) five-force model, Clarkson (1995), and Savage *et al.* (1991) all talked in terms of "primary" stakeholders and "secondary" stakeholders. Greenley and Foxall (1996) identified five groups of stakeholders: consumers, competitors, employees, shareholders, and unions. Clarke and Clegg (1998) maintained that traditional stakeholders are customers, employees, shareholders, and suppliers. Henriques and Sadorsky (1999) proposed four main stakeholder classifications: organizations, communities, regulations and the media. In contrast, relative classifications recognize stakeholders in terms of specific organizations and specific stakes in these organizations (Freeman, 1984; Mitchell *et al.*, 1997). Freeman (1984) also maintained that stakeholders are dynamic – that is, the stakeholders and their stakes change over time, depending on the specific strategic issues under consideration.

The way in which managers define and identify stakeholders remains an important question in the business and organizational literature (Rowley, 1997). In the present study, the first task was therefore to analyze how Spanish managers classify their stakeholders when developing GMSs. Thus, the following two alternative hypotheses are proposed:

H1.1. Spanish environmental managers group their stakeholders in a generic classification.

H1.2. Spanish environmental managers group their stakeholders in a relative classification.

Analysis of salient stakeholders

Mitchell *et al.* (1997) presented a "stakeholder salience model" for identifying important stakeholders, in which "stakeholder salience" was defined as the degree to which managers give priority to competing stakeholder claims. However, there remains little theoretical and empirical evidence of how managers actually prioritize stakeholders (Greenley and Foxall, 1997).

The business management literature provides two perspectives on stakeholder salience. The first is based on the premise that only stakeholders with legitimate claims should be prioritized "... regardless of their power to influence the firm or the legitimacy of their relationship to the firm" (Mitchell *et al.*, 1997, p. 857). The underlying argument to this position is that firms are unable to satisfy the interests of all stakeholders because of restricted resources and capabilities. The second perspective, held by Clarkson (1995), is that all stakeholders related to the organization should be prioritized because all stakeholder interests are legitimate and of intrinsic value, and because all merit consideration on their own terms (Donaldson and Preston, 1995).

The marketing literature also offers two perspectives. The first, held by Maignan and Ferrell (2004), restricts stakeholder prioritization to two main groups of stakeholders: customers and channel members. Their opinion was in accordance with

the traditional marketing view that consumers and competitors are important to marketing strategies and actions. Empirical research by Greenley and Foxall (1996) supported this view by demonstrating that a consumer orientation influences both competitor orientation and employee orientation

The second marketing perspective is broader. It perceives that all stakeholder needs must be accounted for in the strategy process (Polonsky, 1996; Thomlison, 1992).

In general, the literature on relationship marketing supports this perspective in perceiving a need to improve relationships with customers, and to develop and enhance relationships in supplier markets, recruitment markets, internal markets, referral markets, and influence markets (Christopher *et al.*, 1991). For example, Koiranen (1995) advocated a wider vision and suggested that relationship marketing is concerned with building relationships among the members of a broader group than just the firm and its consumers. Similarly, Gummesson (1999) argued that the bases for marketing are classic and special market relationships (with suppliers, customers, competitors, and others who operate in the market), and that non-market relationships (with governments, the mass media, and internal customers) have an indirect influence on the efficiency of firms. According to this view, a firm's efficiency depends mainly on satisfying the classic and special market relationships, and that proactive attitude to its suppliers, customers, and competitors will affect its orientation on non-market relationships. Because the detection of salient stakeholders for an organization is largely a theoretical and empirical question (Buysse and Verbeke, 2003) it is important to analyze whether non-market stakeholders are dependent on relationships with market stakeholders. The following hypothesis is thus proposed:

H2. Managerial perceptions of non-market stakeholders are dependent on how managers perceive market stakeholders.

Influence of stakeholders on green marketing strategies

Previous literature suggests that the degree to which a firm understands and addresses environmental stakeholder demands is associated with proactive environmental strategies (Berry and Rondinelli, 1998; Hart, 1995). Thus, firms perform proactive environmental strategies conditioned by the pressures that they perceive from their stakeholders (Fineman and Clarke, 1996; Jennings and Zandbergen, 1995; Maxwell *et al.*, 1997).

From an institutional perspective, stakeholders are perceived as a regulative structure that prescribes or restrains behavior (North, 1990; Scott, 1995) or as an incentive structure to firms (North, 1991). Thus, stakeholders influence organizational choice (DiMaggio and Powell, 1983) to the extent that these choices are based on assumptions and forecasts that arise from an organization's interactions with its institutional environment (Levy and Rothenberg, 2002). If demands are perceived as restrictions, firms bring about swift socialization to obtain legitimacy from stakeholders, as well as measurable outcomes and accountability (Weick, 1995). However, if they are viewed as opportunities, these demands act as incentives to proactive corporate behavior with a view to receiving positive public attention and increased stakeholder support (Cordano, 1993).

Meanwhile, the empirical standpoint on corporate environmental strategies is unclear. Hoffman (1997) has shown that companies facing a common industry context tend to adopt similar strategies in response to the institutional forces they experience.

Other researchers, however, have found variability in the environmental strategies of companies operating in similar sociopolitical regulatory contexts (Aragon-Correa, 1998; Hart and Ahuja, 1996), as well as within the same industry (Sharma and Vredenburg, 1998). The present authors theorized that these conflicting results could be explained by varying managerial cognitive interpretations of environment and stakeholders that ultimately determine a firm's choice of environmental strategies (Fineman and Clarke, 1996; Sharma, 2000). This view is supported by cognitive approaches to the study of groups (see Porac and Thomas, 1990; Tallman and Atchison, 1996), which suggest that managerial cognitive frameworks shape a firm's strategy.

