

ARUP

Sustainability through delivery

Leveraging portfolio, programme and project
management to drive stronger outcomes.



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Arup have been named as the 2025 ‘Organisation of the year – consultancy/service’ at the Unlock Net Zero Awards. Described as “a role model of Net Zero organisations.”

We were recognised for turning ambition into tangible action - reducing our own emissions whilst driving wider change across projects, partnerships and supply chains.

We understand the importance of acting on climate change – which is why we don’t just tell people what to do, but also act upon it. We lead by example, since setting our science-based targets in 2019 we have:

- Reduced Scope 1 and 2 emissions by 86%
- Transitioned to 100% renewable electricity across global operations
- Committed to phasing out fossil fuel heating in all offices by 2030.

Foreword

In an era where the urgency of addressing the **climate emergency** is paramount, the role of project, programme and portfolio management (P3M) in driving sustainability outcomes cannot be overstated.

This white paper, ‘Sustainability through delivery’, is testament to our commitment at Arup to champion professional project management and to explore the transformative potential of P3M methodologies in achieving critical sustainability goals for our clients.

The paper outlines the role P3M practices can play in supporting the delivery of sustainability outcomes. It covers reasons and blockers for why these practices are not being fully implemented and presents possible solutions and actions that can be taken to overcome them.

Our research highlights the significant impact that P3M managers can have in promoting sustainability at every stage of a project’s lifecycle. From project inception through to transition into operations and project closeout, the application of robust project, programme and portfolio management methodologies can ensure that sustainability goals are not only met but exceeded.

This paper calls for a paradigm shift in how we approach project management, emphasising the need for a collaborative effort between P3M managers and sustainability professionals.

Our aspiration is that this document serves as a catalyst for further discussion, innovation and action within the global project management community.

By sharing Arup’s insights and practical solutions, we aim to inspire P3M professionals to take proactive steps towards integrating sustainability into their practices, ultimately contributing to a more sustainable and prosperous future for all. By addressing these challenges head-on, we believe P3M professionals can ultimately enhance their contributions to the delivery of sustainability outcomes.



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1 Introduction

1.1 Context

The project management profession has significant potential to address the climate emergency through the application of project-programme-portfolio management (P3M) practices and methodologies. These methodologies can increase the success of sustainability outcomes being delivered and our research highlights that this potential is not being fully realised.

This white paper explores the possible reasons for this identified gap and examines how greater application of P3M methodologies can promote and deliver sustainability outcomes. It also offers ideas and possible solutions to bridge the gap, including case study examples of how Arup has applied these practices to deliver strong sustainability outcomes on projects.

We explore actionable steps that project-programme-portfolio professionals and programmes* can start taking today, to better deliver enhanced sustainability outcomes for a prosperous and sustainable tomorrow.

** throughout the paper 'P3M managers' is used as a general term covering Project-Programme-Portfolio managers and professionals.*

1.2 Intended application

This research is intended to help support anyone seeking to deliver strong sustainability outcomes through the delivery of projects, programmes and portfolios.

It highlights the significant potential teams have in positively addressing the climate emergency through their day-to-day operations and provides tangible actions on how organisations may start to realise this potential. More broadly, it also reinforces to project teams and their sponsors, the benefits and importance of implementing robust P3M methodologies in aiding successful delivery.

1.3 Methodology

The development of this paper was supported through an Arup knowledge fund (Invest in Arup), part of Arup University.

We undertook a detailed global literature review to explore the relationship between P3M and sustainable development frameworks and methodologies. The focus was to understand how P3M managers could maximise positive sustainability outcomes through these methodologies.

Academic and professional publications and technical resources were identified through literature searches with support from experienced academics and subject matter experts both within Arup and externally.

The study team identified key themes, opportunities and challenges which formed the basis for this paper and for potential wider expert discussion.

Global cross-discipline workshops were held with a range of P3M managers and Sustainability leaders within Arup; as well as other project professionals, to consider the themes, opportunities and challenges identified by the team.

This discussion led to a hypothesis centred on how the global P3M profession can enhance, support and further maximise the successful delivery of sustainability outcomes and Arup hopes this will provide a launchpad for future collaboration and innovation in this space.

1.4 Why are sustainability outcomes important?

Governments, public organisations and the private sector now have a clear picture of the status of the planet in the climate emergency. They know where progress is needed, as set out in the IPCC AR6 Synthesis Report ⁽¹⁾.

Collectively, private and public sector organisations have a significant part to play to address the climate emergency and help governments meet climate-related goals and commitments. Some private and public sector organisations have made bold commitments, often with an optimism bias, for goals to be reached from 2030 to 2050 and beyond.

Increasingly they are finding themselves challenged to deliver against these targets and commitments. According to the United Nations Environment Programme (UNEP), the world is not on track to achieving global climate goals. Greenhouse gas concentrations are at record levels and there is a high likelihood that global warming will reach up to 3°C above pre-industrial levels by the turn of the century ⁽²⁾.

Last year UNEP emphasised the urgent need for global mobilisation to curb greenhouse gas emissions and prevent catastrophic temperature spikes ⁽³⁾.

For organisations to meet their goals and to contribute towards addressing the climate emergency, all development projects, programmes and portfolios need to focus on sustainability outcomes as a priority.

Beyond simply meeting 'goals' and achieving compliance with regulation, delivering enhanced sustainability outcomes can deliver untold benefits to both organisations as well as wider society.

Benefits include:

- Economic gain – cost savings through reduced energy consumption, waste production and material use.
- Future proofing – building resilience against environmental risks, reducing reliance on resources (e.g. Fossil fuels),
- Social and community benefits - health and well-being, equity and inclusiveness, social license to operate.
- Reputational gain – potential staff and customers are increasingly seeking to work for and with organisations, who prioritise delivery of sustainability outcomes.
- Supporting global and national sustainability goals - UN SDGs and local sustainability plans etc.

