



ENVIRONMENTAL MANAGEMENT SYSTEM (EMS): A PROPOSAL FOR IMPLEMENTATION IN A LARGE ADMINISTRATOR OF CONDOMINIUMS IN THE STATE OF RIO DE JANEIRO – BRAZIL

Sistema de Gestão Ambiental (S.G.A): uma proposta de implantação em uma administradora de condomínios de grande porte do estado do Rio de Janeiro - Brasil

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ABSTRACT

This paper deals with a project to implement an Environmental Management System (EMS) suitable to a large condominiums administrator in Rio de Janeiro (Brazil), based on the parameters of the ISO 14001. The tool may be adequate to companies of any branch or size promoting competitive advantage and becoming an aggregator of value, in addition to contributing to the conservation of the environment. This is a case study developed in a condominium management company, aiming the analysis of its practices and subsequent development of EMS focused on its reality. The study show how there are substantial advantages in the environmental, economic and social area through the implementation of an Environmental Management System; and moreover pointed out that the real savings generated by the reduction of water and electricity consumption will have a positive impact on the coffers of the company, and these values could be applied in other real needs that before could not be met due to lack of resources. The proposed EMS demonstrates that it is possible to apply this environmental management tool to real estate companies with a predominance of administrative processes; and particularly that mobilization for sustainability is still far below what may be expected, confirming the gap between theory and practice. Hopefully this work may stimulate other companies with the same size to move toward sustainable practices in their activities.

Keywords: Environmental Management System (EMS); Condominium Administration; ISO 14001; Sustainability.

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SISTEMA DE GESTÃO AMBIENTAL (SGA): UMA PROPOSTA DE IMPLANTAÇÃO EM UMA ADMINISTRADORA DE CONDOMÍNIOS DE GRANDE PORTE DO ESTADO DO RIO DE JANEIRO - BRASIL

Environmental Management System (EMS): a proposal for implementation in a large administrator of condominiums in the state of Rio de Janeiro – Brazil

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RESUMO

Este artigo propõe um projeto de implantação de um Sistema de Gestão Ambiental (S.G.A) adequado para uma empresa administradora de condomínios de grande porte do Rio de Janeiro - Brasil, tendo como base para o seu desenvolvimento os parâmetros da ISO 14001. Esta ferramenta pode ser adequada a empresas de qualquer ramo ou porte promovendo vantagem competitiva e tornando-se uma fonte agregadora de valor, além de contribuir com a conservação do meio ambiente. Trata-se de um estudo de caso desenvolvido na empresa administradora de condomínios, visando a análise de suas práticas e posterior desenvolvimento de SGA voltado para sua realidade. Ficou evidenciado através do estudo que existem vantagens substanciais na área ambiental, econômica e social através da implementação de um Sistema de Gestão Ambiental. Pode-se salientar ainda que a real economia gerada através da redução dos consumos de água e da energia elétrica proporcionará um impacto positivo nos cofres da empresa abordada, podendo estes valores serem aplicados em outras necessidades reais que até então não puderam ser atendidas por falta de recursos. O SGA proposto demonstra que é possível a aplicação dessa ferramenta de gestão ambiental para as empresas do ramo imobiliário com predominância de processos administrativos. É notável que a mobilização em prol da sustentabilidade ainda está muito abaixo do esperado, confirmando o distanciamento entre a teoria e a prática. Espera-se que este trabalho estimule outras empresas com o mesmo porte a voltarem-se para práticas sustentáveis em suas atividades.

Palavras-chave: Sistema de gestão ambiental (SGA). Administração Condominial. ISO 14001; Sustentabilidade.

INTRODUCTION

With the theme of sustainability rising in recent years and around the world, concern about the environment has become increasingly greater among companies and governments, due to the intensity that is advancing the environmental impact, putting at risk living beings existing on Earth. It is possible to note the signs of exhaustion due to several factors that we have already witnessed or even influenced with our actions, such as deforestation, changes in nature, hunting that lead to the extinction of species, climate change due to the progress of industrialization, among others.

Man becomes the main actor of this environmental degradation, because he is responsible for the abusive use of natural resources, with that, they think of fulfilling their personal and / or commercial objectives, desires and satisfactions without worrying about the consequences.

