Sustainability Transition Imaginaries: The Role of Projects and Project Management [1]

Isaac Odhiambo-Abuya

Department of Management Science and Project Planning
University of Nairobi, Kenya

Abstract

Sustainability transitions entail non-linear shifts that are fundamental to achieve sustainable systems in society. These changes are steered by collectively shared views of what is desirable in the future, or sustainability imaginaries. Although transition studies tend to concentrate on macro-level policy regime or technological regime, this conceptual article places projects and project management as vital micro-level instruments of change that constitute and actualize such imaginaries. We develop the interaction between sustainability imaginaries and the tentative, short-lived organizational frameworks of projects. We suggest that projects do not simply implement sustainable strategies, but instead they are spaces where new sociotechnical imaginaries are tested, contested, and institutionalized. Our conceptual framework integrates concepts and literature of both transition management and project studies and suggests that project management has a role to play in bridging the long-run transition vision with short-run, tactical action and in alleviating path dependencies, which support and uphold unsustainable regimes. The article provides a theoretically grounded agenda on future research and practice.

Keywords: sociotechnical imaginaries; sustainability transitions; project management; project-oriented agency; niche development; future-making

1. Introduction

Sustainability transitions refer to long-term, multi-dimensional changes in sociotechnical systems which fundamentally alter modes of production, consumption, and governance (Markard et al., 2012; Koheler et al., 2019). These shifts are not merely technical changes. On the contrary, they are more profoundly political and ideological in character, through being shaped by the

[1] How to cite this paper: Odhiambo-Abuya, I. (2026). Sustainability Transition Imaginaries: The Role of Projects and Project Management; *PM World Journal*, Vol. XV, Issue VI, June.

collectively shared visions of desirable futures. Jasanoff & Kim (2019) conceptualize such visions as sociotechnical imaginaries, highlighting that they are collectively held, institutionally established and publicly performed visions of desirable futures. Additionally, they are demonstrated by shared understandings of social life and the social order that can be achieved through advances in science and technology. Regarding sustainability, imaginaries of net-zero cities, circular economies and regenerative food systems are robustly directing policy and investment (Beck et al., 2021; Tjhin, 2024). An example of how visions may be translated into reality is the renaturation of the Isar River in Munich, which illustrates the spatial and temporal dimensions through which enviro-technical imaginaries guide the transformation of urban landscapes (Tjhin, 2024).

Transition studies have yielded complex models of how niche innovations break through established regimes, in particular the multi-level perspective (Geels, 2002; Geels & Schot, 2007). This discourse, however, tends to ignore the very organizational types in which such dynamics are realized. At the same time, the project management discipline has typically concentrated on the efficient provision of outputs within the limitations of time, cost, and scope, without consideration of the transformative potential of projects beyond the iron triangle (Silvius & Schipper, 2014; Aarseth et al., 2017). As a result, there still exists a significant gap. Even the tool to operationalize transition strategies has yet to be theorized in both disciplines. Geels & Locatelli (2024) opine that project studies need to be broadened to include sustainability shifts, whereas Friedrich (2023) demonstrates that sustainability role in project management is still perceived in fragmented ways.

Projects are temporary entities that are geared towards producing a unique product, service, or results (Turner & Muller, 2003). They are equally the means by which sustainability policies are enforced, including small-scale initiatives such as renewable energy pilots and large-scale urban infrastructure programs. It is here at the meso-level that abstract visions are tested upon tangible reality where decisions regarding governance, contractual frameworks and interfaces between stakeholders are made. Therefore, projects cannot be considered as neutral delivery conduits, but rather an active part of co-production where imaginaries are tested, contested and transformed (Jasanoff, 2004; Geels & Locatelli, 2024). This co-productionist understanding re-contextualizes the project as a political space where competing visions of the future contest to achieve dominance (Avelino, 2017; Mouffe, 2005).

