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Sustainable and Renewable Project Management: A Strategic Look from the Perspective of Administration

The Management of Sustainable and Renewable Projects: A Strategic Look under the Management Optics

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Summary

The growing concern about environmental impacts and the need for sustainable business practices have placed renewable and sustainable projects at the center of organizational strategies. The role of the administrator as a project manager has become essential in the articulation of actions that integrate economic viability, social responsibility, and environmental preservation. This article analyzes the importance of efficient management of sustainable projects, discussing its contribution to sustainable development and the role of the administrator in conducting these initiatives. The research covers fundamental concepts of sustainability, global data on renewable energy, positive impacts of sustainable projects, and national and international case studies. The article also considers the challenges faced by managers and the skills required for effective performance, in line with the Sustainable Development Goals (SDGs) proposed by the United Nations (UN). Finally, practical and strategic recommendations are presented for the implementation of an organizational culture focused on sustainability.

Keywords: sustainability; renewable energy; project management; administration; sustainable development.

Abstract

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Keywords: sustainability; renewable energies; project management; administration; sustainable development.



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1. Introduction

The 21st century is marked by a significant increase in awareness of the changes climate, depletion of natural resources and socio-environmental impacts caused by models unsustainable production processes. In this context, renewable and sustainable projects have become protagonists in public policies and business strategies. Administrators, as project managers, assume a central role in the technical, economic and social viability of these initiatives. According to the UN Global Sustainability Report (2022), 73% of large companies are integrating sustainability goals into their operations, and project management is identified as a fundamental vector for achieving these goals. Sustainable project management requires a multidisciplinary approach, which combines technical skills with a systemic vision and social responsibility. Managers need to understand not only the objectives economic aspects of a project, but also the environmental and social impacts it can generate. According to Vargas (2020), "the project manager of the future must also be a project agent social transformation, with the ability to lead teams towards sustainable results and long term". This new vision expands the traditional scope of management and brings new challenges professionals.

2. Fundamentals of Sustainability and Renewable Energy

Sustainability is defined by the Brundtland Report (1987) as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs". Within this concept, renewable energies — such as solar, wind, biomass and hydroelectric power — are fundamental pillars as they offer alternatives clean and inexhaustible compared to fossil fuels. According to the Agency International Energy Agency (IEA, 2023), renewable sources were responsible for 30% of the global electricity generation, expected to reach 45% by 2030. The adoption of these sources is strongly linked to project management, from strategic planning to execution and monitoring of results. Solar energy projects, for example, require analysis of technical and financial feasibility, environmental studies, community engagement and compliance with specific legislation. It is in this scenario that the administrator, as a project manager, comes in with

your expertise in resource coordination, stakeholder communication and risk management, always aligned with the principles of sustainability.

3. The Role of the Administrator in Sustainable Project Management

The contemporary administrator needs to develop specific skills to act in sustainable projects. Among them, ethical leadership, the ability to evaluate socio-environmental impacts, systemic thinking and the ability to negotiate with multiple stakeholders. As highlighted by Kerzner (2017), "excellence in project management sustainable is not only in the processes, but in the culture and values that the manager transmits to team and organization". In addition to skills, the administrator also needs to be updated on international sustainability certifications, such as LEED, ISO 14001 and ESG, which serve as a reference for structuring projects aligned with the best global practices.

A study by the Project Management Institute (PMI, 2022) indicates that organizations with strong culture in sustainability are 28% more successful in their projects. This reinforces the importance of managers prepared to integrate the economic, social and environmental dimensions into their practices. In sustainable contexts, project management is not just a technical skill, but a transformative function. Sustainability, beyond an institutional objective, requires strategic planning, governance and adaptability. The project manager acts as a catalyst between available resources, social objectives and environmental requirements. When this function is underestimated, even the most innovative proposals lose strength, whether due to poor execution, due to the lack of indicators or the disconnection with the public involved. In addition, it is necessary for the administrator to understand the regulatory and legal impacts related to sustainable projects. Environmental laws, tax incentives, public policies and international agreements must be critically analyzed in decision-making. Knowledge regulatory framework is essential to ensure legal compliance of projects and avoid risks reputational and financial. The manager's strategic performance also includes coordination with internal and external stakeholders, promoting dialogue between investors, local communities, regulatory bodies and technical staff. This coordination allows not only the efficient execution of the project, but also the construction of social legitimacy, an essential element for the sustainability

of the actions.