Perceptions of stakeholder pressures could vary depending on management's commitment to environmental issues (Buysse and Verbeke, 2003; Henriques and Sadorsky, 1999). Therefore it is necessary to determine whether the level of managers' perceptions of stakeholder pressures is associated with a firm's level of GMS. Although there is very little previous literature that empirically validates the direction of this influence, several authors suggest that stakeholders positively influence corporate strategy. For example, Freeman (1984) has indicated that the "stakeholder approach" is partially about managerial behavior taken in response to stakeholders. Similarly, Roberts and King (1989) have suggested that stakeholders influence the formulation and direction of corporate strategies. This direction also appears in the environmental-marketing literature (see Polonsky, 1996; Polonsky and Ottman, 1998b).

Nevertheless, previous literature assumes that stakeholders are likely to share similar views of a firm's green outcomes and does not consider whether stakeholders or managers want to influence a "non-green outcome". Managers are the most likely targets for private and public political pressures, because of their influence on corporate strategy (Wright and Ferris, 1997), and are often faced with competing demands for time and resources between different stakeholders (Vinten, 2000). Managers may adopt corporate strategies in response to economic pressures even if these strategies may not always be in the best interests of environmental stakeholders (Carrigan, 1995), so we propose two alternative hypotheses:

H3.1. The level of perceived influence of stakeholder pressures is positively associated with a firm's green marketing level.

H3.2. The level of perceived influence of stakeholder pressures is negatively associated with a firm's green marketing level.

Influence of organizational context on stakeholder perceptions

The literature suggests that managerial interpretations of environmental issues are significantly influenced by a firm's perceived "visibility" – that is, whether it can be easily "seen" by relevant constituents (Bowen, 2000; Dutton and Duncan, 1987). Visibility can also explain the diverse levels of a firm's environmental proactiveness (Bowen, 2002), because stakeholders target more visible firms for social pressure (Getz, 1995), and these firms must respond to stakeholders' demands in order to maintain their social legitimacy (Bansal, 1995).

Since large firms are more visible to customers, the media, environmentalists, and government agencies, "visibility" is usually operationalized as firm size (Greening and Gray, 1994; Henriques and Sadorsky, 1996; Sharma, 2000). In addition, because size can

make companies more sensitive to damage to their reputation (Waddock and Graves, 1997), firm size has also been used as a proxy for "political visibility" (Dasgupta *et al.*, 1997). Furthermore, firm size has often been associated with discretionary disclosures practices (see Gray *et al.*, 1995), and empirical research has revealed significant relationships between firm size and a firm's proactive environmental policies (Murphy *et al.*, 1995; Stanwick and Stanwick, 1998). However, because larger firms are not only more visible, but also have more resources to allocate to environmental issues (Bowen, 2000), these resources could explain a firm's proactive behavior with respect to environmental issues. It might therefore be inappropriate to operationalize firm visibility only in terms of firm size.

Annual sales and the multinational character of a firm can create visibility and might affect the importance attached to various stakeholders. Delmas and Toffel (2004) have suggested that environmental groups could target firms because of their market share position (or annual sales). For example, in March 2002, the director of the US Organic Consumers Association targeted Nike because it was a market leader (Frost, 2005). Similarly, multinational corporations are more exposed to pressures from international customers, suppliers, and rivals, and are therefore more oriented towards environmental responsibility, than are national firms (Buysse and Verbeke, 2003; Zyglidopoulos, 2002).

Firms can also become "visible" to the public eye if the pollution they generate harms the environment (Greening and Gray, 1994; King and Lenox, 2000). Pollution varies significantly in different industrial sectors (Hartman *et al.*, 1997), and greater polluters are more easily detected by surrounding communities (Dasgupta *et al.*, 1997). It is therefore evident that managers' attention to stakeholders varies according to the circumstances of the firm's industry (Fineman and Clarke, 1996). In addition, different levels of coercive pressure are exerted upon various industries, and this might also cause firms to adopt different environmental strategies (Milstein *et al.*, 2002; Porter and Van der Linde, 1995).

The literature agrees that a firm's visibility influences the perceived importance of stakeholder pressures, but there is no consensus as to the direction in which a firm will move because of this. To site an example, Chapple *et al.* (2001) empirically found that industry concentration is negatively correlated with involvement in voluntary agreements. Consequently, two alternative hypotheses are proposed:

H4.1. The level of a firm's visibility positively influences the perceived importance of stakeholder pressures.

H4.2. The level of a firm's visibility negatively influences the perceived importance of stakeholder pressures.

Empirical research

Sample

The present study is based on a sample of 115 firms that responded to a survey sent to 1,200 companies in Spain. The target population was defined in terms of the main economic sectors with environmental impact. The sectors selected were compared to the list from the *SIC Industry Codes for Market Segmentation* (supplied by Dunn & Bradstreet) and the National Classification of Economic Activities (NCEA). The respondents were environmental managers from companies with a workforce of more

than 50 employees. The smallest companies were excluded because it was presumed that their lack of resources could influence managers' motivation to go beyond minimum regulatory requirements. Environmental managers were used because many "green" marketing activities cross various functions and because marketing managers are still unable to provide information on some environmental issues (such as product development) (Polonsky and Ottman, 1998a). The survey was sent directly to individuals who participated in the firms' green marketing actions, and the questions were screened to eliminate possible responses from other personnel. The managers were asked to describe environmental marketing actions launched within the preceding two years. This procedure thus differed from the few previous environmental studies – in which marketing managers (rather than environmental managers) had been asked about actions that "should be carried out" (see Polonsky and Ottman, 1998a). Industry representation was adequate, with 15 percent being involved with chemicals products, 25 percent with wholesale distribution, 20 percent with construction, 18 percent with transportation, and 22 percent with others. There was large diversity in the size of the businesses, with 23 percent being small firms, 32 percent being medium-sized firms, and 45 percent being large firms. Most firms were affiliated with a multinational group, with only 18 percent being purely domestic firms. A minority was listed on the national stock exchange, with 68 percent not being listed.