The conceptual disconnect addressed in this article is done by incorporating knowledge about sustainability transitions and project studies. The aim is to construct a framework that describes the way sustainability transition imaginaries are practiced, contested and institutionalized through project based work. The paper is structured as follows. In section 2, the theoretical premises of sustainability imaginaries are elaborated. Section 3 explores how projects serve as future-making

vehicles. Section 4 analyses the specific contributions of project management in shaping imaginaries. Section 5 then integrates these discussions into a conceptual model. Section 6 proposes an agenda on future research and Section 7 is the conclusion.

2. Theoretical Framework

Sustainability imaginaries are the ideational foundation of transitions. They constitute not only what futures are anticipated but also the spatial and temporal aspects of those futures. Tjhin (2024) illustrates that imaginaries could be unpacked in imagined futures, imagined histories, imagined places, and imagined spaces. An example would be a project to retrofit the building stock of a city, which not only enacts an imagined future of energy efficiency, but also simultaneously invokes an imagined past of historical preservation and an imagined space of community identity. This multidimensionality makes imaginaries dynamic and contested assemblages that change as projects progress. Beck et al. (2021) also suggest that it is specifically through such imaginaries that the governance of sociotechnical transformations is realized, as they bring material projects into existence, justify them, and, accordingly, open up or close down competing options. This performative nature of imaginaries that is therefore central, as imaginaries are not merely descriptions of intended outcomes but active constructions of the social and material world which they claims to represent (Jasanoff, 2004; Jasanoff & Kim, 2019).

Moreover, there is a fundamental clash between the inspirational character of sustainability imaginaries and the institutional realities of project operations. On the one hand, imaginaries assert radical discontinuities with existing systems, with might prioritize a call to de-growth, deep decarbonization, or regenerative economies (Feola, 2015). Conversely, the political systems in which the project is implemented are usually highly entrenched within those same systems, preferring to gradual improvements instead of wholesome redesigning the system (Smith & Stirling, 2010; Avelino, 2017). This tension is especially conspicuous in the opposition between incumbent imaginaries that aim to preserve existing sociotechnical configurations, such as green growth through technological fixes vis-à-vis transformative imaginaries that envision fundamentally different social and material relations (Sovacool et al., 2019). There are numerous such examples in energy transitions, where conflict between large-scale, centralized renewable energy infrastructure on the one hand and community-owned alternatives on the other hand materializes (Sovacool et al., 2019; Boettcher III, 2017). Project outcomes in such conflicts are not seen as being conditioned by technical feasibility, but by the political realities and dynamics of unifying heterogeneous actors behind the specific visions (Raven et al., 2016).

Furthermore, imaginaries are performative in the sense that they direct resources and attention to some paths, while marginalize others. As an example, an imaginary of smart cities framed in technology-driven optimization justifies investment into digital infrastructure and data platforms, and marginalizes alternative visions based on community-led urban gardening and social cohesion (Beck et al., 2021). This performativity implies the project front-end, in which visions are defined via business cases and feasibility studies, is a critical moment of political closure. Thus, to comprehend the role of imaginaries, one must consider the power relations that establish what visions are funded, implemented, and evaluated (Avelino, 2017; Mouffe, 2005). These processes can be placed in the multi-level perspective (Geels, 2002; Geels & Schot, 2007), but a more comprehensive interaction with the ideational and political dimension is required to understand the full complexity of the transition pathways (Koehler et al., 2019; Smith & Stirling, 2010).

3. The Role of Projects in Transition Imaginaries

Projects represent vehicles of future-making. They are the organizational spaces where sustainability imaginaries are brought into reality, where experiments are done, and where learning takes place. This role is most pronounced in niche experiments, including pilot projects and living labs, which offers safe settings in which radical alternatives can be tested (Schot & Geels, 2013; Raven et al., 2016). Within such spaces, actors can experiment with novel social practices, create novel technologies, and form the coalitions on which scaling can be achieved. An example of this is exemplified in community energy projects, which embody an imaginary of decentralized, democratic energy systems, demonstrating their viability even before supportive regulatory frameworks are in place (Nemet, 2019; Boettcher III, 2017). Strategic niche management scholarship highlights that such experiments require deliberate nurturing through articulation of visions, building of social networks, and learning processes (Schot & Geels, 2013; Raven et al., 2016). This nurturing is best met by projects since as temporary organizations, they are well positioned to operate with a reasonable degree of autonomy relative to prevailing market and regulatory pressures.

