e-ISSN: 2236-0972
https://doi.org/10.5585/gep.v15i1.25461
Received: 01 Nov. 2023
Approved: 24 Nov. 2023
Editor-in-chief: Luciano Ferreira da Silva
Scientific Editors: Flavio Santino Bizarrias e Renato Penha

SUSTAINABILITY PROJECT MANAGEMENT: A NEW CLASSIFICATION MODEL

GERENCIAMENTO DE PROJETOS DE SUSTENTABILIDADE: NOVO MODELO DE CLASSIFICAÇÃO

Marcos Lopez Rego
Doutor em Administração de Empresas
IAG/PUC-Rio
Rio de Janeiro, RJ, Brasil.
marcos@iag.puc-rio.br

José Ernesto Mattoso Faillace Junior
Mestre
Fundação Getúlio Vargas/CPDOC
Rio de Janeiro, RJ, Brasil
faillace.jose@gmail.com

Abstract
Sustainability issues are becoming one of the most important project categories in distinct business sectors, levels of public administration and countries. This theoretical essay, still under initial development, proposes a new typology based in two dimensions that affect sustainability and project management. The first dimension is the "by the project" and "of the project" division. The sustainability "by" refers to how sustainability is directly included in the project scope, so projects that will deliver sustainable results. In the other hand, sustainability "of" the project mean that all project management processes will follow sustainability procedures. The second dimension is the dichotomy between PBO (Project based organizations) and PSO (Project supported organizations). For the PBO, the projects are the core business of that kind of organizations, so the earnings and profits are direct consequences of successful project execution and new contracts. Whereas for the PSO, projects are related to future operations, products, and services, so they are investments or expenses. As contribution, a research agenda is proposed addressing the relevant aspects, both in theoretical and practitioners' visions for sustainability project management. So this essay is a contribution in the sustainable project management studies.

Keywords: Project-based organizations. Project-supported organizations. Sustainability.

Resumo
As questões de sustentabilidade estão se tornado uma das categorias de projetos mais importantes, tanto no setor privado quanto na administração pública. Este ensaio teórico, ainda em desenvolvimento inicial, propõe uma nova tipologia baseada em duas dimensões que afetam a sustentabilidade e a gestão de projetos. A primeira dimensão é a divisão "pelo projeto" e "do projeto". A primeira refere-se a como a sustentabilidade está diretamente incluída no escopo do projeto, ou seja, projetos que entregarão resultados sustentáveis. A segunda, a sustentabilidade "do" projeto significa que todos os processos seguirão procedimentos de sustentabilidade. A segunda dimensão é a dicotomia entre OBP (organizações baseadas em projetos) e OSP (organizações suportadas por projetos). Na OBP, os projetos são o principal negócio deste tipo de organizações, nas quais os lucros são consequências diretas da execução bem-sucedida dos projetos e de novos contratos. Na OSP os projetos estão relacionados a operações, produtos e serviços futuros, portanto são investimentos ou despesas. Como conclusão apresenta-se uma agenda de pesquisa abordando os aspectos relevantes, tanto na visão teórica quanto na prática, para o gerenciamento de projetos de sustentabilidade**.** Este ensaio teórico então apresenta uma nova contribuição para o campo de estudos em gerenciamento de projetos sustentáveis.

Palavras-chave: Organizações baseadas em projetos. Organizações suportadas por projetos. Sustentabilidade.

How to cite the article
American Psychological Association (APA)

Rego, M. L., & Faillace Junior, J. E. M. (2024, Jan./Apr.). Sustainability project management: A new classification model. *Revista de Gestão e Projetos (GeP)*, *15*(1), 173-186. https://doi.org/10.5585/gep.v15i1.25461

1 Introduction

Every day organizations start new projects, aligned with the defined corporate strategy, in order for their survival, and eventually growth, in turbulent and competitive markets. Sustainability projects are some steps ahead from the corporate strategy and project portfolio, because instead of the organizational survival, they must deal with the most demanding change request from the society (Sankaran, Müller & Drouin, 2020). These trends are not that new, as Markard, Raven and Truffer (2012) pointed out that, about 12 years ago there were "60-100 academic papers per year" dealing with sustainability. The rapid growth of sustainability projects is a trend that is covering more and more industry sectors and has become a crucial discussion in different forums (Huemann & Silvius, 2017). Also, these quick sustainability studies growth in organization and project studies have been revealed a fragmented field, that is not in favor of a consistent development of the area (Sabini, Muzio & Alderman, 2019). Besides that, they pointed three problems with the theme research about. First of all, the question of theoretical inconsistencies among different research questions; secondly, the issue of competing organizing frameworks, and finally a lot of diverse understanding of sustainability. Among those are the question of "by the project" and "of the project" which are the interest of our study (Huemann & Silvius, 2017; Friedrich, 2023).

