

Guidelines to a successful green marketing plan for an eco-industrial park

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Abstract

An Eco-Industrial Park (EIP) is defined according to a number of distinct characteristics. The main purpose of this paper is to describe the tools, the methodology and the key proposals and strategies, on how Industrial Parks and enterprises which are located in Eco-Industrial Parks/ Industrial Areas (IA)/ Industrial-Technology Parks can develop a successful Green Marketing Plan (GMP). The analysis pays attention to environmental aspects and communication and green marketing approaches to promote an eco-industrial area and the SMEs settled inside. This study concentrates on giving advises to EIPs on where to start from, when it comes to sustainable practices. Five steps for developing GMP for EIPs are provided. Moreover, the study shows that there is no magic formula that will radically transform IAs into sustainable settlements such as Eco-Industrial Parks overnight; however there are a number of important factors which could contribute significantly to reduce environmental impacts, while enhancing entrepreneurial goals. The EIPs need to justify the strategy which is the best for every SME located inside. Every EIP should also select one of the alternative strategies described (or select some combination of the alternative strategies) based on certain factors. A GMP promotes the ability of innovative and sustainable industrial areas and EIPs of being a meeting point between industrial actors and the needs of local stakeholders. In addition, the GMP can be a substantial added value for the marketing of all territorial capital, thus making eco-industrial parks a driver for the entire territorial development.

Keywords: Eco-Industrial Parks, Green marketing Plan, Sustainable Industrial Areas, Communication, Sustainable Development

1. INTRODUCTION

An Eco-Industrial Park (EIP) is defined according to a number of specific characteristics such as water recovery and recycling, effective management of resources, energy efficiency, the use of RES, building sustainability, sustainable mobility management, protection of the landscape, common environmental actions, assistance to businesses and social actions.

Green marketing is rapidly becoming a mainstream phenomenon within the sphere of consumption as well as it is increasingly considered a major opportunity for economic recovery and sustainable growth. For too long the practice of “green washing” has been implemented in an attempt to merely portray a “green image” through fake actions. Today this path is no longer viable. The planet's resources are running low. Until now, the issue of sustainability only concerned an environmentally-oriented minority. Lately, however, the situation has changed and the business community has been paying increasing attention to create more environmentally sustainable business actions. In terms of marketing, this means that social and ecological issues should be handled by business and markets as issues of great importance and influence in order to meet the changing customer needs in the new social “Zeitgeist” (spirit of the time). This paper concentrates on giving advice to Eco-Industrial Parks on where to start from when it comes to sustainable practices [1].

A green marketing plan is a marketing plan that incorporates a commitment to being a green business (green statement) into the marketing efforts. Green marketing refers to the process of selling products and/or services based on their environmental benefits. Such a product or service may be environmentally friendly or produced and/or packaged in an environmentally friendly way.

A European co-funded project: MER - Marketing and govERning innovative industrial areas, is based on the core value that green marketing and management of industrial areas can be a key factor for attracting investments in the EU. Its overall objective is to contribute to the improvement of competitiveness and attractiveness in the framework of sustainable growth according to Europe2020 guidance. In order to do so, MER is translating selected results of previous projects regarding green marketing and sustainable governance of industrial areas into concrete tools for sustainable economic development. Furthermore, through MER a network for sharing experience in the green marketing sector and for the identification of replicable good practices for sustainable governance of industrial areas will be established [2].

The general objectives of the project comprise the capitalization of results of previous projects concerning industrial areas' management and sustainability the exchange of experiences on industrial areas' management and sustainability, as well as the development of a network of actors which are able to influence regional and European public policies in the long term and the replication on a greater scale and in different territorial contexts of best practices for place marketing, already developed in previous projects. The expected outcomes of the project comprise: study visits, joint technical workshops, guidelines developed as wiki e-book, training activities, local action plans, a European road map, final international conference [2].