Likewise, the idea of project-oriented agency reflects the ability of the actors to mobilize projects to facilitate transition goals. Hetemi et al. (2025) differentiate between two types. Emergent agency is the form of flexible, collaborative, and adaptive projects where goals evolve and adjust through stakeholders' interaction and learning. In contracts, the induced agency indicates those projects that are contractually binding, with strict scope and performance requirements, and usually relate to large-scale infrastructure delivery. Transitions require both of these forms. Emergent agency corresponds to the exploration, experimentation, innovation and flexibility needed within niches (Geels & Locatelli, 2024; Hetemi et al., 2025), whereas induced agency provides the reliability

and scale necessary to reconfigure regimes (Hetemi et al., 2025). It is the interaction between these forms within a portfolio of projects which predetermines the ability of a program to bridge niche and regime realities and dynamics effectively. Noteworthy, temporality of projects, both finite and goal-oriented, are not only conducive to focused experimentation but conversely create discontinuities that impair sustainability of transition initiatives (Pellegrinelli, 1997; Turner & Muller, 2003).

Projects are also bridging arrangements between the experimental niches and dominant regimes. The processes of articulation, aggregation, and institutionalization aid in transitioning an isolated pilot into a mainstream practice (Geels & Raven, 2006; Raven et al., 2016). This is possible through projects, which produce evidence, establish an actor network, and align with larger policy narratives. An example of this is how the diffusion of solar photovoltaic technology (between niche demonstration projects and grid-connected arrays) was mediated by successive projects that perfected business models, lowered the cost, and established supply chains (Nemet, 2019). Projects can thus be viewed as the organizational links that bridge long-term visions with short-term action, and translates the imaginary into a series of attainable milestones. Geels & Schot (2007) offer a typology of transition pathways that elucidate how interactions between niches and regimes interact through time, with projects as the tangible platforms on which those interactions are enacted. In addition, the non-linearity of niche development, which has its ups and downs over decades as documented by Geels & Raven (2006) offers a timely reminder that the individual project success or failure is embedded within longer trajectories of expectation and disappointment.

4. Role of Project Management in Shaping Imaginaries

Project management is not simply an ensemble of technical instruments, but is a governance practice that actively shapes what imaginaries are transformed into action. A paradigm shift is being experienced, shifting beyond the iron triangle of time, cost, and scope, to a wider concept of project value that includes environmental, social, and economic impacts (Silvius & Schipper, 2014). This shift is captured in the distinction between sustainability of the project and sustainability by the project (Huemann & Silvius, 2017). The former describes how the project process itself is managed in order to minimize negative impacts, such as with low-carbon construction or ethical supply chains. The latter relates to the production of project deliverables ensuring the establishment of sustainable results, like the design of a public transit system, which minimizes urban emissions. The two dimensions are crucial. The lack of sustainability by the project may lead to the deliverables locking in unsustainable practices, while the neglect of the

sustainability of the project may undermine the legitimacy of the transition itself (Aarseth et al., 2017; Armenia et al., 2019).

To accommodate this change, project management methodologies with a focus on sustainability have been developed. An example is the PRiSM (Projects Integrating Sustainable Methods) approach that explicitly introduces sustainability principles into each step of the project life cycle (Gareis et al., 2013). Likewise, Friedrich (2023) examines the multiplicity of varying concepts of sustainability in project management, and identifies that there is substantial agreement on the significance of sustainability although operationalization is fragmented. Armenia et al. (2019) introduce a conceptual framework incorporating dimensions of sustainable project management, highlighting that sustainability should be anchored in the selection, execution, and evaluation of any project. These frameworks contest the conventional premise that sustainability is a restrictive supplement, as opposed to a defining project objective (Gareis et al., 2013). The implementation of agile and hybrid approaches also has additional potential. Conforto et al. (2014) illustrate that an agile project management approach, its iterative cycles, and focus on stakeholder feedback can be applied outside software development to promote adaptability in project delivery. This flexibility is especially applicable to sustainability projects whose nature is characterized by high uncertainty and changing stakeholder expectations (Conforto et al., 2014; Silvius & Schipper, 2014).