According to Dias (2010, p.13), environmental pressure is not new, "during the last 200 years it has aggravated the environmental problem, with the intensification of industrialization and the consequent increase of human intervention capacity in nature."

In this sense, companies assume a significant importance in relation to environmental problems, because in order to fulfill their organizational objectives, they extract resources from nature to transform them into products, which will serve to meet market demands. In addition to extraction, organizations also affect the environment through excessive consumption of water, energy, emission of pollutants and inappropriate waste discards, which are the result of the various production processes.

On the other hand, in order to stay in the market and with a competitive edge, institutions need to be more and more concerned with the environment, which will improve their image and consequently contribute to preservation.

According to a consulting company, the essential tool that helps companies in environmental management is the Environmental Management System (EMS), because it is an organizational structure that allows the company to evaluate and control the environmental impacts of its activities, products or services, as it reflects market gain, cost reduction and the attractiveness of new investors. Based on NBR ISO 14001, it guides and specifies the requirements regarding the implementation of the environmental management system.

Thus, the general objective of the study is to propose an environmental management system appropriate to the specific reality of a condominium administrator located in Centro-RJ (Brazil).

For this, it was necessary to identify if there are environmental practices being carried out by the company; identify the environmental perception of the company's management with a view to developing an environmental policy and identify the main environmental pressures that it causes with its processes

The methodology used was a qualitative and descriptive case study, which according to Yin (2001), is a research strategy that includes a method that covers everything in specific approaches of data collection and analysis. It has to clarify decisions to be made, through the phenomenon investigated starting from its real context, using multiple sources of evidence.

1. SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT

The generation of environmental impacts has always been present in human life since man was aware that he could do whatever he wanted to benefit from living conditions, thus making the relationship with nature much more complex. With the emergence of industrial capitalism also appeared several environmental problems that were foreseen.

In mid-1972, the Stockholm Conference was held. The first global action was organized and joint to discuss the environmental problems that were increasingly evident at that time and to try to propose actions that would mitigate the advance of environmental degradation by creating socio-environmental goals and commitments to be assumed participating countries.

After 20 years of the first Conference, the United Nations Conference on Environment and Development took place in Rio de Janeiro, with the participation of 179 countries, leaving marked the way humanity faces its relationship with the Planet. International policy made clear that it needed to reconcile socio-economic development with the use of natural resources.

According to Boff (2013), the best way to execute management and preserve existing environmental resources is, in principle, to shift the axis from development to sustainability. It is important to have a sustainable society, because it must organize itself and behave in such a way that, through the generations, it can guarantee the life of the citizens and the ecosystems in which it is inserted. Thus, it is up to man to restructure his productive processes by introducing, in this context, the implementation of environmental management that would be one of the forms of corporate sustainability.

Organizations are gradually becoming accustomed to the fact that there can be no economic growth without worrying about natural resources, since most environmental problems are due to the irresponsibility of some companies. Scarcity is also very worrying, because lack of replenishment or unconscious consumption causes the natural resources to run out, and consequently, there will be no raw material for future productions.

According to Tachizawa (2004), initiatives aimed at sustainable development represent for organizations a way to ensure that their activities are constantly renewed, adding more value to their products and achieving another way to increase their profitability.

As culture establishes itself as a new paradigm in the market, organizations must anticipate regulatory requirements and adapt to the new management model. Attributing this value to the business means that the company has a differential in relation to the competition. Despite the advantages in adopting a sustainable posture, companies still do not use the social responsibility of a broad way, being limited the number of companies that really are environmentally responsible for their actions.

In this sense, companies usually concentrate their focus on actions focused only on the economic pillar, neglecting the social and ecological aspects that make up the basis for achieving sustainable development.

1.1 IOS 14001

Based on information from the Lloyd's Register company, the International Organization for Standardization (IOS) 14001 was created to help companies identify, prioritize and manage their environmental impacts, giving better attention to the most relevant issues in their production processes and to prevent pollution and generate waste.

Based on the PDCA cycle - plan, do, check, and act - this standard specifies requirements of an Environmental Management System (EMS), allowing for organization a strong structure for environmental protection and response changes in environmental conditions.