In short, enhanced sustainability outcomes ensure that projects are not only environmentally sound but also socially responsible, economically viable and future ready. On the flipside, ignoring these imperative risks, stranded assets, public backlash and missed opportunities for innovation and leadership.



2 Current application

Why is the current application of P3M methodologies to deliver sustainability outcomes limited?

Robust portfolio, programme and project methodologies have been developed and used by the project management community since the 1970s. A breakdown of where these methodologies are applied and what they deliver is outlined in Figure 1 below. Such methodologies are regularly employed, particularly across more traditional engineering, infrastructure, building, and technology projects. Frameworks for integrating structured P3M techniques with sustainability principles have been developed, namely by the Green Project Management (GPM) organisation.

This includes their Projects Integrating Sustainable Methods (PRISM) structured project lifecycle approach that embeds sustainability into project execution ⁽⁴⁾. However, Arup's research has found that P3M methodologies are often lacking or not fully integrated into the frameworks, meaning application remains low, despite development of such frameworks.

Portfolio Management

Portfolio Management is a co-ordinated collection of strategic processes and decisions that together enable the most effective balance of organisational change and business as usual.

Programme Management

Programme Management is the action of carrying out the co-ordinated organisation, direction and implementation of a dossier of projects and transformation activities (i.e. the programme) to achieve outcomes and realise benefits that are of strategic importance to the business.

Project Management

A project is also a temporary organisation, usually existing for a much shorter time, which will deliver one or more outputs in accordance with a specific business case.

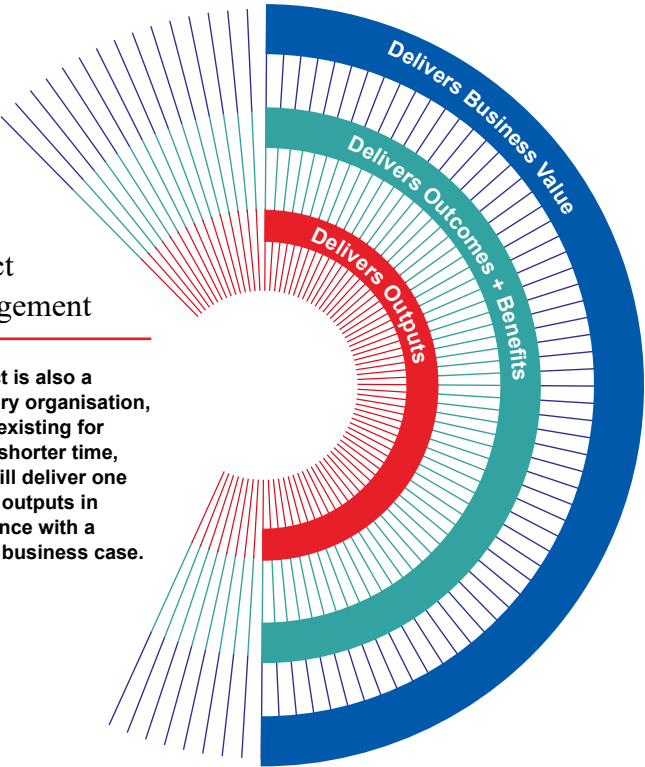


Figure 1
Portfolio-programme-project management (source: Arup, 2025)

Arup’s research has identified the following overarching potential causes for this lack of application:

- 1

Lack of collaboration between sustainability professionals and P3M managers

Arup found limited cross-discipline engagement between the global P3M and sustainability communities. As a result, there is a lack of awareness on both sides of their respective skillsets and the value that potential collaboration could provide. Initiating engagement would lead to a greater understanding of how sustainability professionals can utilise P3M managers and methodologies to benefit projects and lead to an increased likelihood of projects delivering on sustainability outcomes.
- 2

Lack of sustainability knowledge and understanding by P3M professionals

This lack of knowledge will directly affect P3M managers meaningfully delivering sustainability outcomes. As a result they may not be as likely to engage and apply themselves and see the benefit as much as they would on more traditional project types. However, P3M managers can provide value to promote sustainability outcomes even with limited sustainability knowledge.

Having at least an understanding of sustainability fundamentals will enhance the capability to contribute. Knowledge can be gained through actively working on projects and collaborating with colleagues and subject matter experts. Increased collaboration would promote a cross-pollination of skills: sustainability professionals would improve their project management abilities, while P3M managers would gain valuable knowledge and awareness of the value they can provide in driving strong sustainability impact.

- 3

Organisations not fully appreciating the benefit of applying P3M methodologies to deliver sustainability outcomes and objectives

Many organisations fail to realise the true potential of applying P3M methodologies on projects, programmes and portfolios, and as a result the scope and budget for P3M methodologies is sometimes limited.

However, many large organisations can have several disconnected elements, making it challenging to take the entire organisation on the same journey (e.g. meeting a specific sustainability policy). Arup believes that P3M methodologies, particularly programme management, can be successfully utilised to navigate these challenges.

Leveraging methodologies such as robust project and programme controls, establishing Programme or Portfolio Management Offices (PMOs) and focused stakeholder engagement can streamline processes, enhance collaboration and remove silos. It can also increase consistency across projects and ensure timely and cost-effective delivery of projects to meet, or go above and beyond policy requirements.



3 P3M methodologies to improve sustainability outcomes



How can we promote the use of P3M methodologies to improve sustainability outcomes?

Arup identified the following three key approaches to better integrate P3M methodologies into the delivery of projects to deliver stronger sustainability outcomes.