Silvius et al. (2012) pointed out a basic contradiction from the project view as "temporary organization" and the long-term focus of sustainable operations and sustainable development. So, once again the basic definitions of a project must be reviewed, and it should also consider the environmental effects of the project result in longer time frames. More than a contradiction, sustainability projects lead to paradoxes, as the project manager should balance sustainability projects objectives among the corporate strategy and project goals (Sabini & Alderman, 2021).

Included in the evolution and maturity of the project studies field, but based on the temporary organization approach is the understanding that some organizations are supported by projects, whereas others are project-based. For a project-based organization (PBO), projects mean income, and for a project supported organizations (PSO) they are expenses (Lundin, 2016). Also, recent studies confirmed that, no matter which project management approach used, we are moving from planning-oriented practices to a more systemic approach oriented towards value delivery (Bizarrias, Penha, & Silva, 2021)

Based in this discussion, this study is based in a triple construct fundamental. First of all are the sustainability studies, including sustainability management theories, specifically the "by" and "of" sustainability projects typology. Sustainability "by" refers to specific projects to deliver sustainability solutions, whereas "of" means project delivered according to sustainability practices and process. Second, we based on the temporary organizations' theory, as well as the PBO and PSO archetypes. Also, the paper is based on the assumption that theory and practice of projects have extended their level of analysis from individual projects to the focus on as macro-level questions around projects, in other words, a project studies contribution (Geraldi & Söderlund, 2018; Martens & Carvalho, 2016).

In terms of theory building, we adopt both Jabareen (2009) and Jaakkola (2020) complimentary approaches in developing conceptual studies, because theoretical essays should be grounded in a clear research design, whose choice of theories and their subsequent role in the analysis must be explicated and justified. The current study departs from two focal theories, and argues that their research domains are complementary, and the proposal here is to bridge the observed gap.

According to Locatelli et al. (2023), one of the drivers for project management and project studies research is that projects are often agents of change, consequently, it is fundamental to drive the innovation and change required to support grand challenges, as the sustainability ones. Jabarren (2009) developed a method for building conceptual framework linked to multidisciplinary fields of knowledge, as the sustainability research is currently. He defines conceptual framework as a network, or "a plane," of interlinked concepts that together provide a comprehensive understanding of a phenomenon.

Jaakkola (2020) proposes four approaches in the development of conceptual studies: Theory synthesis; Theory adaptation; Typology; and Model. A typology paper "Explains the fuzzy nature of many subjects by logically and causally combining different constructs into a coherent and explanatory set of types" (Cornelissen, 2017, p. 2), so the current study aims to classify and correlate two distinct conceptual frameworks into the project studies field. The typology helps to understand a field arguing that a particular concept, theory, or research domain is internally incoherent or incomplete in some important respect and then introducing other theories to bridge the observed gaps. This concept is aligned into Jaakkola's (2020) typology's essence, because types always explain something, so the dimensions that distinguish types account for the different drivers of specific variants of the field.

The theoretical proposal presented in this essay as a 2x2 matrix based in two dimensions: the first one is the "by" and "of" sustainability project approach, and the second is the Project based and project supported classification. The research question can be expressed as follows: What are the main characteristics of sustainability projects, according to the project based/project supported and by/of sustainability projects approach?

The research gap is based on the lack of joint studies that had analyzed the sustainability projects with the PBO and PSO approach together with the "of" and "by" view. Back to the fundamentals of business administration studies, we propose a 2x2 matrix joining these two dimensions. The research gap is relevant, as the proposed approach is adequate both in theoretical and practitioners' approach. In theoretical terms, future studies will benefit from a simple classification classification model, which can be improved and deepened with the theory evolution. In the practitioners' field a roadmap will benefit both projects based, and projects supported organizations.