2. METHODOLOGY

The rapid deterioration of environmental conditions has resulted in increasing the sensibility of people, organizations, and governments which led to directly enterprises to cluster in Eco-Industrial Parks. Small-Medium Enterprises (SMEs), especially those located in industrial areas with high levels of environmental pollution, have to adopt their environmentally sustainable growth as one of their business values. The creation of a green marketing plan is important because, from one side it is a key input to a successful business plan, and on the other side, it is a communication tool combining all the elements of the marketing mix in a coordinated and totally oriented "green" action plan. Five steps are required for the development of a successful Green Marketing Plan for EIPs.

The **first step** is about the business policy and natural resources. In this step the analysis is a thorough assessment of "where we are now", a descriptive presentation of the current situation, relying more on facts and not on regulatory proposals (what the EIP should do to turn green or how to shape in the near future). It consists of a separate analysis of internal (resources and capabilities of the EIP) and external (competitors, consumers) factors of the EIP. Every EIP should collect specific information in order to be aware of the marketing environment.

This information is relevant to the sales analysis of products and analysis by type, geographic region, consumer groups, distributors, industry, end users and season. Regarding the industry analysis, elements from market factors, industrial rates, as well as environmental factors must be collected in order to depict the existing situation concerning the green industry.

Subsequently, the EIP should collect information about its competitors (financial status, current market share of each green competitor, what are their main goals concerning the green marketing etc.), its customers (who are the current customers and the potential customers for the company's green product, how can they be classified, i.e. demographic characteristics, what classification of

the consumers is the most important for the EIP's, SMEs and its competitors today and in the future etc.) and its resources (evaluation of skills and weaknesses based on the comparison between the brands of the EIP and the brands of the competitors, the comparison of the EIP with its competitors, the assessment of the capacity of EIP to solve problems and to exploit development opportunities, shown in the analysis of the industry and the competitors.)

After analyzing the basic factors that are crucial for the SME (or EIP), in order to identify possible problems and opportunities for its components' green development, the SME should proceed in explaining how these factors could be categorized by elaborating a SWOT analysis. This procedure is required of marketers to identify their priorities. This is the **second step** for the GMP. The SWOT analysis is based on the idea that designing a good strategy means ensuring a good "match" between the external situations faced by an EIP (that is opportunities and threats) and its internal capacities and characteristics (that is its strengths and weaknesses). The SWOT analysis is, therefore, a relatively simple and widespread method which lists the points of strength and weakness of the EIPs, the opportunities and the threats defined by their external environment. The SWOT analysis method is the main tool used by marketers in order to choose the most appropriate strategic options that can be implemented by SMEs located in EIPs. In applying the SWOT analysis, a matrix of four boxes and each SWOT element title on the top of each box are designed, as shown below. Table 1 can be an example of a SWOT analysis of an enterprise in order to conclude its level of "greenness" and how it can exploit its "green" advantage.

Table 1. Example of SWOT Analysis Matrix of an enterprise having adopted a green marketing strategy [1]

<p>STRENGTHS</p> <ul style="list-style-type: none"> • Energy Saving • Lowers the cost of production • Gives a quality image • Better working conditions 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> • "Green" strategies are high cost investments and may be no liquidity for adopting them • Certain green strategies have a long-term projection to the enterprises profit
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • Better enterprise Image • Increase of green sales • Gain new consumers and increase market share • Gain profitability • Possibility of third person funding 	<p>THREATS</p> <ul style="list-style-type: none"> • The international financial instability generates a need to reduce the cost of products – possibility of green products reduce of sales • Local markets must follow the green international trends otherwise will be isolated and lose share of the consumers • The implementation of green marketing strategies must be accurate otherwise through media a possible mistake can be widely spread

The strengths and weaknesses concern the enterprise and its internal environment or its key relations with suppliers, intermediates and clients (micro-environment). The emphasis is on what the enterprise can do better than their competitors in order to better satisfy a customer need or desire. Instead, weaknesses turn out to be "restrictions" for the operation. However, the enterprise can and should seek to convert its weaknesses into strengths and even abilities by strategically investing in key areas and by effectively connecting several key areas.

Additionally, strengths and weaknesses concerning a SWOT analysis for an SME as compared to a big corporation can be seen in Table 2 [3].