- 1 Organisations and project sponsors play a crucial role – “Paradigm Shift”
- 2 The importance of project leadership in sustainability – “Mind Shift”
- 3 Go wider than the ‘triple constraint’ – “Scope Shift”

3.1 Organisations and project sponsors – “paradigm shift”

Technical solutions to climate change alone will not enable organisations to implement the scale of progress required.

Project sponsors have a key role to play to facilitate and commit to the governance and investment required to achieve sustainability outcomes - this is the “paradigm shift”. The role of a project sponsor involves stewardship, making key decisions and delivering successful outcomes.

To promote this they require passion, participation and progression through their role ⁽⁵⁾. Increasingly, organisations see the benefit of genuine commitment to sustainability to increase their attractiveness to investors and employees.

We investigate how P3M managers can support organisations and project sponsors looking to deliver sustainability outcomes through projects using the following concepts:

- “Think Slow, Act Fast” ⁽⁶⁾
- Short-term vs long-term perspectives
- Be wise to policy and regulation

“Think slow, act fast”

Flyvbjerg and Gardner’s recent publication “How Big Things Get Done” ⁽⁶⁾ promotes the concept of “Think Slow, Act Fast”. It is key for an organisation looking to achieve sustainability outcomes to initially focus on defining the ‘sustainable strategic mandate’ to shape the investment and assess how this fits strategically given the organisations sustainability capability and maturity.

P3M managers can support this through the development of delivery plans tailored to specific projects, programmes, or implementation within an enterprise-wide portfolio environment. This will identify further opportunities for positive sustainability intervention to be implemented. More time spent defining clear strategy and planning, increases the probability of “smooth and swift” delivery of projects.

Short-term vs long-term

A very common challenge faced by organisations is balancing long-term sustainability benefits against often conflicting short and medium-term objectives.

Clients recognising this and positively initiating long-term thinking as opposed to focusing solely on the short-term, is a key change needed to achieve sustainability objectives.

Additionally, without having a clear grasp on the true overall short and long-term costs and benefits of delivering sustainability outcomes, it is difficult to make informed and balanced decisions on how to invest and proceed.

P3M methodologies such as cost-benefit analysis can help link immediate priorities to the longer term, bigger picture. Systems thinking can also support clients and project sponsors to identify and define the right programmes and projects to be delivered at the right times to meet the organisations’ sustainability objectives, whilst aligning them with broader business priorities.

Be wise to policy and regulation

A key consideration for all organisations is to have a clear picture of the sustainability policy and regulatory landscape that they must operate and comply within. P3M methodologies can be used to help organisations navigate this. Robust portfolio management should be applied to ensure all programmes and projects are aligned in meeting policy and regulatory requirements.

Policy and regulation can sometimes dictate the criticality, priority and the risk profile for projects. As such, risk and opportunity management is a vital tool to identify, assess, and mitigate risk of non-compliance.

It can also be used to identify opportunities beyond just compliance. Voluntary standards, such as the widely applied ISO14001 Environmental Management Systems ⁽⁷⁾ can be adopted by organisations to provide them with a systematic approach to achieving compliance with environmental regulations.

Key takeaways

- Achieving sustainability outcomes requires not only technical solutions, but a paradigm shift where clients and project sponsors commit to, and advocate for, sustainability throughout a project’s life cycle
- Before beginning a project, P3M managers can work with clients and project sponsors to assess and develop strategic goals and delivery plans, to ensure maximum sustainable development outcomes are defined, prioritised and achieved
- P3M managers can help clients and project sponsors navigate and strategically align with environmental and sustainability policies and regulations throughout a project’s life cycle



3.2 The importance of project leadership in sustainability – “mind shift”

P3M managers can play a key leadership role in delivering sustainability outcomes. However, this will require a “mind shift” from both P3M managers and sustainability professionals in how they approach projects and collaborate to achieve more successful and impactful outcomes. To assist this mind shift, engagement is required between the two communities to understand how they can collaborate more effectively.

P3M managers can play a key leadership role for delivering sustainability outcomes through the following concepts:

- P3M manager influence and capability development
- Stakeholder engagement

P3M manager influence and capability development

Through their central role on programmes and projects, P3M managers are centrally placed to influence a variety of key stakeholders to drive strong sustainability outcomes ⁽⁸⁾ (Figure 2).

However, a key challenge exists in building the capability and confidence of P3M managers to undertake this influential leadership role.

Some are self-motivated towards sustainability and can self-develop capability, others are primarily guided by the project requirements and develop their capabilities through knowledge transfer on projects.

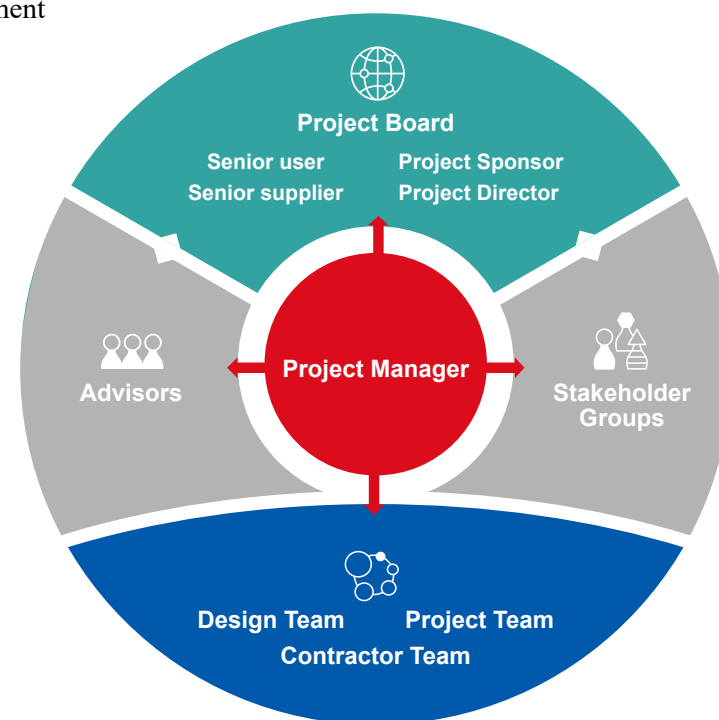


Figure 2
P3M managers are positioned to influence projects
(source: Arup, 2025)