This working paper proceed as follows: after the Introduction, the theoretical concepts of sustainability by and off projects are presented. The following section present the definitions of project based and project supported organizations are presented, continued by the proposed 2x2 matrix. After that the proposed research agenda and final thoughts are presented.

2 Sustainability projects or megaprojects?

The sustainability project management studies are Megaprojects are attractive to decision makers due to four motivations or "sublimes", as defined by Flyvbjerg (2014). The first is the technological sublime, defined by the enthusiasm of technicians for innovative solutions, as it must present a technological breakthrough and become a reference, with pioneering, innovative technology, and a break in paradigms. Next, the political sublime, driven by politicians' desire to build monuments that are iconic and highly visible. They represent political achievements, as they clearly express the results of a government: a symbol of progress, social redemption, and growth as a developed nation. Next, the economic sublime characterized by profits, progress, jobs; and, finally, the aesthetic sublime, which is the intrinsic pleasure of people, notably architects, in designing iconic buildings (Flyvbjerg, 2014).

The four sublimes do not include the symbolic dimension of megaprojects, as mentioned by Rego, Irigaray and Chaves (2018), who identified five dimensions of "intensive symbolism megaprojects": Firstly, the redemptive dimension, which means that the project will rescue the environment from an old status and place it in a new era. Secondly, the missionary dimension

means that the project team is expected to carry out an arduous mission until results are obtained. Fulfilling this mission strengthens a country politically and economically, as it works and redirects its morale, its ability to evolve, and, most importantly, it can unite the nation politically and economically. Thirdly, the annihilating dimension, as the project aims to demolish, sometimes literally, the past, associated with outdated indicators, such as poverty, slavery, deindustrialization, among others. If successful, there will be no doubts regarding the competence of the project sponsor, so the government should use it as a symbolic platform for the success of its management. Next, the heroic dimension, because this type of project is usually associated with a person or organization that heroically carries out the execution towards a successful end. Finally, the Illusory dimension, because, in the end, the results of the projects fall beyond of what was expected. Projects of intensive symbolism are then redemptive, missionary, annihilating, heroic and illusory (Rego, Irigaray, & Chaves, 2018).

More recently Sankaran, Müller and Drouin (2020) proposed one more dimension, the "sustainability sublime". The 17 Sustainable Development Goals (SDG) proposed by the United Nations - UN (Mansell & Philbin, 2020) could trigger the motivation for politicians, engineers, scientists and business leaders to develop and decide to go ahead manageable megaprojects adherent to the 17 SDG proposed by UN. The previous sublimes do not adequately express the motivation towards sustainable projects. Finally, Toljaga-Nikolić et al. (2020, p. 12) concluded that "project management methodologies promote the introduction of sustainability dimensions, particularly the social aspect, since the processes in projects managed by a specific methodology are consistent with the social elements of sustainability".

3 Sustainability of and by projects

Sustainability is the commitment that available natural resources and environments will be preserved for the incoming generations. According to Sabini, Muzio and Alderman (2019), sustainability comprises strategies, projects and processes related to survival and long-term future of the planet earth and its species. Mella and Pellicelli (2017) mentioned that the non-sustainability actions have well known sources, also non-sustainable behavior is not irrational in an absolute sense but derives from the action of three connected "behavioral archetypes" that accurately describe the "natural" behavior of individuals in pursuing their aims. The Non-sustainability, among others are result of the Mass consumer goods society; the search of low-cost production systems, no matter the long-term consequences; the extensive deforestation of

many parts of the world, the degradation of the quality of agricultural soil, and the Increased poverty in regions, countries and continents (Freedman, 2016).

The sustainability issue is a long-term challenge, that leave us an apparent paradox with the temporary nature of projects. One theoretical approach is to consider sustainability as a long-term transition process (Markard, Raven, & Truffer, 2012). A socio-technical transition could be seen as a set of efforts that will demand long development times and will require special skills, infrastructure and processes that will result in a new or upgraded socio-technical system, with institutional changes (Kemp, 1994). Socio-technical transitions are above technological transitions, because they include changes in user-practices, politics, and institutional changes (Markard, Raven & Truffer, 2012). For instance, the problem of waste of electrical and electronic equipment. Every year tons of electronic hardware garbage, called e-waste became available, as consumers and organizations changed their electronic equipment. It will be very difficult to a specific electronic company to start a process to collect its own e-waste, as electronic hardware became "no-brand" waste. So, a reverse logistics sustainability initiative should involve a change of mind-set at the whole sector, not limited to one or another player (Islam & Huda, 2018).