Questionnaires

GMS – this variable captures the strategic and operative dimensions of marketing management, and is measured by eight items. To our knowledge, this scale has no precedent, so qualitative and quantitative procedures were followed to ensure scale validity and reliability. The qualitative procedure included a review of the literature and two rounds of exploratory interviews with managers and academics. The first round produced a scale of 15 items, but since some of the concepts were either duplicated or confusing, the number was reduced. For example, actions such as "publication of environmental reporting" and "actions for enhancing corporate image" were grouped in the item "use of green publicity and green sponsoring", while "analysis of waste elimination from end products" and "end product recycling" were included in "analysis of green consumer behavior". Similarly, the action to "recommend the substitution of non ecological materials" was added to "politics of green product design" and "collect recyclable packaging" was included in "use of distribution with green criteria". We also eliminated the "use of ecolabelling" item because it could be accounted for ecological advertising and product's brand.

The quantitative procedure included a factorial analysis, a Kendall's coefficient of concordance, and a Cronbach's alpha test. The factorial analysis was applied to eight items, which were loaded on the one factor accounting for 68.20 percent of the variance (KMO = 0.86677; Bartlett Test = 484.60827, $p < 0.0000$). A Chi square of 232.2794 ($p < 0.0000$) and W de Kendall of 0.4175 indicate a medium although significant agreement among managers regarding content items of GMS. Finally, the Cronbach's alpha of 0.90 shows a high reliability of the scale.

The stakeholders or environmental pressures perceived were evaluated were evaluated in relation to 16 driving forces (banks, suppliers, distributors. scientific institutions, consumer organizations, insurance companies, competitors, labor unions, voluntary agreements, press/media, and so on) that influenced firms' willingness to

undertake green marketing initiatives. These stakeholders were selected from those used in earlier theoretical and empirical research (Buysse and Verbeke, 2003; Freeman, 1984; Henriques and Sadorsky, 1996; King and Lenox, 2000). The responses were graded from 0 to 4, with 0 = "no influence" and 4 = "heavy influence". The global scale showed a degree of reliability of 0.87. After factorial analysis, test reliabilities across the four groups were 0.80, 0.81, 0.70, and 0.71, respectively.

In analyzing the influence of visibility in relation to stakeholders' perceived importance of the firm, firm size was operationalized according to:

- the number of employees (50-250 = "small", 251-500 = "medium"; 501+ = large); and
- annual sales.

A firm's affiliation with a multinational group and a listing or non-listing with the national stock exchange were used as indicators to operationalize multinational character. The following sectorial dummy variables were used to examine the effects on industry:

- chemical products;
- wholesale distribution;
- construction;
- transportation; and
- others.

Empirical results and analysis

Cluster analysis of green marketing strategy profiles

Before testing the validity of the hypotheses, the validity of the proposed GMS profiles was analyzed with an SPSS Quick cluster routine. Since *K*-means cluster requires specification of the number of clusters, theoretical antecedents were used to run quick cluster routines with three clusters:

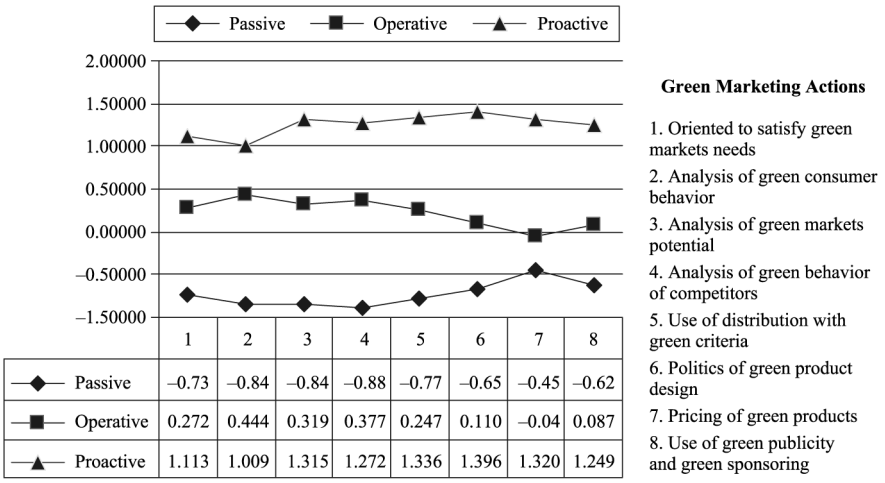
(1) tactical (or passive);

(2) quasi-strategic (or operative); and

(3) strategic.