According to Furniel (2011), in Brazil, there are more than 6,000 registered companies in Brazil and the search for certification is growing every year. With this certification, companies increase their visibility in the national and international market and consequently consolidate their credibility with customers, suppliers and employees. Furthermore, creating a positive history regarding the environment, they obtain more attractive and low-cost financing.

Regarding the international scenario, the concern with sustainable development is worldwide and when it comes to exports, the production chain is increasingly demanding this ISO 14001 certificate, since only then

can suppliers participate in the bidding process and / or quotation with other competitions. Otherwise, the chances of negotiations and exports with the foreign market are almost zero.

1.2 IOS 14001:2015

According to a consulting firm called Templum, it does not make sense for the company to have only ecologically correct performance without including environmental management in its strategy, which is why IOS 14001 has recently been upgraded, in addition to incorporating strategic issues, care about the value chain, the life cycle, among other changes.

This new version follows a high-level structure, aiming to improve compatibility with other management system standards, including IOS 9001, which provides companies with certain economic gains. With this, they can reduce the consumption of resources and costs, as well as generate market forces and add value. Therefore, the focus is the improvement in environmental performance and not only in the management system, expecting from the organizations more proactive attitudes towards damages and degradation, the correct use of resources and the preservation of biodiversity.

According to Templum, the adoption of an EMS can be done strategically by each organization, being specific to each type of company, because like IOS 9001, it is not the goal of IOS 14001 to impose uniformity in the structure of the system or the documentation. The entire implementation and internal audit process are the responsibility of a consultant, while the certification process is carried out by independent certification bodies, which can take from 10 to 18 months or even longer in specific cases.

Templum also says that a well-implemented Environmental Management System can bring the following benefits to organizations:

- Reduce the risk of accidents, legal sanctions, etc.;
- Increase the quality of products, services and processes;
- Save or reduce consumption of raw materials, water and energy;
- Captures new customers;
- Improves image;
- Improves processes;
- Increases the chances of permanence of the company in the market;
- Increases financing possibilities due to good environmental history.

2. ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

Environmental management focuses on organizations, being a set of policies, programs and administrative and operational practices that consider the health, safety and protection of people and the environment through minimizing or eliminating environmental impacts.

According to IOS 14001, its main objective is to seek a constant improvement of services, products and work environment of the various organizations, whether public or private. Nevertheless, let us see below other objectives that also have their importance:

- Implement, maintain and improve an environmental management system;
- Ensure compliance with its defined environmental policy;
- Demonstrate such compliance to outsourcers;
- Seek certification / registration of its environmental management system by an external organization;
- Carry out a self-assessment and issue self-declaration of compliance with this Standard.

2.1 Environmental policy

The environmental policy is the starting point of the whole project, where it must be materialized by written documents and contain in it all the principles and ideologies of the company with respect to the environment, respecting the laws and regulations. According to the Standard "Environmental Policy is the basis on which the organization establishes its objectives and goals".

It is recommended that it must be sufficiently clear for its understanding by internal and external stakeholders and that it periodically analyzed and reviewed to reflect changes in conditions and information".

2.1.1. Planning

The planning tends to prepare a methodology that allows the organization to distinguish the significant environmental aspects and that are treated with priority by the organization's EMS. This planning can be divided into the following stages:

- **Environmental aspects:** Its main function is to detect the most relevant environmental impacts to the environment, precisely because it is caused by the activity of the company, be it through products or services. A flow chart of the company's activities can help in this perception, as it demonstrates each stage of the production process, making it easier to establish and maintain procedures that can control these environmental pressures.
- **Legal and other requirements:** After its definition, the requirement should clearly state the project's implications, always considering compliance with environmental laws and regulations, however, there are cases where the requirements do not meet the needs of the company. In this case it is necessary to develop internal performance criteria.
- **Objectives and targets:** Based on the identification of significant environmental impacts, each sector, hierarchy and / or appropriate function of the organization will have its responsibilities defined according to the determination of the environmental objectives and targets. With this, they should always seek to prevent pollution and maintain a relationship between the Company, the Environment, the Employees and the Community as safe and healthy as possible, thus being the environmental objective that the company should achieve.
- **Environmental Management Programs:** Tend to establish and maintain the objectives and targets, where it is revised and modified periodically in order to serve the company. Each level of the organization must have its responsibilities and commitments to achieve its objectives, and are defined by means and deadlines, without disturbing the established schedule.