Moreover, project management offices (PMOs) are central to the institutionalization of sustainability in organizations. Muller et al. (2013) establish a relational typology of PMOs highlighting their different roles, suggesting a range of minimum administrative support up to maximum strategic partnering. By adopting a strategic orientation, PMOs can integrate sustainability criteria into project selection, prioritization, and evaluation, and in so doing, can ensure that project portfolio alignment supports transition goals in the long term (Müller et al., 2013; Pellegrinelli, 1997). They also could standardize the methodologies that incorporate life-cycle evaluation, stakeholder dialogue, and adaptive learning (Gareis et al., 2013). It is in this sense that PMOs not only act as centers of project management excellence, but as custodians to the organizational sustainability vision (Huemann & Silvius, 2017).

Most importantly, the project management has to be proactive in engaging in the plurality of stakeholder imaginaries. Project managers are boundary actors who navigate between the visions of funders, policymakers, users, and communities. An article by Opoku et al. (2024) highlights the critical role of project managers as change agents in achieving sustainable urban development, demonstrating that sustainability leadership and innovative capability are crucial competencies. This would involve going beyond the traditional stakeholder management that seeks to find alignment and consensus to a more agonistic practice that accommodates the varied and numerous

perspectives (Mouffe, 2005). For example, a large dam project can represent a state imaginary of energy modernization, and entail displacing communities who hold an imaginary of intact river ecosystems and access to ancestral land. In such contexts, effective project management efforts will not look at ways to suppress conflict but create governance spaces where competing imaginaries can be discussed and possibly negotiated (Avelino, 2017; Smith & Stirling, 2010). This requires facilitation, conflict transformation, and futures literacy competencies that are often not included in most mainstream project management training (Opoku et al., 2024; Huemann & Silvius, 2017).

The incorporation of sustainability indicators also demonstrate how project management informs imaginaries. Bell and Morse (2012) maintain that sustainability indicators should not be seen as neutral measures, as they represent specific frames of what sustainability means, and whose interests matter. Once project managers choose key performance indicators, they tacitly promote one imaginary over the rest. In this way, the selection of the indicators is a political act, which requires reflexivity and intervention of the stakeholders (Bell & Morse, 2012; Friedrich, 2023). The selection of metrics, which may be oriented to carbon reduction, to increasing biodiversity or social equity, directs project energies in particular directions and reinforces certain transition pathways.

5. Conceptual Synthesis

By combining the above-presented arguments, we propose a conceptual model, which links the Vision (Imaginary), Execution (Project), and Impact (Transition) phases. The model is a composite of four domains that are interconnected. The imaginary domain is the collectively visualized sustainable futures that are espoused at various levels, ranging in scope between global discourses of decarbonisation and local place-based visions (Beck et al., 2021; Tjhin, 2024). This domain is not monolithic, as it has competing, overlapping, and evolving visions that establish the direction toward transition efforts (Avelino, 2017; Jasanoff & Kim, 2019). The strategic intermediation domain involves processes of integrating imaginaries into project initiation, funding, and portfolio formation criteria. Here development banks, corporate PMOs, and government agencies operate, determining what gets commissioned and the definition of success (Pellegrinelli, 1997; Müller et al., 2013).