Silvius ⁽⁹⁾ gives specific guidance on five sustainability competencies for P3M managers to help further support this mind shift:

- Systems thinking to understand relationships, root causes and feedback loops
- Anticipatory capabilities to think about the future
- Knowledge regarding Codes of Ethics and professional conduct
- Strategic competence to hold the big picture
- Interpersonal soft skills such as communication, negotiation, and diversity

Stakeholder engagement

Conflicting priorities and stakeholder objection may hinder the delivery of sustainability outcomes, due to conflicts between economic, environmental, and social imperatives. P3M managers can lead stakeholder engagement at a grass-roots level as well as working with decision makers and funders at an executive level, to listen, bring parties together and support positive outcomes. P3M managers with sustainability knowledge and strong communication and influencing skills are invaluable in enabling open and informed conversations on how a project can help address the climate emergency.

McPhee and Dias’ ⁽¹⁰⁾ publication on “Integrating Sustainability into Major Projects” contains content for stakeholder engagement, including useful guidance throughout the full project lifecycle as well as templates, plan contents and approaches for stakeholder engagement.

Key takeaways

- P3M managers are centrally placed to influence key project stakeholders and project teams to achieve sustainable development outcomes
- P3M managers should develop their sustainability knowledge and competencies, to build capability and confidence in integrating and delivering sustainable development outcomes for projects, programmes and portfolios

3.3 Go wider than the ‘triple constraint’ – “scope shift”

To support the delivery of sustainability outcomes, projects, programmes and portfolios need to move away from solely focusing on the ‘triple-constraint’ of time-budget-quality, to considering the wider environmental, economic and social impacts they deliver.

This represents a required “scope shift” and P3M professionals need to support this by adopting a flexible and tailored approach to integrating sustainability into projects and programmes.

This is considered through the following two themes:

- Flexible and tailored implementation
- UN SDGs and performance measures

UN SDGs and performance measures

The 2030 United Nations Sustainable Development Goals (UN SDGs) offer a framework that P3M managers can use to support this “scope shift”. P3M managers can use these SDGs to help guide and inform the sustainability outcomes that the programme or project seeks to achieve.

Demonstrating positive and verifiable impact against sustainability objectives is vitally important to all stakeholders to provide assurance that targets and objectives are being achieved.

The 2030 UN SDGs also present a globally common index-based framework. Many of the approaches for sustainability implementation set out key performance indicators (KPI) based approaches to demonstrate delivery, often against the UN SDGs.

In project management and the GPM/PRiSM⁽¹¹⁾ methodologies, the ‘benefits management’ technique⁽¹²⁾ provides a globally accepted approach to measure delivery performance. While there are differences in terminology, there is strong alignment between the various approaches to ultimately use KPIs to demonstrate delivery performance and this should be considered for all projects and programmes.

Flexible and tailored implementation

Regardless of the scope or type of methodology approach adopted, it must be flexible and tailored to the specific needs of the project or programme.

Multiple perspectives must be considered from the nature of the desired outcomes, the organisation’s requirements for the investment, and delivering in a socially and environmentally appropriate manner.

This presents an opportunity to align and integrate P3M methodologies with the approaches to sustainable development implementation. This means P3M managers may have to flex and tailor methodologies more commonly applied on traditional projects, so they best serve the purpose of delivering focused sustainability outcomes.

Risks and opportunities is an area of common synergy and language across both sustainability and project management that can be integrated and tailored to the benefit of the project.

Throughout programme and project execution, external factors such as evolving sustainability legislation and environmental regulation need to be considered.

Therefore, a degree of agility in a continued review and tailoring of the project management approach will be required. P3M managers are well equipped to manage such evolving environments. This presents an opportunity for skillsets to be used to maximise the sustainability outcomes achieved through delivering projects, programmes and portfolios.

Key takeaways

- P3M managers can use the UN SDGs as a framework from which they can shape their programme or project objectives
- Demonstrating a positive and verifiable impact through KPIs aligned with the UN SDGs provides assurance to stakeholders that sustainable development targets and objectives are being achieved
- P3M managers should harness their skillsets of flexible and tailored project management, to maximise the sustainable development outcomes to be achieved through delivery





We have considered the theory of how applying P3M practices and methodologies can improve delivery of sustainability outcomes.

Next, we aim to provide possible initial approaches of how to apply these methodologies.

Drawing on Arup's experience of adopting P3M methodologies to enhance delivery of sustainability outcomes for projects, programmes and portfolios, we've highlighted the following applications:



1 Climate and sustainability areas of focus for P3M managers



2 Project sponsor engagement and support



3 Influencing sustainability across the project lifecycle

4.1 Climate and sustainability areas of focus for P3M managers

Arup has identified the core project management skills and techniques that we believe P3M managers should develop to support the delivery of sustainability outcomes.

Our research indicates that shortfalls or the lack of application of these approaches results in reduced optimisation of sustainable outcomes.

In Figure 3, we highlight some core areas of sustainability where P3M managers should consider deepening their knowledge and experience.

We propose that P3M managers should collaborate with sustainability experts to ensure the technical aspects of sustainable development are influenced and delivered by suitably qualified and experienced professionals.

Core knowledge held by P3M managers will strengthen those relationships, facilitate collaboration, allowing them to check, challenge and ultimately come together to support better sustainable outcomes.