As long-term initiatives, sustainability projects could be theorized as transitions. Although the institutional theory could be used (Fuenfschilling, 2019), four approaches are discussed by Markard, Raven, and Truffer (2012). The *strategic niche management*, based on the development of niches of sustainability; the *transition management* that is an instrumental practice-oriented framework that will guide toward more sustainable strategies; the *multi-level perspective* that focus on different types of transitions pathways; and the *technological innovation systems* related to the development of more sustainable technologies, and its consequences both in institutional and organizational terms.

The transition management approach could also be considered as intermediation spaces, where the projects will be part of a long-term transition. Also, vanguard projects could be seen as intermediation spaces for sustainability transitions (Gasparro et al., 2022). Wang et at. (2020), in a study focused on sustainability of megaproject management, proposed a research framework based on three elements: process, purpose and people. Although not mentioned in their study, the *process* dimension, aimed to achieve procedural structure of project life-cycle is aligned with the "of the project" concept, that will be discussed below. The same analogy

can be traced towards the *purpose* dimension have much in common to the "by the project" view.

The sustainability studies are also concerned with Greenwashing Behaviors (GWBs) as a description of misleading environmental advertising actions and projects, supposedly done by corporations, as some contractors fabricate pictures and falsify certifications to deal with environmental inspection (He et al., 2022)

The sustainability "by" means specific projects created to deliver operations or business process that will formally include some sustainability effort, so it will be part of the project scope. These projects could be initiated based on upper management decisions to start or enhance direct measures in favor of the sustainability practices and will normally be under "The Triple Bottom Line" concept, which will consider environmental, social and governance (ESG) practices, as well as business case, deliverables, stakeholders' identification and risk assessment (Huemann & Sylvius, 2017).

The sustainability "of" means that the organization operations and projects are delivered according to sustainability practices and process. So, here the sustainability will not be directly expressed in the project scope but will be underneath all project management practices and tools. (Huemann & Sylvius, 2017; Gareis, Huemann & Martinuzzi, 2013).

4 Project based and project supported organizations

The study of how differently organizations deals with projects have started with the development of temporary organizations theory, as the seminal work by Lundin and Söderholm (1995). Following the theory evolution, concepts such project-based forms of work (Cattani et al., 2011), families of temporary organizations (Jacobson, Lundin & Söderholm, 2015), project society (Lundin et al., 2015), project-based firms (Whitley, 2006) and project-based organizations (Lundin, 2016; Söderlund, 2015; Miterev, Mancini & Turner, 2017).

Whitley (2006) proposed four types of project-based firms, based in two dimensions: separation and stability of work roles and singularity of goals and outputs. The author named four types of project-based firms: organizational, precarious, craft and hollow. The present research is partially based on the three major archetypes that define Project Contexts (Lundin, 2016). The first one is the PBO, defined when the project result is delivered to an external customer. The classic example can be observed in Engineering construction organizations

companies, that normally sign contracts with other private or public organizations to deliver distinct set of buildings, roads, bridges, tunnels, and other projects.

The second archetype is constituted of PSO, that are firms whose core-business is process based, such as mass-market production. The projects in such kind of organization are used to develop their process and products to future needs. For instance, a new product line project in an automobile organization. The project result expectation is that the new line will at least keep, or even growth, the company´s market share. In this sense, projects for PSO are expenses, because they all rely on internal or external sources of money to be approved. The PSO expectation is that, on the long term, new projects will keep the organization competitive in its market.

5 The draft proposition: 2x2 sustainability matrix for projects

The Figure 1 shows the initial proposition of a classification matrix. The business administration theories have a long tradition of using 2x2 matrix as a simple way of classifying and explaining management dimensions, such as the Product/Market Expansion Grid (Ansoff, 1957), or the BCG Growth Share Matrix (Reeves et al., 2014). There are four cells, named, respectively Strategic View, Principal function, Organizing view and Culture view, following the clockwise direction.