Table 2. SWOT Analysis Matrix of an SME in comparison with Bigger Enterprises [3]

<p>STRENGTHS</p> <ul style="list-style-type: none"> • Can be more flexible on decision making • Flexible working practices • Produces its products domestically and can control its quality most essentially • Can be more flexible on pricing policy 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> • Competitors with higher turnover and/or profitability, market share and/or know-how, have greater ability of adopting “green” strategies • Competitors have better distribution networks • Bigger enterprise can spend more on communication, advertising and promotion strategies
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • With respective investment on Green strategies an SME could gain a competitive advantage • The company merged with another that is a large potential customer for its products • The company recently merged with another leading to obtain the benefits of economies of scale in production • An SME could exploit easier and better the dynamic of innovative ideas • An SME can focus on niche markets 	<p>THREATS</p> <ul style="list-style-type: none"> • Foreign competitors are constructing a new factory of the latest technology with radical elements of innovation in the country – the EIP’s headquarters • The most important customer of the company recently acquired one of its most important competitors • Declining trend on market size

The SWOT analysis process brings together many executives from different departments, which must fully collaborate. Under this collaboration, employees of different functional parts of the business can exchange views in order to crystallize ideas and proposals for the development of those strategies that will lead to new opportunities for the Eco-Industrial Park.

The **third step** is the Market Segmentation. Based on the SWOT analysis, where the EIP is strong and where it is not, can be concluded. And based on that, the next step would be the ability to meet the client's needs more effectively than its competitors. It is also strategically important for the EIP to be aware of how certain variables affect the purchasing behaviour. A good knowledge of client behaviour facilitates the development of successful Marketing plan. In this framework, the following conclusions have been reached as guidelines. Firstly, environmental sensibility and consumer awareness increases and customers are on the one hand becoming more familiar with environment-friendly enterprises and their brands and recognize their respective actions, and on the other hand they present an increased awareness of environmental certifications. Moreover, customers are aware of the environmental certifications, are seeking for recyclable packaging, and want to be informed about the company's actions and the green products' advantages [4]. Finally, customers are informed about Green Marketing and report the following as its main advantages: waste management, protection of natural resources, renewable energy, low-emissions and investments in new and environmentally-friendly technologies.

Based on the step above, it’s worth mentioning that an important reason for the customers to buy a product is the value they see in it, because customer value leads to customer satisfaction and therefore to customer fidelity. Enterprises can thus be brought to clear results of market segmentation that will help them in the right product positioning. At this point caution must be paid because positioning is not just the science of differentiating the products / services of the SME. It is, at the same time, the art of creating a product identity on the customer’s mind.

Aaker suggests the plan below for analyzing clients in order to help the marketer come to strategic conclusions about the consumer: culture (possible “green” life style), demographic analysis (demographic trends that influence “green” industry), technology (technological trends that influence green industry), government/legislation (legal frame environmental friendly) and finance

(economical perspectives that can have positive “green” impact) [5]. Being aware of the profile of the consumers who the EIP wants to target and the restrictions imposed by the answers to the above criteria, the EIP’s marketers have a detailed picture of the situation and may lead them to the next step.

When all the quantitative and qualitative data concerning the company’s customers has been collected the company is ready to answer the main question “where do we wish to go” and “how to get where we want”. Depending on that answer, the marketers must decide and design both their marketing strategy as well as their action plans. These actions can be targeted to sales targets, profit, market share, target markets, etc. They should be achievable, measurable, quantified and reported in a given timeframe. Based on that, it has been proven in practice that in recent years both consumers and businesses, in particular small-medium enterprises (SME) that are located in Eco-Industrial Parks / Industrial Estates / Industrial Parks / Technology Parks, turn to “green” products and services, in order to optimize the green policies and reduce environmental disasters, in order to achieve sustainable development in all sectors.

Thus, the EIPs develop strategies which are implemented either separately from each other, or all together, so they can create a “Green” Portfolio. This Portfolio can be divided into 2 main critical axes: The first analyzes the possible actions concerning the green functional structure and fixed equipment, while the second one analyzes the actions concerning the “greenisation” of the products. The Eco – Industrial Parks should justify the strategy that is the best for every SME contained in them (**fourth step**). Every EIP should also select one of the Green Marketing Actions (or select some combination of the actions) based on certain factors. Thus, managers need to identify what ought to be greened: A company (systems, processes), a product or both.