The core of this model is the projecting practices domain, where day-to-day activities of project management take place. This involves planning, resourcing, risk management, stakeholder engagement and monitoring. The governance structures, the contractual provisions, and the choice of methodologies are employed as filters at this level to shape the imaginary (Geels & Locatelli,

2024; Hetemi et al., 2025). An illustrative case is a contract founded on fixed price and detailed specifications to implement a predictable, closed imaginary, where an alliance contract allows an emergent co-design (Hetemi et al., 2025). Likewise, the measures applied in the stage-gate reviews reinforce specific understandings of sustainability, while marginalizing alternatives (Bell and Morse, 2012; Armenia et al., 2019). The final domain is material and institutional outcomes, which includes the physical deliverables, the intangible capabilities, relationships, and learning created (Turner & Muller, 2003; Geels & Raven, 2006). Imperatively, results are fed back into the imaginary domain. Successful niche projects may enlarge the scope of what is considered possible and failures can discredit whole transition pathways (Nemet, 2019; Sovacool et al., 2019).

Managing these paradoxes is intrinsic to this model. The greatest paradox is the temporal reality. Projects are temporary organizations with limited life cycles, but sustainability transitions need long-term change (Turner & Muller, 2003; Pellegrinelli, 1997). This paradox is evident in the challenge of institutionalizing memory, sustaining stakeholder networks and ensuring that the benefits continue to be experienced even after the project team has disbanded. To deal with this, one would have to consciously make adjustments and mainstream transition management at the portfolio level. The imaginary can be undertaken across a longer time by sequenced projects coupled with permanent structures like community trusts, or multi-stakeholder platforms (Pellegrinelli, 1997; Muller et al., 2013). Moreover, the PMO, as a permanent organizational unit, can act as the custodian of long-term transition visions, ensuring continuity across successive temporary projects (Müller et al., 2013; Huemann & Silvius, 2017).

6. Discussion and Future Research Agenda

The model illustrated in this article underlines the proactive role that project managers and project management practitioners can assume in the process of defining sustainability futures. Instead of simply implementing predefined strategies, project managers can take the role of custodians of sociotechnical imaginaries and exert their positional authority to contest assumptions and facilitate deliberation, and champion transformative pathways (Opoku et al., 2024; Huemann & Silvius, 2017). This involves an intentional change in professional identity, where the practitioner becomes the change agent instead of being simply an implementer. This change is aided by methodological flexibility, especially by agile methods which focus on iterative learning and collaboration with stakeholders (Conforto et al., 2014; Friedrich, 2023).

On the basis of this analysis we present a future research agenda with five guiding questions. First, how do diverse stakeholder imaginaries compete in project governance, and what institutional designs enable pluralistic deliberation rather than technocratic closure? The researches could be

based on political processes theories and utilize comparative case studies to find those conditions of governance that help to reach transformative and not reproductive outcomes (Avelino, 2017; Smith & Stirling, 2010). The agonistic interpretation provided by Mouffe (2005) offers an effective analytical lens through which one can examine how conflict over imaginaries can be effectively channeled instead of being suppressed. Second, what project management methodologies are most effective in supporting radical, as opposed to incremental, sustainability transitions? Although agile and hybrid methods are promising approaches that allow enabling adaptation and learning (Conforto et al., 2014), their necessity to support radical visions under the pressures of budget and timeline constraints require empirical testing (Silvius & Schipper, 2014).

Thirdly, what can be done to manage temporal tensions? Future research ought to examine how program and portfolio management can coordinate waves of short-term projects in order to sustain momentum around long-term transformations, and how permanent intermediary organizations can bridge the temporary-permanent gap (Pellegrinelli, 1997; Muller et al., 2013). The relational typology of PMOs introduced by Muller et al. (2013) provides a baseline of how to investigate which PMO roles can most effectively support imaginary stewardship that spans the long term. Fourth, how can the various combinations of quantitative and narrative-based measures render projects accountable to contested imaginaries without rendering sustainability to the status of a tick-box exercise? It is an urgent priority to develop pluralistic evaluative frameworks, which are able to integrate indigenous and local knowledge with scientific indicators (Bell & Morse, 2012; Friedrich, 2023). Armenia et al. (2019) present a framework, which can be expanded by empirical validation to include such pluralistic views.