Continuing education is another relevant dimension. The administrator must seek training constant in topics such as socio-environmental responsibility, governance, circular economy and green innovation. According to Sachs (2015), the transition to sustainable models depends directly from the quality of institutional leadership. Therefore, it is up to the administrator to keep up to date and form teams capable of operating under this new logic. It is from this perspective that the role of the manager expands beyond technical execution, acting as a facilitator of cultural changes within organizations.

Finally, it is important to highlight the role of the administrator as a promoter of the culture of sustainability. This means going beyond meeting environmental goals and promoting transformations in organizational values, daily practices and decision-making processes. The sustainability must be integrated into the organization's identity, and this integration is only possible through conscious and committed leadership. The figure of the administrator, therefore, must be seen as a strategic agent that leads the organization towards a new economy, more resilient, inclusive and responsible.

4. Indicators and Impact Measurement in Sustainable Projects

Impact measurement is one of the main tools for evaluating the effectiveness of projects sustainable. Indicators such as Carbon Footprint, Social Return on Investment (SROI) and socio-environmental impact indicators (such as access to energy, social inclusion and green job creation) are widely used by organizations seeking to measure your results in an objective and transparent manner. According to the Harvard Business Review (2021), companies that measure their sustainable impacts have greater access to financing and better reputation indexes in the market. The administrator is responsible for choosing indicators adapted to the reality of each project and to monitor them throughout the life cycle. This includes data analysis, sustainability reports and transparent communication with society and investors. Clarity in defining objectives and precision in measuring impacts are fundamental to the success and credibility of projects. Furthermore, the impact assessment allows continuous adjustments and decision-making more aligned with the SDGs.



5. Case Studies: Sustainable Initiatives in Brazil and the World

Several projects around the world show how efficient management can transform sustainable initiatives into scalable, high-impact solutions. A notable example is the project Grameen Shakti in Bangladesh, which has provided solar home systems to more than two millions of homes in rural areas, generating employment, social inclusion and access to energy clean (UNDP, 2022). Effective management has enabled the replication of the model and its recognition as one of the most successful community renewable energy initiatives in the world. In Brazil, the Solar Cities Project stands out, promoted by the Ideal Institute in partnership with city halls in the south of the country. The initiative aims to install solar panels in public schools and health units, reducing operating costs and promoting environmental education.

Administrators have been essential in the articulation between public bodies, suppliers and the community, ensuring the technical and financial sustainability of the project. Such examples reinforce that strategic management is the bridge between sustainable intention and its implementation effective.

6. Challenges and Future Perspectives

Despite advances, there are still significant challenges to consolidating projects sustainable, such as cultural resistance, limited resources, lack of technical training and regulatory barriers. Many administrators have not yet been exposed to specific training in sustainability, which limits the full integration of this concept into their working methods.

The creation of courses, certifications and mentoring programs focused on sustainable management is a growing demand. On the other hand, increasing social pressure and the appreciation of ESG practices by investors and consumers are accelerating this transition. According to a report by PwC (2023), 79% of consumers prefer companies with a clear positioning on sustainability, and 84% of investors consider ESG practices as a decisive criterion in their decisions. This points to a future in which sustainability will no longer be a differential and will become a minimum requirement for business continuity.

7. Final Considerations

The role of the administrator in managing sustainable and renewable projects is decisive for the building a more balanced, fair and viable future. Integrate the principles of sustainability to administrative and decision-making processes is a challenging task, however essential in the face of the demands of the 21st century. As demonstrated throughout this article, the combination of technical skills, social sensitivity and ethical commitment is the way for truly transformative projects. Strategic management is capable of transforming good intentions into concrete actions with lasting impacts. This requires long-term vision, alliances intersectoral and commitment to measurable results. The administrator must position yourself as a transition leader, capable of connecting innovation, sustainability and profitability in the same project. In a world where resources are finite and needs grow, the responsibility of management cannot be underestimated. Finally, it is necessary foster an organizational culture that values sustainable development at all levels its levels. This includes internal policies, operational processes, supplier relationships and dialogue with society. Sustainability, therefore, is not only achieved through goals or reports, but rather in competent management, with focus, planning and delivery capacity. The administrator who assumes this responsibility becomes not only a project manager, but also an agent of change with a direct impact on building a fairer future and green.

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