The types of the aforementioned actions are listed below [1]:

- **Actions for the Development of Green Structures & Improvement of the Production Process.**
These actions have been aiming at the creation of green protocols within the Industrial Area, for efficient and less costly use of energy resources, for the saving of energy of the enterprises, for the waste management and eco management of natural resources, as well as for the respect of environment and for sustainable mobility management. If there is no commitment from all the enterprises established in the Industrial Area, there is an increased risk of inappropriate functioning of the entire Industrial Area and a high failure rate for this operation.

- **Actions for the Development of the Image of Industrial Area’s SMEs & the Integration of Ecological Standards.**

In order to achieve sustainable development a triptych strategy should be implemented. This action is based on three factors: Firstly, on the integrated science that consolidates branches to develop efficient and environmentally friendly processes and products. Secondly, on the intensity of knowledge, in order to create more green value when eco-content is added to products and services. Thirdly, on productivity through certifications regarding specific Environmental Management Standards (ISO 14001, EMAS).

- **Actions for the Development of Green Products & Procedures**

Although, the marketing mix of a product can be composed by various elements, the “4Ps” has been established as the most important. The 4Ps elements are: product, price, promotion and placement. Marketers should focus in these four elements when creating their green marketing strategy.

- **Actions of Investment to Key Success Factors**

Besides the classical theory of what makes an enterprise green, new ways to enrich the “green” theory were added to the “green” terminology over the years. These are the Integration of practices for Eco-design and the Eco-Labeling Products.

In conclusion, there is no single Green Marketing Action that can fit all enterprises. Actions should work best under different market and competitive settings. Most enterprises tend to apply a mixture of strategies concerning, either procedure related to infrastructure or selected codes of their products.

There are two sets of questions that the marketers should consider before choosing the green marketing strategy appropriate for their business entity (**fifth step**). The first is to ask how substantial the green consumer segment is for their firm. The second is whether the brand or firm can be differentiated from the green dimension. Most enterprises use a mixture of these alternative Green Marketing Strategies analyzed below [6].

- **Lean Green**

If the marketer decides to use elements from the Lean Green strategy he should not focus on publicizing or marketing the green initiatives. Instead, he should try to reduce costs and improve efficiencies through environmentally friendly activities, thereby creating a lower-cost competitive advantage, not a green one. Lean Green companies are usually uncertain about promoting their green activities and the green product attributes for fear of being held to a higher standard. The companies are afraid of not being able to live up to its claims or differentiate themselves from competitors. Lean Green enterprises do not want to promote their environmental efforts directly to the overall brand, because of the risk that all products of the company then may be pigeonholed as green. Therefore it is safer for Lean Green companies to tie their environmental friendliness to only one brand.

- **Defensive Green**

When defensive green strategy is used as a marketing strategy, it is used as a precautionary measure, or as a response to a crisis or to competitors’ actions. Therefore, the enterprise uses defensive green strategy in order to enhance brand image and ease the damage. On the other hand, by using this strategy companies cannot differentiate themselves from competitors on the basis of greenness. Aggressive promotion of greenness would not be suitable since it would create high expectations that cannot be met. When using the defensive approach, companies engage in activities such as sponsoring smaller environmentally friendly events and programs. Those actions protect their environmental advertising claims from the potential difficulties created by activists, regulators or competitors. As long as the company is not in the position to obtain a sustainable competitive advantage on the basis of the greenness, but is eager to be environmentally responsible, defensive green is the appropriate strategic approach.

- **Shaded Green**

Shaded Green companies focus on having long-term, system wide, environmentally friendly processes that require both significant financial and nonfinancial commitment. Shaded Green companies see green activities as an opportunity to create innovative needs-satisfying products and technologies. These companies usually have the power and capability to differentiate themselves on greenness, but instead they choose to profit from highlighting other attributes. These attributes are usually the direct, tangible benefits provided to the customers. Shaded Green companies usually sell their products through mainstream channels, where the environmental benefits are promoted only as a secondary factor. This type of promotion is most efficient when promoting products that have the ability to help the consumer save on recurring costs, such as energy, fuel and electricity.