The eight items measuring GMS were standardized to give all criteria equal weight. A one-way analysis of variance was used to test the robustness of the solution provided for the cluster analysis. The robustness of the solution was also tested by repeat cluster analyses on randomly selected sub-samples of the respondents, in accordance with a procedure used by Henriques and Sadorsky (1999) and Buysse and Verbeke (2003). Because the assignments within these sub-samples were made almost entirely to the same clusters, the results can be considered independent of a particular sub-sample characteristic. Figure 1 shows the cluster profiles associated with variations in the responses to the eight items. Positive cluster means indicate green marketing practices, whereas negative cluster means indicate a lack of green marketing practices. The three cluster profiles are thus grouped according to differences in performing green actions.

The first cluster consisted of 47 passive firms that had a low GMS performance level; these firms satisfied green markets by employing reactive tactics in terms of



	1	2	3	4	5	6	7	8
Passive	–0.73	–0.84	–0.84	–0.88	–0.77	–0.65	–0.45	–0.62
Operative	0.272	0.444	0.319	0.377	0.247	0.110	–0.04	0.087
Proactive	1.113	1.009	1.315	1.272	1.336	1.396	1.320	1.249

Figure 1.
Final clusters of GMS profiles

strategy and marketing mix. The second cluster profile contained 46 operative or quasi-strategic firms with a medium level of GMS; these firms were inclined to use green marketing actions. The third cluster included 22 strategic firms that devoted significant attention to green marketing actions in dealing with environmental stakeholders.

These profiles have similarities with those of Miles and Snow (1978). The present passive group, like the defenders of Miles and Snow (1978), were conservative in their approach to environmental marketing and more oriented to operations than to marketing solutions. The present quasi-strategic group, like the analyzers of Miles and Snow (1978), give priority to being "second-in" with cost-effective product offerings. The present strategic cluster, like the prospectors of Miles and Snow (1978), often employed mixed marketing, and their environmental surveillance was market oriented. Growth in these kinds of firms is based on product market development and marketing solutions.

This GMS cluster solution also concurs with the research on the type of environmental management that identifies best practices designed to simultaneously reduce the harmful environmental impact of commercial activities and to provide a competitive advantage in product markets. Likewise, this solution coincides with authors who state that firms integrate their concern for the natural environment across corporate strategy and internal functions like marketing, in an effort to achieve an adequate response (Menon and Menon, 1997; Percy, 2000; Preston, 2001).

According to this literature, differentiation advantage can result from best practices of environmental management that focus on product markets (Stead and Stead, 1995, 1996). Some of these practices such as development of new environmentally responsible products, and advertisement of a product's environmental benefits (Dechant and Altman, 1994; Reinhardt, 1998) are included and validated in our GMS operationalization. Figure 1 thus reveals three progressive levels of green marketing actions to adapt to environmental restrictions. Classifying firms according to a progressive level of marketing action performance is also assumed by market orientation literature, where the level of market orientation is the degree to which the

business unit obtains and uses information from customers, develops a strategy that will meet customer needs, and implements the strategy by being responsive to customer needs and wants (Ruekert, 1992: p. 228).

Testing of hypotheses

H1.1 *and* H1.2. To assess the firms' perceptions of the importance of stakeholders, the 16 stakeholder items were incorporated in a principal component analysis. Following varimax rotation, four factors emerged with eigenvalues greater than 1 (5.72; 1.72; 1.23; 1.11). These accounted for 61.3 percent of the total variance. The results thus revealed four groups of stakeholders that do not coincide with previous classifications (see Table II).

The first group represented stakeholders associated with the firm's classic market relationships: customers, competitors, distributors and suppliers (Gummesson, 1999). These market stakeholders have the greatest impact in determining the success of the firm's business operations. For example, customers might respond positively to a company's environmental actions by purchasing its product, but they might also boycott it if the firm has a bad reputation for poor environmental management (Elkington, 1994). Similarly, green suppliers might stop delivering inputs to protect their own reputation (Henriques and Sadorsky, 1999), and their involvement positively influences the performance of environmental products (Pujari *et al.*, 2003). Distributors can collaborate in recycling actions and brand identity (Rindova, 1997), and their cooperation increases the credibility of a firm's actions. Competitors might achieve competitive advantage if they develop a more proactive environmental strategy (Garrod, 1997).

The second group included the "social stakeholders" – the press and media, environmental organizations, and the local population. These stakeholders can affect a

	Market stakeholders	Social pressure groups	Immediate providers	Legal stakeholders
Competitors	*0.67043*	0.12622	0.30647	−0.04314
Customers	*0.75724*	0.17810	0.08334	0.14082
Distributors	*0.69900*	0.26383	0.32973	0.00949
Insurance companies	*0.62062*	0.11379	0.37064	0.07435
Suppliers	*0.63172*	0.17072	−0.11300	0.31315
Environmental organizations	0.25406	*0.79860*	0.03420	0.05918
Consumer organizations	0.32276	*0.60686*	0.28722	−0.11716
Local population	0.03556	*0.79477*	0.07906	0.22453
Press-media	0.35757	*0.62507*	0.35853	0.18524
Voluntary agreements	0.21863	−0.08187	0.09479	*0.67399*
National regulations	0.02247	0.18781	−0.06074	*0.83063*
International regulations	0.04348	0.35283	0.34379	*0.68306*
Owners	0.04992	−0.03454	*0.76629*	0.19191
Banks	0.18657	0.25745	*0.53384*	−0.23471
Scientific institutions	0.14508	0.23900	*0.57179*	0.12001
Labor unions	0.27559	0.15273	*0.59867*	0.11258
Eigenvalue	5.72	1.72	1.23	1.11
Cronbach's alpha	0.80	0.81	0.70	0.71

Table II.
Factor loadings of stakeholder influences

firm's reputation by mobilizing public opinion for or against the company's performance (Clarkson, 1995). Firms gain a good environmental reputation and social legitimacy insofar as they comply with shared social goals (Bansal and Roth, 2000). In contrast, firms with a bad environmental performance can be faced with negative publicity campaigns from environmental lobby groups or unfavorable coverage by the media (Welford and Gouldson, 1993). Local populations can also impose political restrictions on firms local government elections, and by mobilizing public opinion for or against a corporation's environmental performance (Clair *et al.*, 1995).