Social value, identified in Figure 3, is an area of sustainability that is sometimes overlooked yet, plays a fundamental role in achieving sustainability outcomes. It is a priority topic globally that many organisations, particularly in the public sector, are seeking to enhance across their projects and encompasses wider considerations involving inclusion, equity, social licence and ethics. The challenge is to put people and their quality of life first, but this is not always straight forward to deliver and there are no standard solutions to these challenges (Arup, Social Value – A UK White Paper) ⁽¹³⁾. This places an imperative on P3M managers to be aware, to lead and be skilled to engage on the issue of social value.

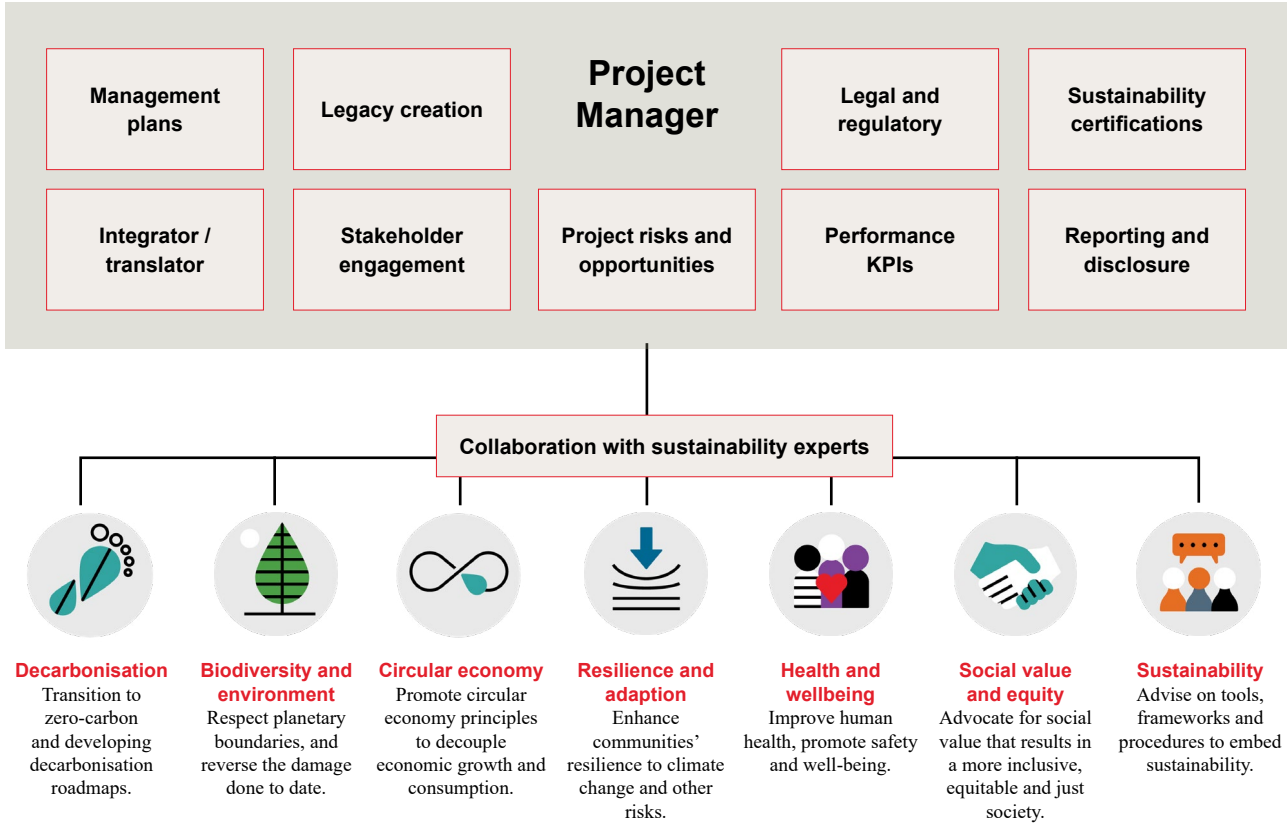


Figure 3
Recommended areas of focus for P3M managers
(source: Arup, 2025)

A framework for socially sustainable construction project management was presented by Geol et al., ⁽¹⁴⁾ with social sustainable characteristics in project delivery framed around:

- Worker health, safety and well-being.
- Community engagement and well-being.
- Ethical conduct.
- End user involvement and satisfaction.

4.2 Organisations and project sponsor engagement and support

Portfolio, programme and project managers' positions on projects allows them to have significant influence. This influence extends to project sponsors and wider project stakeholders.

P3M managers can support through all stages of a project, but early engagement is crucial to ensure sustainability commitments are integrated into project definitions and holistic planning from the outset.

Key to this practice is to discuss sustainability priorities, setting clear targets and measures, and embedding sustainable practices into project plans and strategies from the early stages of development. Regular communication and reporting on sustainability metrics, by engaging stakeholders through workshops and meetings, is also essential.

Figure 4 below presents tangible ways we have identified for a P3M manager to support clients and project sponsors, particularly during the initial stages of development through early engagement.