The planning ends after the creation of the environmental management program through an action plan. The steps in the table 1, such as the data collected in the studied company, are described in accordance with IOS 14001, in order to establish the steps for the implementation of an Environmental Management System (EMS).

Table 1 – Action Plan

ENVIRONMENTAL ASPECTS	IMPACTS	LEGAL REQUIREMENTS	INTERNAL PERFORMANCE CRITERIA	OBJECTIVES	GOALS	DEADLINES
Waste disposal	Pollution	Environmental laws	Acting in organizational culture	To make the relationship between Enterprise, Environment, Employees and the Community as safe and healthy.	Create a recycling and selective collection process	1 year
Water consumption	Waste of water	*	Acting in organizational culture		Reduce as much as possible waste of water	3 years
Electricity Consumption	Waste of energy	*	Acting in organizational culture		Reduce as much as possible waste power	3 years

Source: Authors (2017)

2.2.3. Implementation and operation

Still based on IOS 14001, it is at this stage of the program that it is equivalent to the implementation of the EMS, agreeing the operational part, so that one can defer to what was planned. Therefore, it comprises the following regulatory requirements:

Structure and Responsibility: According to the Standard, "roles, responsibilities and authorities should be defined, documented and communicated in order to facilitate effective environmental management". Therefore, based on the standard, the administrative structure should provide financial resources, technology, specific qualifications and human resources, and appoint persons, functions, responsibilities and authorities to lead the implementation of the EMS. Everything must be done with complete communication and documentation.

Training, awareness and competence: It has as great importance the orientation and training of all employees of the company, giving them a new awareness regarding environmental responsibility. When they reach a level of maturity, they themselves will be able to evaluate possible impacts that they end up causing with their activities, being able to revert to the situation, which will also result in the improvement of their personal performance.

Communication: Must establish and maintain internal communication procedures between all levels and functions, with receipt, documentation and response, taking into account also the external communication of significant environmental aspects.

EMS Documentation: The information should be documented describing the main elements and the interaction integrated or shared with other existing management systems in the company, thus having guidance on interrelated documentation. It becomes an instrument to ensure that the EMS contemplates not only the internal public, but also the external environment with which the company maintains relationships. With this, it is advised that the company describes the various types of documents, establishing the procedures and control associated with them.

Document Control: All documentation should be easily accessible, frequently reviewed and updated for compliance with regulations, laws and other environmental criteria assumed by the company. However, obsolete versions must be removed in order to avoid any disturbance in the understanding of current norms and laws.

Operational control: It is fundamental to ensure the environmental performance of the company, since it must create activities related to pollution prevention and conservation of resources in new projects, respecting even its commitment that was expressed in environmental policy.

Emergency Preparedness and Response: Procedures for emergencies or uncontrolled events should be determined. For this, it is indispensable to identify probable risks, then provide necessary resources and prepare an emergency brigade team.

2.2.4. Verification and corrective actions

According to the standard, it is at this time that the organization can be certified if the EMS has been properly executed. Also are checked possible changes for continuous improvement and preservation of the project. It comprises the following regulatory requirements:

Monitoring and Measurement: It should be anticipated to periodically investigate the existence of problems and the possibilities of correcting them, including records of performance information, operational controls and conformities, being properly archived. The accompaniments of these measurements and the environmental performance of the companies are useful for the management of the environmental activities. Generally, the environmental quality control bodies determine in a documentary manner the properties to be measured and the periodicity of the measurements.

Non-conformities and corrective actions - preventive: Corrective actions are elaborated through non-compliance, which in turn means any simple deviation from the given criteria. When it occurs, instructions are given to check the causes, correct and prevent them, as a new error is not allowed. Some companies already adopt risk analysis as an excellent source of information in identifying the need to adopt preventive measures, but any recurrent change in corrective and / or preventive actions must be recorded.