The third group included providers of critical inputs, such as owners and shareholders, labor unions, banks, and scientific institutions. Owners and shareholders are critical providers because environmental actions require a significant investment in technologies and capabilities (Hutchinson, 1992). Financial institutions influence management decision-making because the threat of refusing financial support can negatively affect the firm (Buysse and Verbeke, 2003). Shareholders and financial institutions can thus penalize firms that are considered a high-risk investment because of their poor environmental record, and might make their discontent known by refusing to extend new loans or by withholding capital (Henriques and Sadorsky, 1996). Labor unions also affect the actions of firms by monitoring the work environment of employees and gaining insight into a firm's activities (Sarkis, 1995). Scientific institutions have the capacity to convince governments to standardize environmental practice or technology (Henriques and Sadorsky, 1996).

The fourth group includes international and national regulations and voluntary agreements. Environmental regulations constitute an authorized exercise of coercive power that restricts an organization's discretion (Carroll, 1996). Environmental regulations can also provide incentives to perform environmental activities (Cook and Farquharson, 1998) and often affect the economic and environmental performance of firms (Porter and Van der Linde, 1995). Voluntary agreements can complement such direct regulations (Delmas and Terlaak, 2001). These findings confirm that Spanish environmental managers group their stakeholders in a relative classification. *H1.2* ("Spanish environmental managers group their stakeholders in a relative classification") is therefore confirmed.

H2. Drawing on Greenley and Foxall's (1996) research methodology, multiple regression analysis was used to test the hypothesis. Three equations were performed on dependent variables – one for each of the social stakeholders, immediate provider stakeholders, and legal stakeholders. Market stakeholders were used as the independent variable for all equations. Firm size, multinational affiliation, and annual sales were introduced as control variables.

A forward selection procedure was used to apply the independent variables to each regression model. Table III shows that all equations were formulated, thus indicating that market stakeholders were a predictor of social stakeholders, immediate provider stakeholders, and legal stakeholders (that is, all non-market stakeholders). The results of zero-order and partial correlation coefficients showed that each significant association was weakly influenced by the model's other variables. These findings confirmed *H2* – "managerial perceptions of non-market stakeholders are dependent on how managers perceive market stakeholders".

H3.1 *and* H3.2. Three procedures were used to test this hypothesis. The first two describe the associations between stakeholders and GMS, and the third validates the

direction of these associations. The first procedure was a one-way variance analysis (ANOVA) to examine the relationship between the importance of each individual stakeholder group and GMS cluster. The high *F*-values reported in Table IV indicate that variations among firms regarding the perceived importance of an individual stakeholder were associated with differences in their GMSs. Descriptive statistics show, however, that firms with an operative environmental strategy generally attach importance to competitors, labor unions, environmental organizations, voluntary agreements, and national regulations. These findings largely coincided with Buysse and Verbeke's (2003) pollution-prevention typology – in that firms perceived stakeholder opinions as guidelines for improving environmental performance (rather than being constraints). The present group of proactive firms reacted according to Buysse and Verbeke's (2003) environmental-leadership strategy – in that they aligned with the stakeholders who were perceived as being important. In the present typology, proactive firms differ from firms with an operative environmental strategy with respect to the importance they attach to stakeholders who are associated with market efficiency, such as customers, distributors, suppliers, and providers of financial, formal, and public support (banks, insurance companies, owners, and the local population).

The second procedure involved a multivariate variance analysis (MANOVA) to test the linkage between GMS and the overall stakeholder profiles. This was done to avoid biased linkages between environmental strategy and generalized stakeholder importance (because individual stakeholders could be interrelated). Table V shows the perceived importance of the four stakeholder groups and the corresponding ANOVA *F*-values. It should be noted that the ANOVA F was significant for all stakeholders' profiles. The high *F*-values suggest that variations in the perceived importance of the stakeholder groups were related to differences in the firms'GMSs. In the absence of other control variables, differences in green strategies are associated with 33 percent ($1 - \lambda$) of the variation in the importance assigned to stakeholders.

To test the direction of these relationships, four simple regression analyses were conducted – one for each stakeholder group, using GMS as the dependent variable. In the absence of other control variables, all stakeholder groups positively influenced the GMS of firms (see Table VI). These results validated *H3.1* – "the level of perceived influence of stakeholder pressures is positively associated with a firm's green marketing level".