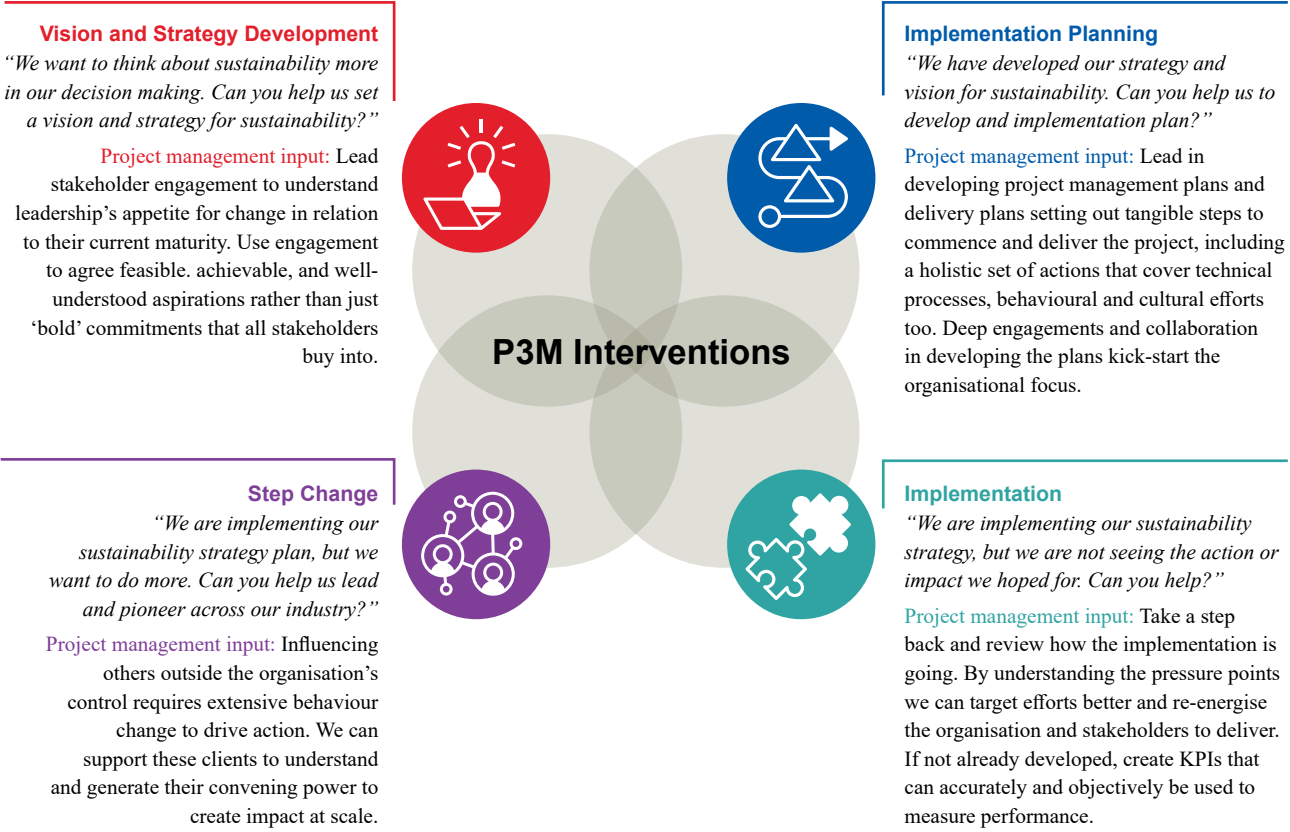


Figure 4
How project managers can support clients and project sponsors
(source: Arup, 2025)

4.3 Influencing sustainability across the project lifecycle

Portfolio, programme and project managers oversee the entire project lifecycle, from inception through to transition into operations and project closeout. This provides them with a holistic view of projects, thus emphasising the importance and potential for them to influence and support sustainable outcomes through tangible actions at every stage of the project lifecycle [Figure 5].