Records: It should be stored in a safe place, present clarity in its contents, and to be easily available for consultation, as it tends to provide a systematic analysis and a computerized control of the occurrences, thus allowing a greater control and monitoring of each stage.

Audit of the EMS: It is important to establish periodic audits to see if the planned actions and requirements of the Standard are being met, as it is the company that will show the results achieved by the company.

2.2.5. Critical analysis

Finally, the standard further states that critical analysis should be done and documented frequently to ensure the effectiveness of the EMS, and to do so, in order to achieve the stated objectives, management is responsible for identifying the need for possible changes in its Environmental Policy, which with this action promotes the continuous improvement of the system.

3. CONDOMINIUMS ADMINISTRATION

As urbanization progresses each year, the number of condominiums throughout the country has increased, either horizontal or vertical, since the purpose of this project is to optimize spaces in the few available territories.

According to Moreira (2010), in Rio de Janeiro, there are more than 12 thousand condominiums, equivalent to 480 thousand commercial and residential units, representing an universe of 2 million people. Monthly, condominiums spend over R \$ 90 million, with contracts, utilities (water, energy, gas, etc.), employees, products and services.

Thus, for Moreira (2010), managing a condominium has become very complex due to the range of knowledge required and due to the search for professional and competent partnerships, all this to keep the condominium up to date, not only in terms of legislation, but also in what concerns to the aspect of real estate valuation, besides acting as mediator of conflicts.

Due to their legal nature and collection form, having the criterion of apportionment of monthly and annual expenses, it is not possible to enter bankruptcy, however, they can be extinguished at the moment they become financially and operationally unfeasible, cause poor management or even poor conservation status.

In addition, another great responsibility demanded to the condominiums was the obligation of retention and payment of the contributions of all the companies and autonomous that provide services in the enterprise. If it does not happen correctly, the condominium is subject to heavy fines, which consequently impacts on the financial life of the enterprise. Another mandatory aspect is the regularization of the condominium in the National Registry of Legal Entities - CNPJ, because without this document, it is not possible to operate anything related to the government, banks, institutions, etc., so it is necessary to be up to date with the Federal Revenue.

With this, Moreira (2010) affirms in his publication that the outsourcing of this service has become a reality in the market, since it tends to seek to minimize the various legal, accounting and fiscal problems. Companies in this highly competitive industry and with increasingly demanding customers must update and innovate frequently, even without impacting the budget.

The administration of condominiums is dedicated to commercial buildings, residential or even industrial, being a business related to convenience, consumer of products and services, as well as generator of jobs. There are several factors that can become a competitive differential in the market, from the location that facilitates the access and the displacement of its clients, through the staff with qualification and experience, and finally, a good structure of equipment, technologies and information.

4. ADMINISTRATOR OF LARGE CONDOMINIUMS IN RIO DE JANEIRO

The company analyzed is recognized as one of the main companies in the condominium management business in the State of Rio de Janeiro. Founded in 1954, it is today recognized as synonymous of quality, precision and innovation in real estate business, and the success of being in this market for so long is a

consequence of the constant focus on providing positive experiences for all its clients, with efficiency and comfort. For commercial reasons, the company name has been replaced.

Being an independent, family owned company that is in its third generation of managers, it has been growing from its own resources, using state-of-the-art technologies and innovations, and can plan its strategies more and more. In this way, the company has formed a solid corporate and real estate patrimony since its foundation, where this solidity, coupled with an administration with planned growth, guarantees security and credibility for its clients.

Located in Centro-RJ, it has a client's portfolio that currently reaches more than 1,300 condominiums and 68 thousand properties, having more than 37 thousand active insurance among the most diverse coverages. In addition, the technical capacity allows the company to control and process around 3 million pieces of information per month. These numbers demonstrate the results orientation, ensuring more value and return for each investment.

The expansion and success of the company are often recognized, being awarded the Master of Real Estate Award by ADEMI, due to the various services offered by the company and recently received an important Certification of real estate, called PROCONDO, granted in 2016 only for companies that have passed through Bureau Veritas audit process, world leader in certification.

Based on PROCONDO's website, this certification has a validity of 3 years and guarantees to companies the seal that considers them as suitable to carry out the activity of condominium administration with quality, safety and excellence.