	Multiple *R*	R^2	ΔR^2	Beta	$p <$	Zero-order *r*	Partial *r*
Social stakeholders							
Market stakeholders	0.58	0.33	–	0.54	0.0000	0.5805^{***}	0.5601^{***}
Number of employees	0.62	0.38	0.05	0.20	0.0176	0.2937^{**}	0.2329^{*}
Immediate providers							
Market stakeholders	0.57	0.32	–	0.57	0.0000	0.5698^{***}	0.5469^{***}
Legal stakeholders							
Market stakeholders	0.34	0.12	–	0.34	0.007	0.3376^{**}	0.3219^{**}

Notes: $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.000$

Table III.
Multiple regression analysis with market stakeholders as independent variable

Stakeholder types	Tactic or passive	Quasi-strategic or operative	Strategic or proactive	ANOVA F
Environmental influence of competitors	0.5625 (0.9432)	1.7931 (1.0481)	1.6250 (1.4312)	13.8229***
Environmental influence of consumer organizations	0.6250 (0.9812)	1.7667 (1.3047)	1.9375 1.2165)	15.7547***
Environmental influence of customers	1.3125 (1.2574)	2.3333 (1.2954)	2.7188 (1.3733)	12.5465***
Environmental influence of distributors	0.3830 (0.7676)	1.2667 (1.0807)	1.5625 (1.2165)	14.9154***
Environmental influence of labor unions	0.9149 (1.1000)	1.4000 (1.1326)	1.3750 (0.9070)	3.6736*
Influence of environmental organizations	1.2708 (1.2504)	1.9000 (1.2690)	1.8438 (1.0506)	3.7933*
Environmental influence of banks	0.4894 (0.8565)	0.8000 (1.1567)	1.0625 (1.2684)	3.9056*
Environmental influence of insurance companies	0.7021 (0.9536)	1.2000 (0.9965)	1.4375 (1.3664)	4.6048**
Environmental influence of voluntary agreements	1.6667 (1.5620)	2.5333 (.9732)	2.0313 (1.0920)	4.1488**
Environmental influence of the local population	1.6875 (1.2404)	2.2414 (1.4307)	2.5313 (1.0468)	4.7512**
Environmental influence of national regulations	3.0612 (1.0880)	3.4000 (1.0372)	3.1250 (0.9070)	3.0615*
Environmental influence of international regulations	2.5102 (1.1560)	3.1724 (1.1671)	3.3125 (0.8958)	6.3085***
Environmental influence of owners	1.5714 (1.5275)	2.2500 (1.4044)	2.5000 (1.4591)	4.2889**
Environmental influence of the press	1.0000 (1.2416)	2.1000 (1.1552)	2.1875 (0.9980)	13.5439***
Environmental influence of scientific institutions	0.5417 (0.9216)	1.5862 (1.2397)	1.8387 (1.0984)	16.6439***
Environmental influence of suppliers	0.4468 (0.8024)	1.2414 (1.0907)	1.3750 (1.4756)	8.0983***

Notes: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.000$

Table IV.
Individual stakeholder pressures under different green marketing strategies

Stakeholder types	Tactic or passive	Quasi-strategic or operative	Strategic or proactive	ANOVA F	Wilki's lambda
Market stakeholders	0.6190 (0.6681)	1.5921 (0.8734)	1.7333 (0.7821)	21.244**	
Social pressure groups	0.9881 (0.8427)	1.9695 (0.9239)	2.3194 (0.5803)	21.721**	
Immediate providers	0.8214 (0.8120)	1.4939 (0.7059)	1.7778 (0.8352)	12.614**	
Legal stakeholders	2.3571 (0.9970)	2.7967 (0.8126)	3.0185 (0.8122)	4.331*	
Overall effect					0.67**

Notes: * $p < 0.01$; ** $p < 0.000$

Table V.
Stakeholder groups under different green strategies

H4.1 *and* H4.2. This hypothesis was also tested by three procedures. In a first phase, a one-way analysis of covariance was used to test whether the importance attached to diverse stakeholders could be influenced by a firm's visibility. Size, multinationality, and industry variables were added to the analysis as covariates to determine whether, after other effects had been considered, variations in the typology of GMS were still associated with differences in the perceived importance of each stakeholder group. In the second phase, a MANCOVA test was performed on all stakeholder groups to estimate the effect of the GMS profile for each dependent variable after considering the effects of the firms' visibility variables.

The results reported in Table VII support *H4.1* – "that the level of a firm's visibility positively influences the perceived importance of stakeholder pressures". The results demonstrate that the association between the importance of immediate suppliers (three), legal stakeholders (four), and GMS preference is weakened after certain variables (including firm size, multinationality and industry) are incorporated.

The MANCOVA results shown in Table VII indicate the overall significant effect of GMS typology after adding the visibility variable. When size, multinationality, and industry effects were incorporated, the differences in GMS still represented 18 percent of the variance ($1 - \lambda$) in the perceived importance attributed to stakeholders. This suggests that, when firms adopt a stronger stakeholder orientation, their strategy evolves from an initial passive stance to a more operative one, and finally to a proactive green strategy. The analysis also shows that the progression in the importance attached to stakeholders did not necessarily increase at the same rate for all

Green marketing strategy	Multiple R	R^2	Adjusted R^2	Beta	F	$p <$
Market stakeholders	0.44972	0.20224	0.19479	0.449716	27.1263	0.0000
Social pressure groups	0.41863	0.17525	0.16740	0.418629	22.3113	0.0000
Immediate providers	0.38562	0.14870	0.14051	0.385617	18.1661	0.0000
Legal stakeholders	0.32617	0.11639	0.10981	0.326168	12.8575	0.0005

Table VI.
Multiple regression analysis with GMS as dependent variable

	ANCOVA F				MANCOVA Wilki's λ
	Market stakeholders	Social pressure groups	Immediate providers	Legal stakeholders	All stakeholders
Green marketing strategy	7.148***	7.973***	0.534	1.791	0.822**
Control variables					
Stock exchange listing	0.036	0.003	0.53	1.261	0.970
Multinational affiliation	4.070**	2.362	3.967**	0.03	0.883
Annual sales	3.234*	1.877	11.882***	6.463**	0.845*
Number of employees	4.537**	5.868**	6.348**	0.195	0.851*
Chemical	1.916	0.912	0.103	0.179	0.906
Transportation	5.516**	6.666**	5.725**	0.564	0.863
Wholesale distribution	1.64	10.945***	5.173**	0.516	0.938
Construction	1.948	15.938****	0.075	0.043	0.871
Others	9.108***	19.777****	14.758****	1.113	0.819**