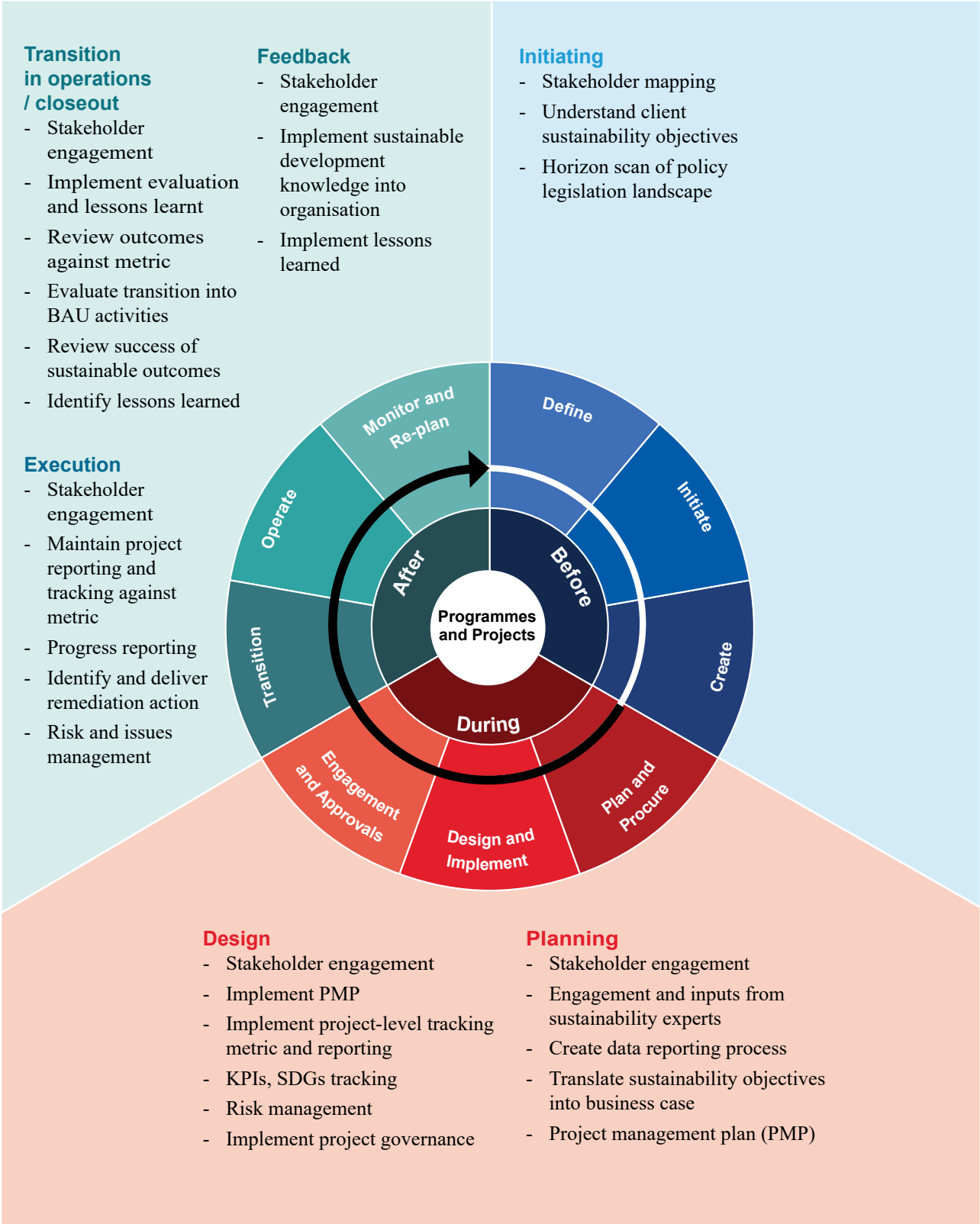


Figure 5
P3M manager’s influence across the project lifecycle
(source: Arup, 2025)



5 Actions for impact

This paper highlights the benefits of P3M manager’s influence on projects, programmes and portfolios, and how applying P3M methodologies can accelerate and increase the likelihood of delivering positive sustainability outcomes.

The paper also highlights the need for P3M managers to increase their knowledge in this field to be able to better contribute to these outcomes, and also highlights how we need to “shift” their role to realise a better future for humankind and our planet.

Table 1 below identifies eight critical actions that we believe P3M managers can take now to accelerate the influence of applying P3M methodologies to promote sustainability outcomes and to support the “paradigm shift”, “mind shift”, and “scope shift” that Arup has identified as being required.

1. Enhance sustainability knowledge Build a foundational understanding of sustainability within the P3M profession. This knowledge empowers P3M managers to drive sustainability outcomes and engage effectively with key stakeholders.	2. Be curious and ambitious Be curious about sustainability. Ask questions, challenge organisations to go beyond compliance; seek value in applying sustainability outcomes.
3. Client and project sponsor engagement P3M managers can use their focal positions on projects and their holistic view of the broader context to influence organisations wherever possible to define and deliver sustainability outcomes. These managers should call upon sustainability experts as required to support projects through the project lifecycle.	4. UN SDGs and Sustainable Development Frameworks Familiarisation with the UN SDGs and sustainable development frameworks to understand how to integrate them into programme and project objectives, and to identify how P3M methodologies can enhance and accelerate successful delivery of sustainability outcomes.
5. Green Project Management and PRISM The Green Project Management Standard and PRISM methodology provide a ready to use framework to embed sustainability into project delivery. P3M managers should consider applying this methodology or elements of it whenever possible on projects.	6. Engage the sustainability profession Engage with the sustainability profession to raise awareness of P3M managers’ capabilities and influence on projects, and vice versa. This should encourage and enhance how the two professions can work together. This engagement will also support the upskilling of P3M managers in sustainability.
7. Be policy and legislation savvy Seek to keep abreast of policies and legislation that underpin sustainability across relevant industry sectors and relevant global regions. This knowledge helps organisations navigate through the evolving legal and regulatory landscape.	8. Be advocates for sustainability Use P3M managers’ networks to advocate for sustainability. Raise awareness of the benefits of delivering sustainability outcomes for projects and demonstrate the pivotal role P3M managers can play in delivering these outcomes.

Figure 6
Top eight actions P3M managers can take today

6 Case studies

This section provides case study examples of how Arup have applied P3M methodologies on programmes and projects to support successful delivery of sustainability outcomes.