The discussion of the proposed 2x2 Matrix will follow the clockwise rotation, starting at their upper left side. The first quadrant was named “Strategic View” and refers to Project Supported Organizations and Sustainability by projects. We are talking about a huge diversity of organizations, in mass market consumer products, like automobiles, electronics, home appliances, toys, among many others. Also, are included mining, oil & gas, energy, water supply, sewage systems, etc. These organizations make money based on their operations, but, in different way, they will also rely on projects to develop new technologies, new products or services, expand, or upgrade their infrastructure.

Figure 1.

Sustainability Project Matrix

	PROJECT SUPPORTED ORGANIZATIONS	PROJECT BASED ORGANIZATION
BY	STRATEGIC VIEW	PRINCIPAL FUNCTION
OF	CULTURE VIEW	ORGANIZING VIEW

Source: Elaborated by authors, 2023.

These organizations are including more and more sustainability projects in their respective portfolios for different reasons. First of all, because of external pressures from various stakeholders' groups, such as consumer pressure groups, unions, press media and others. Secondly because of new government regulations. For instance, the automobile industry must follow a strict sustainability schedule. In European markets the aggressive "Fit for 55" proposal means that 55% CO2 emission reduction target by 2030, compared to 2021 levels (Ovaere & Proost, 2021). Third, because of deliberate strategies, that will result in a portfolio of new projects. In the automobile market Einhorn and Sato (2023) explained the bad result of Japanese car makers in their projects towards the electrical car market, as they mention "Tesla is the world's top EV (electrical vehicles) maker by vehicles sold (...). No Japanese carmaker makes the top 20, leaving them on the sidelines of the auto industry's fastest-growing sector".

So, the name "Strategic View" means that the sustainability projects are essential to the company survival, is an essential part of the transition towards a new environmental. But, as they are basically operations enterprises, projects are huge investments, not directly related to their respective core business, so they usually will include one or more supplier organizations, that will collaborate and partnership their projects. These organizations will normally be PBO, or project-based organizations.

The second cell is the "Principal function" one and refers to Project Based Organizations and Sustainability by projects. This is the group of highly specialized sustainability organizations, that will offer solutions for project supported organizations.

The third cell is the "Internal Organizing" one. In order to offer state-of-the-art sustainability solutions, the project-based organizations should be organized in a way that the sustainability practices will offer a competitive advantage in future contracts. So, it is a matter

of internal projects, that will organize and prepare the organization to deal with sustainability issues.

Finally, the last cell is the "Culture view" will result in a long-term transition from a non-sustainability scenario until every new project will be planned based on sustainability principles, no matter its scope. For instance, if the upper management of a given organization decided that create an internal project, dedicate only to celebrate its 100-year anniversary. The sustainability should be included in every aspect of the celebration project, so during the project planning, the project scope must be analyzed under the sustainability best practices lens. As the organization is usually a process-based firm, the most common situation will be that they will decide to outsource part of the project (Hermano & Martin-Cruz, 2020)

6 Research agenda proposal and final thoughts

As proposed by Jaakkola (2020) the Typology model for conceptual papers is valuable when the proposition is to categorize variants of concepts as distinct types. It includes the differences between variances of a concept, the organization of fragmented research into common distinct types, and to identify critical dimensions in order to solve conflicting findings from previous research. Based on this, a research agenda is proposed below, considering the four-sustainability project definitions.

1. How and why sustainability projects differ?
2. What is the contribution and value of sustainability projects to the future of project management and project studies?
3. What determines success or failure in sustainability projects?
4. How can collaboration and coordination support the delivery of sustainability projects in the interest of all stakeholders?
5. How "Strategic Sustainability" can be defined and characterized as the way that project supported organizations get their strategic sustainability goals?
6. What makes sustainability a project-based organization "Principal function"?
7. How the "Organizing view" concept can be defined, in terms of its existence on project-based organizations?
8. What are the possibilities possible to create a "Culture view" in project supported organizations?