Notes: * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$; **** $p < 0.000$

Table VII.
Stakeholder groups under different GMSs, accounting for a firm's visibility variables

stakeholder groups. To test the direction and level of these influences, a two-stage least-squares regression analysis was performed with an SPSS statistical package. GMS was used as a dependent variable; the four stakeholder groups were used as independent variables; and firm visibility variables were used as instrumental variables. Two separate models were estimated to analyze the contribution of variables to the R^2 model. The first model used only the industry sector as an instrumental variable, whereas the second used firm size and multinational character. The results contained in Table VIII support the previous analysis (ANOVA and MANCOVA tests), and validate *H4.1*. They also confirm that a firm's visibility variables influence the classification of the perceived importance of stakeholders, which ultimately influences the firm's strategy level.

The influence of legal stakeholders in addition to social pressure groups and market stakeholders was appreciable only when the economic sector variable was incorporated (model 1). This indicates that the perception of these stakeholders was conditioned by the potential negative impact of a firm's sector. When the organizational characteristics (model 2) were added, firms focused their attention on market and social stakeholders, but the influence of legal stakeholders disappeared. This might mean that the perception of stakeholder importance is influenced by a firm's ability to control or influence its stakeholders through power and resources derived from the size and multinational character of the firm. This could explain recent events in Spain whereby large firms were reported to be more likely to commit violations of regulations than were smaller ones. It seems that Spain has the highest rate of non-compliance and is the most reluctant of European Union members to adopt environmental protection laws – despite the fact that the EU approves more environmental legislation than any other type (ABC, 2004).

Discussion and limitations of the study

This study has empirically examined the relationship between stakeholder management and GMSs in a sample of Spanish firms. Because there has been little research in this field, a wide range of literature was reviewed to develop a testable typology of GMS and a classification of relevant stakeholders. As a result, the study

	Model 1	Model 2
Variables		
Market stakeholders	0.194741*	0.20904**
Social pressure groups	0.254908**	0.27133**
Immediate providers	0.082664	0.112508
Legal stakeholders	0.176848**	0.140364
Summary statistics		
Multiple R	0.54671	0.57106
R^2	0.29889	0.32611
Adjusted R^2	0.26998	0.29649
ΔR^2		0.02722
F statistic	10.33815	11.00943
$p <$	0.0000	0.0000

Notes: * $p < 0.10$; ** $p < 0.05$

Table VIII.
A two-stage least squares regression analysis with GMS as dependent variable

has identified the stakeholders associated with GMS and their impact on the strategy adopted by the firms. Moreover, the study has established how this impact is moderated by the firm's own economic sector and organizational characteristics.

The results supported *H1.2* – Spanish firms used a relative stakeholder classification that was based on the perceived influence that stakeholders had on a firm's GMS. Although the present study's stakeholder classification differed from previous classifications in the literature, it reflected the dynamic nature of stakeholders and confirmed that stakeholder identities and their interests varied according to the organization and its context. The validation of *H2* suggests that, although managers considered all stakeholders (see Table II), they also perceived that the firm's proactive attitudes to suppliers, customers, and competitors affect its orientation to non-market relationships. The study also revealed that the level of perceived importance of stakeholder pressure was positively associated with a firm's green marketing level, as predicted by *H3.1*, even though this relationship was moderated by variables related to the firm's visibility (*H4.1*). This implies that managerial perceptions of environmental stakeholders were a function of stakeholders' potential influence, but that they were moderated by the firm's own organizational and economic-sector characteristics.

Theoretical and managerial implications

The results of the present research support the importance of managerial perceptions in assessing the influence of stakeholders, and strengthen stakeholder theory. The research also contributes to a comprehensive theory of the firm, in that it tests whether perceived and organizational variables influence firms' proactive environmental behavior. As Rowley (1997) has pointed out, any theory of firms requires reciprocal explanations as to how stakeholders influence organizations and how firms respond to these influences. In this sense, the present results support the basic premise of institutional theory – that firms tend to conform with social influences in their environments in order to gain support and legitimacy (Baum and Oliver, 1991). The results also support the use of a resource-based view of the firm in the area of corporate environmental strategies (e.g. Hart, 1995). GMS is a corporate response that embodies a complementary asset, because firms gain competitive advantage by implementing environmental management best practices (Christmann, 2000), and strengthen their organizational use of resources and capabilities to develop them.

Managerial consequences derived from our analysis can be incorporated into public and general management, and environmental marketing management. In order for public policy makers to promote environmental proactiveness in firms, they must know which stakeholders are most influential, because this is essential to environmental policy design. The present research shows that managerial perception of market stakeholders is a predictor of non-market stakeholders' perceptions. Among the non-market stakeholders, legal stakeholders have the weakest influence on GMS. These findings confirm the results of studies carried out in other EU countries and corroborate the opinion that regulations have a limited impact on a firm's environmental actions (see European Commission, 1997; Janicke *et al.*, 1997).