5. METHODOLOGY

This is a case study with the proposal to develop an EMS as defined in ISO 14001, aimed at improving the environmental performance of the Condominiums Management Company of Rio de Janeiro. According to Gil (2002), the case study "consists of the deep and exhaustive study of one or a few objects, in a way that allows its ample and detailed knowledge, a task practically impossible by other already considered delineations".

5.1. Data collect

Data for the development of this study were obtained through interviews with collaborators, analysis of spreadsheets of controls and with direct observation of the routines of the analyzed company. According to Gil (2002), "in most well-conducted case studies, data collection is done through interviews, observation and document analysis."

5.2. Study location and participants

The company surveyed is an administrator of large condominiums in Rio de Janeiro, being a reference company in this branch and has been operating for more than 60 years in the market, where it serves only the State of Rio de Janeiro.

5.3. Instrument for data collection

For the elaboration of this article, different forms of data collection were done, such as: formal interviews, observations and control worksheets. With this, a table was created in summary form, where it points out how

the proposed EMS will act on the main environmental impacts detected in the processes of the analyzed company.

Table 2 - EMS proposed for Condominium Management Company

ENVIRONMENTAL ASPECTS	IMPACTS	OBJECTIVE	GOALS	DEADLINE
Trash disposal	Ground pollution	Make relationship in between the company, the environment, the employees and the community the safest and healthy possible.	Implement a process of recycling and selective collection	1 year
Water consumption	Natural resource scarcity		Reduce consumption by applying reducers and reuse system	1 year
Energy consumption	Natural resource scarcity		Reduce consumption by repositioning or the exchange of lamps and equipment for more economical models	6 months
Pulp consumption	Mass deforestation		Guide employees in the act of printing and when possible reuse sheets already used (drafts / backs)	2 months
Fuel burning	Atmospheric pollution		To reduce as much as possible the displacement of Motorcyclists in the deliveries of documents and to use more resources online (Site and E-mail)	6 months

Source: Authors, 2017

As several sectors of the company work with handling and circulation of pulp, a survey was made with the supply sector and according to the information obtained with the responsible, the company uses around 200 reams per week, which is equivalent to 800 reams per month. Based on this information, the unit value of this material in the market is on average R \$ 16.00, which is estimated in a monthly cost of R \$ 12,800.00 only with the purchase of pulp.

Energy is essential for the functioning of the organization, both for the lighting of the environments and the operation of the equipment, so it is the biggest villain in relation to the environmental pressures caused by the company. With this, we went to the accounts payable sector and sought to know with the responsible how much energy is paid per month. With this, we took as base the last 12 months and reached an average of R \$ 26,700 per month.

Aiming at the question of the physiological needs of the employees (water, bathroom, hygiene), water was another element that raised information, because it is also essential for the organization and becomes the second biggest villain due to the fact of high daily consumption. By adopting the same criterion used to obtain energy consumption data with the accounts payable sector, we raise the amount of water paid per month, and we reach an average of R \$ 7,500 per month.

The generation of waste in the company is also high, due to the high consumption of cellulose, which consequently causes mass discarding as well as discards of various materials caused by employees of the company in general. After some interviews with the cleaning team, it is estimated that around 40 kg of garbage is thrown away daily, which on average points us to almost 1 ton of discarded waste per month without being properly recycled.

In fact, according to a publication made this year on Riotron's website, Brazil recently generates about 30 thousand tons of garbage daily, which harms the environment a lot when this disposal is not treated properly.

In addition to the above impacts that are triggered by the internal processes of the organization, another environmental pressure that occurs only on the outside and that can be worked also, is with respect to the burning of fuel. This, in turn, is caused by the motorcycles that deliver and collect physical documents, where in this process the consumption of fossil fuels that cause air pollution and the extraction of non-renewable resources is identified.

According to the Transport Journal, in recent years, the transportation sector is the fastest growing polluting source in relation to motorcycles, according to Conama - National Environment Council, a motorcycle has the capacity to pollute between three to seven times more than a car or bus. Being more precise in this information, with each kilometer covered, the motorcycle emits 2.3 grams of carbon monoxide against 0,34 of a car. Taking into account the increase in the fleet of motorcycles in the country, pollution in this sense has also increased considerably, thus resulting in higher costs with public and private health, since this means of transportation causes or aggravates respiratory problems and is always subject to serious accidents.