This draft essay on sustainability projects was based on the identification of the main characteristics of sustainability projects, according to the project based/project supported and by/of sustainability projects approach. After a brief and initial literature review on sustainability projects and project-based/project-supported organizations, a 2x2 Matrix was proposed. The four quadrants were named, “Strategic View”, “Principal function”, “Organizing view” and “Culture view”.

The purpose of this article was to provide an initial view of the growing field of sustainability projects, under the lenses of project-based organizations and sustainability by and of the project. In terms of suggestion for future studies, a ten-research question were proposed, where qualitative research approach could be useful, based on the identification distinct of organizations for each one of the four quadrants. It is of utmost importance, before a second phase research, that could be based on hypothesis testing in quantitative studies for all proposed questions.

References

Ansoff, H I. (1957). Strategies for diversification. *Harvard Business Review*, 113-124.

Bizarrias, F., Penha, R., & Silva, L. (2021). Value and projects: Contributions under marketing perspective. *Revista de Gestão e Projetos (GeP)*, 12(2), 1-8.

Cattani, G., Ferriani, S., Frederiksen, L., & Täube, J. (2011). *Project-based organizing and strategic management: A long-term research agenda on temporary organizational forms*. Emerald Group Publishing Limited.

Cornelissen, J. (2017). Editor’s comments: Developing propositions, a process model, or a typology? Addressing the challenges of writing theory without a boilerplate. *Academy of Management Review*, 42(1), 1–9.

Einhorn, B. & Sano, N. (2023). The World´s Love Affair with Japanese cars is Souring. *Business Week*, Jan 05. Available at https://www.bloomberg.com/news/features/2023-01-06/toyota-nissan-risk-status-loss-as-tesla-vw-byd-top-global-electric-car-market.

Freedman, B. (2016). *Environmental Science: A Canadian Perspective.* Halifax, Canada, Dalhousie University Libraries.

Friedrich, K. (2023). A systematic literature review concerning the different interpretations of the role of sustainability in project management. *Management Review Quarterly*, *73*(1): 31-60.

Fuenfschilling, L. (2019). An institutional perspective on sustainability transitions. In Boons, F. & A. McMeekin (eds.) *Handbook of Sustainable Innovation*, Edgard Elgar Publishing, 219-237.

Gareis, R., Huemann, M. & Martinuzzi, A. (2013). *Project management & Sustainable development principles*. Newtown Square, USA: Project Management Institute.

Gasparro, K., Zerjav, V., Konstantinou, E. & Cassady, C. (2022). Vanguard Projects as Intermediation Spaces in Sustainability Transitions. *Project Management Journal*, *53*(2), 196-210.

Geraldi, J, & Söderlund, J. (2018). Project studies: What is it, where it is going. *International Journal of Project Management*, *36*(1), 55-70.

He, Qinghua, Wang, Z., Xie, J. & Chen, Z. (2022). The Dark Side of Environmental Sustainability in Projects: Unraveling Greenwashing Behaviors. *Project Management Journal*, *53*(4), 349-366.

Hermano, V. & Martín-Cruz, N. (2020). The project-based firm: A theoretical framework for building dynamic capabilities. *Sustainability*, *12*(16), 6639.

Huemann, M. & Silvius, G. (2017). Projects to create the future: Managing projects meets sustainable development. *International Journal of Project Management*, *35*(8), 1066-1070.

Islam, M. & Huda, N. (2018). Reverse logistics and closed-loop chain of Waste Electrical and Electronic Equipment (WEEE)/E-waste: A comprehensive literature review. *Resources, Conservation & Recycling*, *137*(1), 48-75.

Jaakkola. E. (2020). Designing conceptual articles: four approaches. *AMS Review*, 10(1): 18-26.

Jabareen, Y. (2009). Building a conceptual framework: Philosophy, Definitions, and Procedure. *International Journal of Qualitative Methods*, *4*(3), 49-62.

Jacobson, M., Lundin, R. & Söderholm, A. (2015). Researching Projects and Theorizing Families of Temporary Organizations. *Project Management Journal*, *46*(1), 9-18.

Kemp, René. (1994). Technology and the transition to environmental sustainability. *Futures*, *26*(10): 1023-1046.

Locatelli, G. et al (2022). A Manifesto for Project Management Research. *European Management Review*, *20*(1), 3-17. https://doi.org/10.1111/emre.12568

Lundin, R. (2016). Project society: paths and challenges. *Project Management Journal*, *47*(4):7-15.