Fifth, in what ways can the sustainability transitions already being experienced in different geographical localities help to inform the generalizability of the framework? Renaturation of city rivers in Europe (Tjhin, 2024), diffusion of solar energy worldwide (Nemet, 2019), and Asian energy conflicts (Boetz III, 2017) each present their own unique lesson as to how a project mediates between global imaginaries and local realities. Comparative case studies in various development contexts will be fundamental in perfecting the model. Moreover, research on the deep transitions perspective (Köhler et al., 2019; Schot & Geels, 2013) can help situate individual project dynamics within longer-term, multi-systemic change processes.

Last but not least, there are a number of limitations that have to be acknowledged. This is a conceptual article, which synthesizes the extant literature, thus its propositions need to be empirically verified. The strenuous nature of sociotechnical transitions implies that the proposed linear and phased model is simplistic. Practically, domains overlap and interact in non-linear manners and the framework will miscalculate the contribution of exogenous shocks and political ruptures (Geels & Raven, 2006). In addition to this, the article has not addressed substantially the

enormous amount of informal, community-based initiatives (Simone, 2004). Future research must expand the analysis to these more invisible yet equally important forms of project organizing, recognizing the improvisational and emergent nature of infrastructural development in many parts of the world (Simone, 2004). Even the project-based agency notion (Hetemi et al., 2025) needs to be refined further by means of longitudinal case studies that can capture the interaction between the emergent and induced forms throughout the entire project life cycle.

7. Conclusion

This article has shown that sustainability transitions are not only technical or environmental changes but are embedded within how sustainability imaginaries are constructed, thus a collective vision of the desired futures. Projects are the main project-oriented agency that operationalizes such imaginaries by bridging between conceptual goals, long-term sustainability, and immediate realistic activities. Conceptual analysis has provided various important conclusions.

To begin with, projects exist as mediating institutions bridging experimental niches with systemic and long-term societal changes (Geels et al., 2006; Raven et al., 2016). They are the organizational linkages that helps in converting abstract visions into sequential and realizable milestones. Second, the manner in which actors envision the future, be it through technocratic or transformative views and perspectives, directly affects the extent, the objectives, and the results of project management practices (Jasanoff & Kim, 2019; Tjhin, 2024). The performativity of imaginaries means that project front-end decisions are moments of profound political significance (Beck et al., 2021). Third, project roles are continually changing towards a more systemic approach focused on delivering long-term value (Silvius et al., 2019). This change necessitates the inclusion of sustainability in the selection and prioritization of projects and in ongoing learning (Armenia et al., 2019; Friedrich, 2023). Fourth, sustainability transitions are continually contested, and the project management role demands being able to maneuver through multiple perspectives, as well as handling tensions between the existing socio-technical regimes and the emerging innovations (Avelino, 2017; Sovacool et al., 2019). Fifth, even though the level of integration is increasing, the current project management standards frequently fail to keep pace with the tempo of transition, often being unable to fully internalize environmental, social and economic considerations beyond the immediate project parameters (Aarseth et al., 2017; Gareis et al., 2013).

To enhance the role of projects in facilitating sustainability transitions, we offer recommendations for both practitioners and researchers. Regenerative project design should be embraced by project practitioners, going beyond harm reduction to actively restoring natural systems and building social resilience (Feola, 2015; Gareis et al., 2013). The imaginary assessment should be embedded

into the process of project initiation by project managers who would explicitly map the underlying futures that the stakeholders have and would use participatory methodologies to ensure a fair and inclusive process of project initiation (Opoku et al., 2024; Bell & Morse, 2012). Methodologies like PRiSM and adaptations of PRINCE2 that embed sustainability principles should be more widely adopted (Gareis et al., 2013; Conforto et al., 2014). Future studies need to empirically validate the project-oriented agency concept using longitudinal case studies (Hetemi et al., 2025). The development of context-sensitive, actionable sustainability metrics that can capture long-term socio-technical impacts remains a priority (Bell & Morse, 2012; Armenia et al., 2019). The impact of digital tools, including artificial intelligence and big data, on the improvement of sustainability performance in the project life cycle deserves additional investigation (Friedrich, 2023). Lastly, further research is required to gain an understanding of how project managers can effectively navigate the profound uncertainties and wicked problems of radical sustainability transitions.