All this information collected becomes important for a future comparative and qualitative analysis, besides guiding in the decisions to be made regarding the implementation of an Environmental Management System in the company

According to the information published by Valle (2017), it ended up addressing the AGU (Advocacy General of the Union), which in 2016 adopted a series of measures in search of efficiency of the institution. In comparison to the previous year, the organization managed to achieve an average saving of 12.5% in water and energy costs, just after the implementation of the EMS.

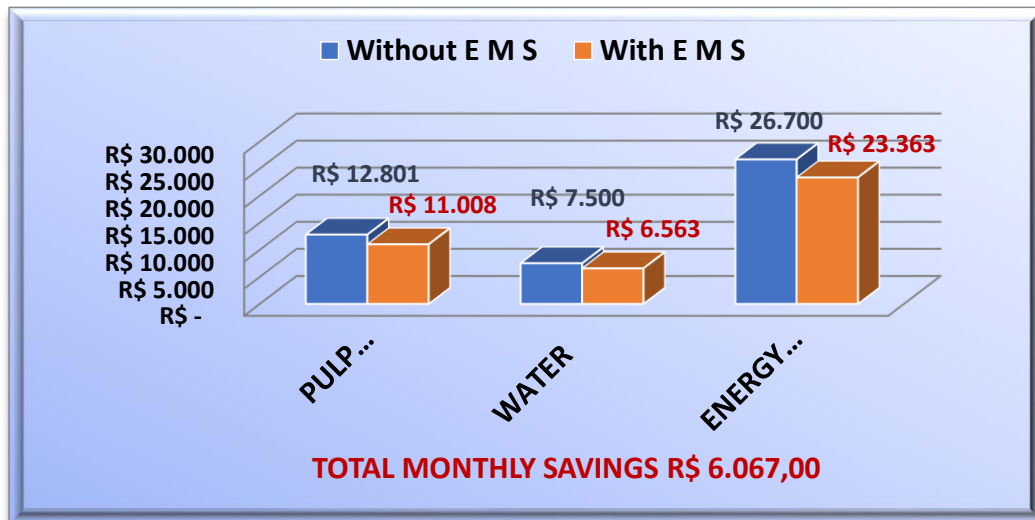
Another major event company called LPR, started a sustainable campaign called "Conscious Printing" in 2013 and, according to information published the following year on the website of this organization, it managed to achieve an economy of almost 14% compared to the same period in the year 2012. This campaign had as main objective the reduction of copies and impressions, being necessary to act directly on the behavior and customs of the employees of the company, thus managing to reduce considerably the consumption of pulp. It is worth mentioning that this change of culture that counts on the active participation of employees is part of one of the several actions that the EMS proposes for the companies that adhere to it.

Concentrating the data and information collected in the company in question regarding its consumptions in 2016, if we apply the same percentages of the results obtained by the companies mentioned above, and that acted in the same consumptions pointed out to the company addressed in this article, it is possible to reach large savings at the end of the year.

Therefore, by applying 12.5% in water and energy consumption and 14% in pulp consumption, it is possible to reach a monthly savings of approximately R\$6,067.00. If a balance is maintained in relation to these economies during the other months, at the end of one year it is possible to achieve an economy of approximately R\$73,000.00.