Lundin, R. & Söderholm, A. (1995). A theory of the temporary organization. *Scandinavian Journal of Management*, *11*(4), 437-455.

Lundin, Rolf et al. (2015). *Managing Work in Project Society: Institutional Challenges of temporary Organizations*. Cambridge: Cambridge University Press.

Mansell, P. & Philbin, S. (2022). Measuring Sustainable Development Goal Targets on Infrastructure projects. *Journal of Managing Projects in Business*, *23*(8), 1-22.

Markard, J., Raven, R. & Truffer, B. (2012). Sustainability transitions: An emerging field of research and its prospects. *Research Policy*, *41*(6):955-967. https://doi.org/10.1016/j.respol.2012.02.013

Martens, M. & Carvalho, M. (2016). The challenge of introducing sustainability into project management function: multiple-case studies. *Journal of Cleaner Production*. *117*(1), 29-40. https://doi.org/10.1016/j.jclepro.2015.12.039

Mella, P. & Pellicelli, M. (2017). How Myopia Archetypes Lead to Non-Sustainability. *Sustainability*, *10*(1), 21. https://doi.org/10.3390/su10010021

Miterev, M., Mancini, M. & Turner, R. (2017). Towards a design for the project-based organization. *International Journal of Project Management*, *35*(4), 479-491.

Müller, R., Drouin, N. & Sankaran, S. (2019). Modeling Organizational Project Management. *Project Management Journal*, *50*(4), 449-513. https://doi.org/10.1177/8756972819847876

Ovaere, M. & Proost, S. (2021). *Cost-Effective Reduction of Fossil Energy use in the European Transport Sector: An Assessment of the Fit For 55 Package*. Working paper, Ghent University. Available at https://wps-feb.ugent.be/Papers/wp_21_1031.pdf

Reeves, M. & Venema, T. (2014). *The Growth Share Matrix Perspectives*. Available at https://www.bcg.com/publications/2014/growth-share-matrix-bcg-classics-revisited

Rego, M, Irigaray, H. & Chaves, R, (2017). Symbolic Megaprojects: Historical Evidence of a forgotten Dimension. *Project Management Journal*, *48*(6), 17-28.

Sabini, L. & Alderman, N. (2021). The Paradoxical Profession: Project Management and the Contradictory Nature of Sustainable Project Objectives, *Project Management Journal*, *52*(4), 379-393. https://doi.org/10.1177/875697282110076

Sabini, L., Muzio, D. and Alderman, N. (2019). 25 years of 'sustainable projects'. What we know and what the literature says. *International Journal of Project Management*, *37*(8),820-838.

Sankaran, S., Müller, R. and Drouin, N. (2020). Creating a 'sustainability sublime' to enable megaprojects to meet the United Nations sustainable development goals. *System Research and Behavioral Sciences*, *37*(6), 813-826. https://doi.org/10.1002/sres.2744

Silva, L, Bizarrias, F., Penha, R. and Larieira, C. (2023). The future of Project Management. *Revista Gestão e Projetos*, chamada especial 2023. Available at: https://periodicos.uninove.br/gep/chamaesp2023 .

Silvius, A., Schipper, R., Planko, J. van der Brink, J. and Kölher, A. (2012). *Sustainability in Project Management*, Gower Publishing.

Söderlund, J. (2015). Project-Based Organizations: What Are They? In: Chiocchio, F, Kelloway, E. and B. Hobbs, (Eds.) *The Psychology and management of Project Teams*. Oxford: Oxford university Press, 2015.

Toljaga-Nikolić, D., Todorović, M., Dobrota, M., Obradović, T., and Obradović, V. (2020). Project management and sustainability: Playing trick or treat with the planet. *Sustainability*, *12*(20), 8619. https://doi.org/10.3390/su12208619

Wang, G., Wu, P., Wu, X., Zhang, H., Guo, Q. and Cai, Y. (2020). Mapping global research on sustainability of megaproject management: A scientometric review, *Journal of Cleaner Production*, *259*(2), 1-12.

Whitley, R., (2006). Project-based firms: New organizational form or variations on a theme. *Industrial and Corporate Change*, *15*(2), 77-90.