- **Extreme Green**

Companies using extreme green as a marketing strategy are embodied with holistic philosophies and values. In these companies, environmental issues and responsibility are fully incorporated into the business and product life-cycle processes. Their practices include life-cycle pricing approaches, total-quality environmental management and the manufacturing for the environment. Companies that use Extreme green as a marketing strategy mostly serve niche markets and sell their products or services through boutique stores or specialty channels.

After marketers have chosen the strategy that is more effective for the enterprise, they should create a timetable schedule in order to control the results. The risk there is that most of the companies are not systematic about their environmental approach to business. Every company must plot its own Eco-Advantage path and suggest its own program of action that can be divided in three types of actions: Short, medium and long term controlling set of actions.

3. RESULTS

An important point of this research is that there is a massive consumer portion that wishes to embrace innovative products or processes. This fact encourages companies to continue their attempts for awareness of the other portions of the market as well. There exist some distinct case studies which represent the above mentioned four main green marketing strategies, as shown in Figure1 and are described in turn.

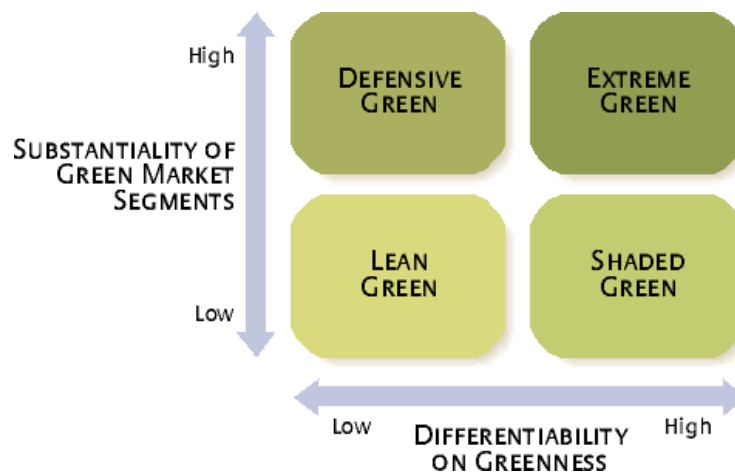


Figure 1 Go “Green” through 4 strategic steps [6]

3.1. The Sui-generis Company – Lean Green Marketing Strategy: The TOM Shoes Case

The company has developed a green product line (canvas shoes with natural straw-type materials). Moreover, the company did not make investments in infrastructures and advertising, but it invested in ecologically sponsorship programs in collaboration with non-governmental organizations and communities.

The main idea was that by purchasing a pair of shoes, a child in Ethiopia would be able to obtain a similar pair of shoes. Within a month, 30.000 pairs of shoes were sold. By the end of the campaign, the action had exceeded its target by 23% and increased public awareness. This target was achieved without promotion through the media. The "social partners" of TOMS Company consist of NGOs and charitable organizations based in the countries where TOMS sells its products. The company promoted its products by the action “A day without shoes” in 2008. Moreover, as a promotion activity, in 2010, the third year of the program, more than 250,000 people walked barefoot in over of 1600 events [7].

3.2. The Investor Company – Defensive Green Marketing Strategy: The Wal-Mart Case

The Wal-Mart Company was founded in 1962 by Sam Walton in the U.S.A. Actually, 629 local stores in the U.S.A. alone operating. Nowadays, «Wal-Mart» is an international company with 5,651 branches and approximately 780,000 associates. The company's stores are divided into four categories: Wal-Mart Discount Stores, Wal-Mart Supercenters, Wal-Mart Neighborhood Stores and Wal-Mart Stores Express. In the past, the company was known for its indifference to social and environmental issues, as it had never been a standard of good corporate citizen.

Later on, the company changed its strategy and opted to act with environmental awareness. The company reduced its CO₂ emissions in sales from 2005 to 2008 by about 10%. In order to achieve its new target, the company constructed two superstores with energy savings systems and has started selling organic products in retail sales. In the Defensive Green Marketing Strategy, companies don't take high risks with their environmental initiatives. In this strategy the target is the creation of environmental responsibility and not the creation of a competitive advantage, through energy efficient interventions [8].