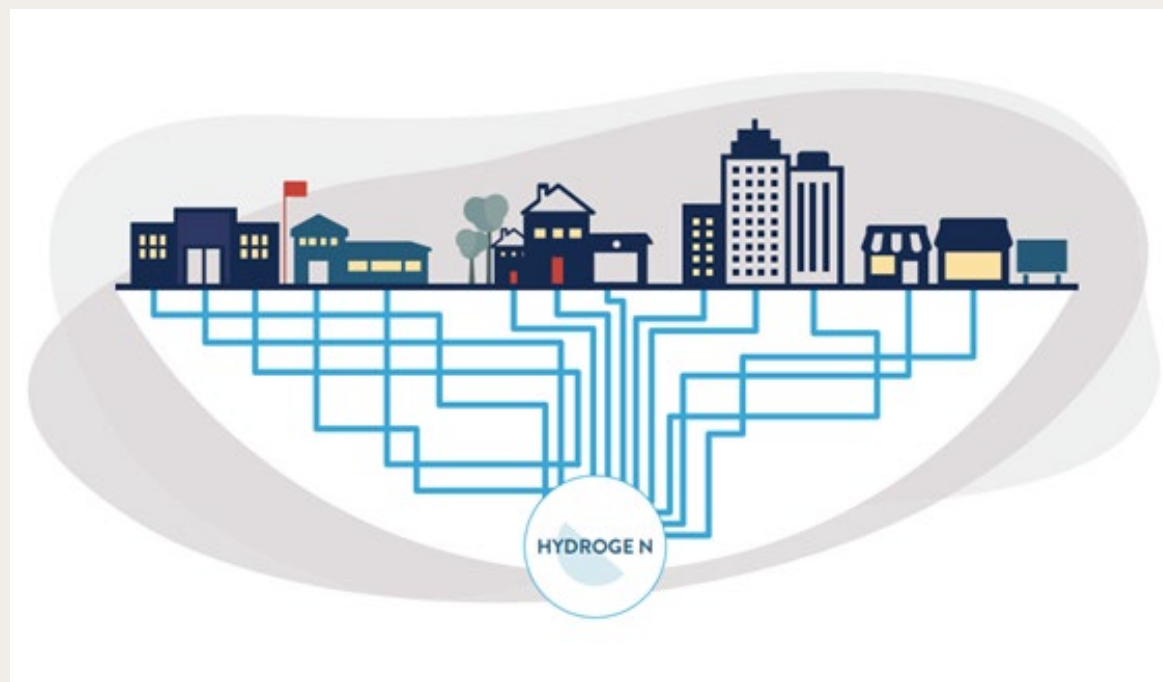
Case study

Hy4Heat - Hydrogen Feasibility Study

Arup was commissioned as the programme manager for the Hy4Heat programme, a feasibility study to establish if it is technically possible, safe, and convenient to replace natural gas (methane) with hydrogen in residential and commercial buildings, as well as in gas appliances..

The Hy4Heat programme management team was recognised by winning the Association for Project Management Programme of the Year Award 2021, being judged to have:

“demonstrated the most effective use of programme management techniques, achieved the greatest results, and provided evidence of innovations and lessons learned for the profession.”



Case study

Rituals – Carbon Impacts

Arup supported Rituals in evaluating the carbon impacts of fit out elements and finishes of their stores.

The application of project management skills and methodologies enhanced the delivery of sustainability outcomes by providing expertise in procurement strategies, incorporating contract clauses and terms & conditions into supplier agreements, and integrating circular economy principles - such as promoting take back schemes and furniture re-use.

The Arup project management team assisted the client in managing risk with suppliers and contractors, helping to identify and implement mitigations measures to address issues as they arose, further advancing circular outcomes.



Case study

Imperial College – Decarbonisation Plan

Imperial College London engaged Arup to develop a Decarbonisation Plan for its diverse estate, using structured project management methodologies to ensure effective delivery.

The 10-month programme was built around collaborative workshops and stakeholder engagement, enabling alignment across academic and operational groups. Arup embedded knowledge sharing from the outset, introduced best practices from similar projects, and maintained quality through a dedicated leadership team and regular governance meetings.

Tailored deliverables, including technical reports, accessible summaries, and an interactive dashboard, supported informed decision-making. This structured, inclusive approach led to the successful sign-off of the plan by the University Management Board, demonstrating how project management can drive meaningful sustainability outcomes.



Case study

Bristol City Council Sustainability Framework (2021 - 2024)

Arup, working with Arcadis and Mott MacDonald, is Bristol City Council’s strategic partner to aid the delivery of new infrastructure, homes and regeneration across the city.

Arup supported Bristol City Council across a three-year period from 2021 with the development of a Sustainability Framework to facilitate better evidence-based decision making and guidance on adopting a consistent approach to addressing sustainability across the whole life of Bristol City Council’s capital projects. This framework was designed to influence at a portfolio, programme and project level.

The framework was developed in phases. The first phase involved developing objectives and metrics to enable the council to demonstrate progress and measure continual improvement towards its own sustainability objectives at

a portfolio, as well as helping to influence the design of individual capital projects through seeking more sustainable solutions across a range of programmes (e.g. transport, education).

This phase included the creation of a sustainability project lifecycle and project stage checklist which sets out the sustainability considerations that need to be made at each stage of a project for built environment capital projects, integrated with existing portfolio governance arrangements.

In the second phase, the framework was piloted on several different infrastructure, masterplanning and public realm projects in the council’s capital portfolio. The third phase involved refining the framework based on feedback from the pilot project and developing a suite of training materials to support client side project managers and the central PMO team in its implementation.

Bristol City Council Sustainability Objectives



Support achieving a carbon neutral Bristol



Ensure that all Bristol City Council assets can be net zero carbon in operation



Minimise embodied carbon across the lifecycle of assets



Deliver a net enhancement of green and blue infrastructure with increased biodiversity



Ensure our built assets are resilient to a changing climate



Support the climate resilience of the wider city



Minimise waste and maximise adaptability, reuse and recycling across our asset lifetime



Reduce the need to travel, and maximise the use of sustainable forms of transport



Support achieving lower pollution levels in Bristol



Use the council's purchasing power to support and influence the supply chain in providing sustainable products and services

7 Reflections and next steps



Portfolio, programme and project managers’, positioned centrally within projects, have a significant potential to help deliver sustainability outcomes.

By applying P3M methodologies they can effectively support the delivery of sustainability goals at every stage of a project, from inception to closeout.

As sustainability knowledge grows within the profession, the ability to drive and influence positive outcomes will increase yet further. Crucially, engagement between the P3M and sustainability professions is key to fostering a mutual understanding of how to collaboratively tackle the climate emergency.

Through this research, we have identified a perceived gap in the application of P3M methodologies and three shifts required by organisations and P3M professionals to start closing this gap: the ‘paradigm shift’, the ‘mind shift’, and the ‘scope shift’.

Finally, eight immediately implementable actions have been identified to support these shifts and begin closing the gap.

The P3M profession has an ethical responsibility to implement sustainability practices to improve outcomes. These findings are intended to kick start a dialogue and share provide realistic actions that all P3M managers could take today to help realise the profession’s immense potential in delivering a prosperous and sustainable tomorrow and shape a better world.

“Build Climate Mitigation into your project: No task is more urgent today than mitigating the climate crisis - not only for the common good, but for your organisation, yourself and your family.”

How Big Things Get Done, (6)

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