In a world where impractical responses to climate change and even worse social stratification are getting more and more rapid, the ability to project desirable futures into the present act has ceased to be a luxury and now a necessity. By repositioning project management as a critical art of materializing shared futures, this article contributes a conceptual foundation for a research and practice agenda that is fit for the transformative challenges of our time.

References

Aarseth, W., Ahola, T., Aaltonen, K., Økland, A., & Andersen, B. (2017). Project sustainability strategies: A systematic literature review. International Journal of Project Management, 35(6), 1071–1083. https://doi.org/10.1016/j.ijproman.2016.11.006

Armenia, S., Dangelico, R. M., Nonino, F., & Pompei, A. (2019). Sustainable project management: A conceptualization-oriented review and a framework proposal for future studies. Sustainability, 11(9), 2664. https://doi.org/10.3390/su11092664

Avelino, F. (2017). Power in sustainability transitions: Analysing power and (dis)empowerment in transformative change towards sustainability. Environmental Policy and Governance, 27(6), 505–520. https://doi.org/10.1002/eet.1777

Beck, S., Jasanoff, S., Stirling, A., & Polzin, C. (2021). The governance of sociotechnical transformations to sustainability. Current Opinion in Environmental Sustainability, 49, 143–152. https://doi.org/10.1016/j.cosust.2021.04.010

Bell, S., & Morse, S. (2012). Sustainability indicators: Measuring the immeasurable? (2nd ed.). Routledge.

Boettcher III, W. A. (2017). Resolving potential energy conflicts among allies: The 2015 United States-Republic of Korea nuclear cooperation agreement. Energy Research & Social Science, 24, 86–93. https://doi.org/10.1016/j.erss.2016.12.007

Conforto, E. C., Salum, F., Amaral, D. C., Da Silva, S. L., & De Almeida, L. F. M. (2014). Can agile project management be adopted by industries other than software development? Project Management Journal, 45(3), 21–34. https://doi.org/10.1002/pmj.21410

Feola, G. (2015). Societal transformation in response to global environmental change: A review of emerging concepts. Ambio, 44(5), 376–390. https://doi.org/10.1007/s13280-014-0582-z

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. https://doi.org/10.1007/s11301-021-00230-3

Gareis, R., Huemann, M., Martinuzzi, A., Weninger, C., & Sedlacko, M. (2013). Project management and sustainable development principles. Project Management Institute.

Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case-study. Research Policy, 31(8–9), 1257–1274. https://doi.org/10.1016/S0048-7333(02)00062-8

Geels, F. W., & Locatelli, G. (2024). Broadening project studies to address sustainability transitions: Conceptual suggestions and crossovers with socio-technical transitions research. International Journal of Project Management, 42(7), 102646. https://doi.org/10.1016/j.ijproman.2024.102646

Geels, F., & Raven, R. (2006). Non-linearity and expectations in niche-development trajectories: Ups and downs in Dutch biogas development (1973–2003). Technology Analysis & Strategic Management, 18(3–4), 375–392. https://doi.org/10.1080/09537320600777143

Geels, F. W., & Schot, J. (2007). Typology of sociotechnical transition pathways. Research Policy, 36(3), 399–417. https://doi.org/10.1016/j.respol.2007.01.003

Hetemi, E., Pemsel, S., Söderlund, J., & Jerbrant, A. (2025). Projecting for sustainability transitions: Contrasting two types of project-oriented agency. International Journal of Project Management, 43(5), 102721. https://doi.org/10.1016/j.ijproman.2025.102721

Huemann, M., & Silvius, G. (2017). Projects to create the future: Managing projects meets sustainable development. International Journal of Project Management, 35(6), 1066–1070. https://doi.org/10.1016/j.ijproman.2017.04.014

Jasanoff, S. (2004). The idiom of co-production. In S. Jasanoff (Ed.), States of knowledge: The co-production of science and social order (pp. 1–12). Routledge.