Public managers must also take into consideration the technological sectors and size of firms. These factors can moderate stakeholder influence with regard to a company's level of GMS. The economic sectors that are closest to the final consumer are more responsive to stakeholders than are industries whose customers are other firms. The

Environmental Index (IEA, 2003), a publication that evaluates Spain's level of corporate environmental commitment, confirms these results. According to this index, the transportation and construction sectors express the highest commitment to the environment, whereas the chemical, plastics, and minerals sectors show little motivation. Thus, regulations should be designed to promote the environmental visibility of all of the participants in the manufacturing and commercialization processes. They should also encourage firms to incorporate life-cycle environmental considerations into their corporate decisions with respect to the market. Two examples of this are "eco-labeling" and ISO, both of which are environmentally-oriented tools (GEN, 2004).

Firm size can lead to greater attention to stakeholders, but it can also increase resistance to pressures for change (Murphy *et al.*, 1995). This explains the apparently contradictory results found in the present research, and corroborates the findings of previous studies in Spain. Large firms perceive environmental sensitivity in terms of competitiveness, but they also tend to violate regulations; as a result, their perception does not necessarily translate into positive environmental actions. In contrast, small firms are likely to perceive legal restrictions before focusing on the association between environmental sensitivity and customer demands (Giménez *et al.*, 2002). It is therefore apparent that public managers who want firms to adopt voluntary agreements as an "opportunity" should associate such agreements with competitiveness and market demand, because these aspects interest firms of all sizes. The EU has adopted this approach by linking solutions to the competitive functioning of markets with market-related instruments of environmental policy (see European Commission, 1998).

This study also has implications for general management and for environmental marketing management in particular. Although the present study did not address the relationship between corporate "greening" and an organization's environmental performance, it nonetheless provides useful information for future studies on the differential impact of GMS profiles on a firm's environmental performance. The concept of the manager as the moderator of all environmental influences could explain why the organizational "greening" process is not a linear, one-dimensional progression to enhanced environmental practices (Schaefer and Harvey, 1998). Rather, it is an uneven process in which several GMS profiles prioritize different stakeholders. Stakeholders who are initially perceived as influential to GMS design (see Table II) are often not the ones who are later associated with a firm's GMS level (see Table VIII). The gap between perception and action is mentioned in the literature on the cognitive aspects of corporate performance (see Sanchez and Heene, 1996) and suggests a two-phase process that includes formulating and implementing the strategy (Guth and MacMillan, 1986). The present results confirm that business performance depends largely on how well a firm's strategy has been formulated and implemented (Herbert and Deresky, 1987). Nonetheless, the results also support criticism of this view (Mintzberg, 1990), in that the results reveal that underlying perceptual, behavioral, and organizational factors influence strategy implementation (Sutcliffe and Huber, 1998).

The study also found that the surveys on GMS and stakeholder perception undertaken in the present survey are a potential source of information for managers, because they can be used as a self-diagnostic tool to determine if a firm's attitude to the environment is reactive or proactive. Because stakeholders react to environmental initiatives, the success of these actions will depend on a firm's ability to identify and satisfy stakeholder needs better than its competitors. A firm grasp of the drivers and

components of GMS is a prerequisite to understanding and predicting stakeholder response. By operationalizing GMS, actions associated with green marketing behavior can be identified to adapt to or control stakeholder influence. This is an important contribution because little of the marketing literature tests (or even suggests) ways in which strategies can be used to address stakeholder interests (Polonsky *et al.*, 2002).

Limitations and future research

The present study has focused on the relationship between GMSs and stakeholders, but has not ruled out the possibility that other organizational strategies might also have the same results. It is also possible that the environmentally reactive firms in this study developed proactive corporate strategies in other functional areas. Future studies might explore the links between GMS and other functional typologies (for example, operations). One of the problems encountered in the present research was that the study relied on self-reported measures provided by managers. Response bias might therefore have influenced the evaluation of variables. Another limitation was the use of single-source data for both independent and dependent measures. These are recurrent methodological weaknesses in much of the research on corporate strategies. Future studies could replicate the present study using more direct objective measures of the theoretical constructs. It is also possible that the findings reported here are limited to the Spanish context. Future studies might therefore replicate and extend the study in other industries and countries to ascertain whether environmental concerns have different effects in other contexts. Another possible limitation was the use of environmental managers as key informants. Although environmental managers know about environmental activity, they might not be involved in leveraging this information in marketing activities. On the other hand, marketers are unlikely to be familiar with the environmental intricacies of their firms' activities; indeed, some relevant environmental information might not even be available within the firm (Polonsky and Ottman, 1998a). Another limitation involved the nature of the sample companies used in the present research, as compared with those studied in much of the literature used to support the present research. Much of the literature reviewed for this study related to green marketing or marketing, usually in a consumer context. However, the present survey was conducted among firms whose customers were mainly other firms. This involved different market dynamics from those typical of the literature. The market dynamics of the firms studied here were characterized by a derived demand and by environmental standards imposed by their customers (which were themselves firms), such as the ISO 14000 series and the Eco-Management and Audit Scheme (EMAS). The relative lack of literature on such green industrial marketing could encourage future research to delve more deeply into environmental marketing strategies in the industrial market. The use of aggregate-level data is another limitation of our study since composite variables can mask significant variances within a firm's GMS. Our opinion is that since this study uses a correlational research design, future studies should be based on structural equation modeling to fully exploit the information provided by the items that compose the measures. Finally, green marketing management could be advanced by developing a classification of environmental strategies and relevant stakeholder groups in different industries, and in different market dynamics.

Note

1. The author is very grateful to anonymous reviewer for making this valuable observation.

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