3.3. The Standard Company – Shaded Green Marketing Strategy: The Timberland Case

The Timberland Company was created in 1978 in the U.S.A., when the shoe company «Abington» converted to Timberland Company. This company is undoubtedly one of the most reputable companies with respect to environmental protection and chooses to use recycled materials without chemical additions. These materials are widely used in production processes and in energy saving systems.

Timberland Company believes in profitable growth through community service and takes only environmentally friendly practices. Furthermore, the company aims to raise awareness of communities around the world on environmental issues and it is well known for its consistency in adopting initiatives for environmental protection. The company seeks to offer to the communities in which its stores are operating, through its environmentally friendly policies [9].

3.4. The Pioneer Company – Extreme Green Marketing Strategy: The DuPont Case

The DuPont Company is an important multinational company which operates in various sectors such as Chemicals, Food & Beverage, Manufacturing, Transportation, Packaging & Graphic Arts, Action & Applications, Health & Medical, Plastics, Electronics, etc.

DuPont Company invented Nylon, Teflon and was the manufacturer of chlorofluorocarbons (CFC) for A/C units which are responsible for the ozone hole over Antarctica. However, the company has managed to reduce greenhouse gases by 10.5% between 2004 and 2010. The DuPont Company has managed to radically change its profile from one of the major causes of pollution in America, in one of the most active organizations for environmental protection in the world. The main objective of the company is to achieve a further reduction of 15% by 2015.

Leading innovation of the company is the invention of products that can save the environment and not products that are just environmentally friendly. These products can reverse negative effects and do not damage the environment during their production. The company is constantly searching for innovative technologies for the design of new and improved products. In general terms, «DuPont» reduces environmental impacts and creates products that will prevent further damaging consequences to the planet [10].

These strategies have a clear effect on the basic operational characteristics of an enterprise, including the use of financial resources, staff training, the extent of green technology and green structure development, the need of environmental standards, advertising campaign, the number of green products made and the company's corporate social responsibility policy. These characteristics are depicted in Table 3 below.

Table 3. Effects of Green Marketing Strategies

Strategies	Committed Financial resources	Staff Training	Green Technology Development	Green Structure Usage	Environmental Management Standards	CSR ¹	Green Products Characteristics	Green Advertising Campaign
Lean Green	Not Always Required	Basic	Low	Elementary	X	X	1 product	X
Defensive Green	Low	Basic	Medium	Basic	√	X	2-3 products	√
Shaded Green	Medium	Medium	Average	Average	√	√	Green categorized production line	√
Extreme Green	High Levels of Investment	High, Involvement of All employees	High	High	√	√	Green every aspect of production	√

¹ CSR= Corporate Social Responsibilities

4. CONCLUSIONS

Green marketing incorporates a broad range of activities, including modification of products, changes to the production process, to packaging, as well as modifying advertising campaign. Eco Industrial Parks as a whole along with individual enterprises which are located in Eco-Industrial Parks / Industrial Estates / Industrial Parks / Technology Parks and adopt green marketing strategy as a proactive step, from scrap to end-product and processes, access themselves to new markets, substantially increase market share and profit and also enjoy competitive advantage over other non-environmentally responsible alternatives. A Green Marketing Plan can become the driving mechanism for green local development by transforming a region into a “green zone” in line with the current international initiatives.

For these reasons and in order to avoid marketing mistakes, this study is intended to answer the question "what are the basic guidelines to create a successful Green Marketing Plan. The enterprise should always focus on the following key aspects. At first, an enterprise getting into a green marketing portfolio must be completely aware of what is being expected by its customers as well as the society. In addition, the Green Marketing Strategy should commit everyone in the enterprise management. Moreover, the principles of a Green Marketing Strategy should be strictly defined, controlled periodically and must be communicated to all stakeholders and to the public, and finally, the green enterprise should always have in mind that when starting green policies, there is always a next step to follow. In short, it is also crucial to understand that greening is something that needs time and resources to be disbursed, but the rewards are plenty.

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