Jasanoff, S., & Kim, S. H. (Eds.). (2019). Dreamscapes of modernity: Sociotechnical imaginaries and the fabrication of power. University of Chicago Press.

Köhler, J., Geels, F. W., Kern, F., Markard, J., Onsongo, E., Wieczorek, A., … Wells, P. (2019). An agenda for sustainability transitions research: State of the art and future directions. Environmental Innovation and Societal Transitions, 31, 1–32. https://doi.org/10.1016/j.eist.2019.01.004

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

Mouffe, C. (2005). On the political. Routledge.

Müller, R., Glückler, J., & Aubry, M. (2013). A relational typology of project management offices. Project Management Journal, 44(1), 59–76. https://doi.org/10.1002/pmj.21321

Nemet, G. F. (2019). How solar energy became cheap: A model for low-carbon innovation. Routledge.

Opoku, A., Saddul, K., Kapogiannis, G., Kugblenu, G., & Amudjie, J. (2024). Empowering urban sustainability: Unveiling the crucial role of project managers in attaining Sustainable Development Goal 11. International Journal of Managing Projects in Business, 17(2), 225–246. https://doi.org/10.1108/IJMPB-12-2023-0266

Pellegrinelli, S. (1997). Programme management: Organising project-based change. International Journal of Project Management, 15(3), 141–149. https://doi.org/10.1016/S0263-7863(96)00063-6

Raven, R., Kern, F., Verhees, B., & Smith, A. (2016). Niche construction and empowerment through socio-political work: A meta-analysis of six low-carbon technology cases. Environmental Innovation and Societal Transitions, 18, 164–180. https://doi.org/10.1016/j.eist.2015.02.002

Schot, J., & Geels, F. W. (2013). Strategic niche management and sustainable innovation journeys: Theory, findings, research agenda, and policy. In F. W. Geels, M. Hekkert, & S. Jacobsson (Eds.), The dynamics of sustainable innovation journeys (pp. 17–34). Routledge.

Silvius, A. J., & Schipper, R. P. (2014). Sustainability in project management: A literature review and impact analysis. Social Business, 4(1), 63–96. https://doi.org/10.1362/204440814X13948909253866

Simone, A. (2004). People as infrastructure: Intersecting fragments in Johannesburg. Public Culture, 16(3), 407–429. https://doi.org/10.1215/08992363-16-3-407

Smith, A., & Stirling, A. (2010). The politics of social-ecological resilience and sustainable socio-technical transitions. Ecology and Society, 15(1), 11. https://doi.org/10.5751/ES-03218-150111

Sovacool, B. K., Martiskainen, M., Hook, A., & Baker, L. (2019). Decarbonization and its discontents: A critical energy justice perspective on four low-carbon transitions. Climatic Change, 155(4), 581–619. https://doi.org/10.1007/s10584-019-02521-7

Tjhin, D. A. (2024). The return of nature? Negotiating the 'renaturation' of the Isar as an envirotechnical landscape. Social Studies of Science, 54(4), 557–574. https://doi.org/10.1177/03063127241234567

Turner, J. R., & Müller, R. (2003). On the nature of the project as a temporary organization. International Journal of Project Management, 21(1), 1–8. https://doi.org/10.1016/S0263-7863(02)00020-0

About the Author

Dr. Isaac Odhiambo-Abuya

Nairobi, Kenya

Dr. Isaac Odhiambo-Abuya is a distinguished educator and leader in project management at the University of Nairobi, Kisumu Campus, where he directs academic programs and chairs the Research, Innovation and Enterprise Committee. He is deeply committed to graduate mentorship and advancing the field, having co-founded the university's premier Annual International Conferences in Project Planning & Management and Project Monitoring & Evaluation. He maintains an active membership with the Project Management Institute (PMI). He can be contacted at isaac.abuya@uonbi.ac.ke