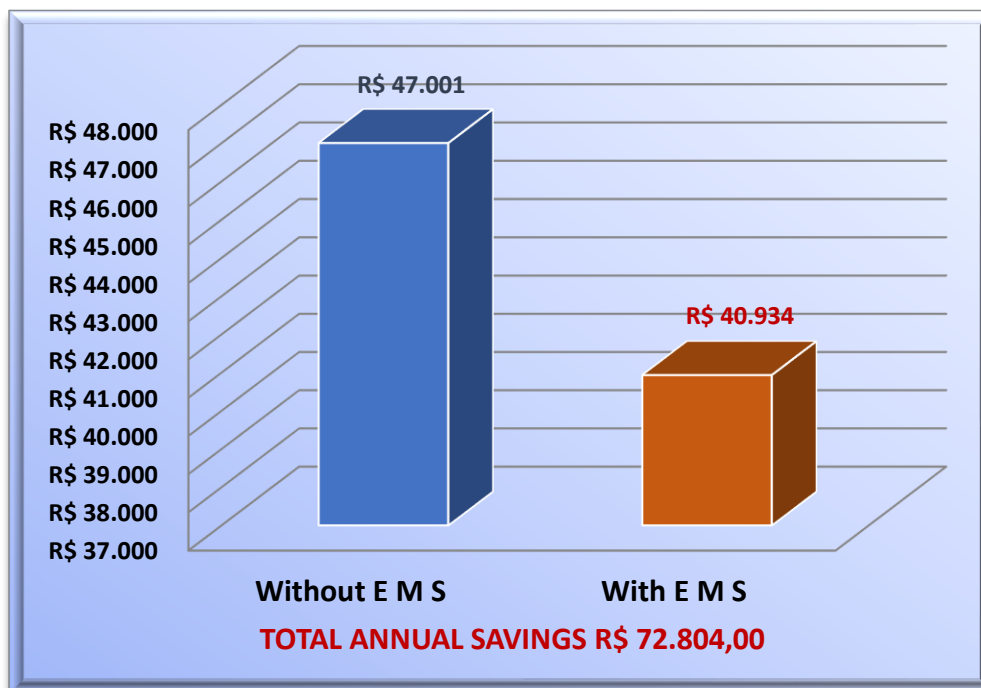
Above, on graphics 01 and 02 it is represented these possible monthly and annual savings that can be achieved by the condominium management company after the implementation of the EMS.

Graphic 01 - Monthly expense savings



Source: Authors, 2017

Graphic 02 - Annual savings



Source: Authors, 2017

It is worth emphasizing that the economy in the final budget of the company tends to increase at each moment that the Environmental Management System is advancing, once as the employees are committed to the same objectives of the company, other points of the operational processes end up being impacted also, but in a positive way.

In addition to a possible investment in technological resources, using digitization processes of the various documents circulating in the company, either for sending, receiving or internal circulation, a campaign like the

"conscious impression" will also provide a very relevant economy in other points. The company will not only save on the purchase of pulp, but also on the consumption of ink or toner, the printing contract that accompanies the rental of the printers can be reduced and, finally, reducing the consumption of sheets will consequently reduce the disposal of waste which in turn will decrease consumption and purchase of waste bags. In addition, according to a survey by IPEL, based on global garbage, it was identified that 90% of office waste corresponds exclusively to paper.

Another example would be the application of a process focused on the selective collection, since the majority is recyclable waste, they can be reused or sold, becoming a new recipe for the Condominium Management Company.

In order to reduce motorcycles moving around the city, fuel consumption and maintenance will also reduce considerably, contributing to the preservation of the environment. If it is an outsourced service, it will be possible to review the contract with the service provider.

CONCLUSION

In recent years the world has been undergoing major environmental changes, forcing companies to be seek a way to fit this new reality to stay in the market. For this, it will be necessary for organizations to invest more and more in ecologically correct processes and understand that starting with an environmental policy would not be bad. However, given the current scenario, regarding the economic and political crisis, lack of investment in improvements, low recognition and compensation of public employees that leads to demotivation, it is perceived that starting an Environmental Policy will not be as easy as environmental issues are directly linked to the current situation.

In the case of the analyzed Condominium Manager, some surveys were carried out that allowed the identification of environmental aspects pertinent to our study, which made possible the creation of a proposal of Environmental Policy in order to minimize or eliminate the impacts and initiate the implantation of an Environmental Management System (EMS). To this end, it will be necessary to create a responsible and committed team to design and implement Environmental Management with short, medium- and long-term actions, thus making the institution committed to environmental sustainability.

It can also be pointed out that the real economy generated through the main points to be treated will provide a positive impact on the coffers of the company, and these values could be applied in other real needs that until then could not be met due to lack of resources.

We hope that this work can provide necessary subsidies for new institutional practices generating in every academic context attitudes that benefit the environment and society.

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