

## **Project Sustainability Management: a systems approach**

The advantages of a management system approach to managing project sustainability, and how such an approach works.

Conclusion: certifying processes that report outcomes is more important for organizations starting out on Project Management Sustainability (PSM). But as a PSM system matures within an organization, certifying conformance of the underlying management system becomes equally important.

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### **Introduction**

A management system is as a consistent set of interrelated and interacting arrangements and practices to establish a policy and related objectives and to achieve those objectives.

The arrangements should ensure the systematic control and improvement of an organization's operational and other processes.

Standards for Project Sustainability Management (PSM), if they ever materialize, will specify requirements of the management system of an organization, without prescribing the objectives that an organization should achieve or specific performance requirements that should be met. Standards do not define what good quality is or what sound environmental performance is.

Organizations will set their own policies and objectives based on an analysis of the market conditions, the requirements and needs of their customers, the negative effects of their activities on society and environment and the applicable legal requirements. Based on their objectives organizations can determine how to manage their activities to achieve the desired results.

In general terms, sound project sustainability performance must be determined on the basis of an analysis of the social, environmental and economic aspects of projects and related effects, applicable legal requirements and by considering the views of interested parties.

The added value of a management system for an organization is that it enables the organization to achieve its business objectives and that the necessary processes and activities are carried out as effectively and efficiently as possible.

For stakeholders, the management system provides confidence that the relevant legal and other requirements are met, risks have been identified and operational controls are in place and working effectively and that the organization tries to continually improve its sustainability performance.

### **PSM guidelines**

A guideline or standard for a PSM system should provide organizations with a framework to systematically address sustainability issues in a transparent, reliable and consistent manner by providing guidance on the identification and management of aspects of an organization's activities that impact on or have a relationship with project sustainability issues.

It would not specify the "standards" that an organization should apply for certain sustainability issues or the specific performance levels that should be achieved.

These standards and performance levels are determined by an organization itself taking into account its specific context (location, environmental and social environment, etc), the applicable legislative framework and the views of its stakeholders.

However, it is vital that:

- what the project sustainability issues are,
- what performance objectives an organization should set itself;
- what acceptable results are,

Should be determined, in consultation with the project's stakeholders, for any specific situation taking into account universal values and principles, and legal and other normative frameworks.

For this, an internationally agreed definition for project sustainability is not needed: the PSM concept does not need to be cast in stone before an organization can usefully address sustainability issues that are relevant in its specific context.

For instance, environment and environmental impacts are ill defined; we do not completely understand global environmental mechanisms and interrelationships, let alone that there is universal agreement on what the relevant environmental issues are and what the preferred approaches and solutions should be.

What management systems do is provide useful guidance for addressing sustainability aspects, i.e., the pointers for an organization to contribute to an improved social and cultural environment based on analysis of its interaction with the environment. Global issues can at best provide a direction; on the local level issues can become concrete based on analysis and consultation of stakeholders, without losing sight of the "big picture".

Guidelines for a PSM system should provide:

- A globally accepted set of basic principles, or at least reference to some widely accepted sets of principles for sustainable development or its components (social, economic, environmental).
- Guidance on the process to use those principles as a basis for organization and situation specific project sustainability performance objectives (taking into account stakeholder views, legal issues, direct and indirect influence, etc.);
- Guidance on the management system to ensure implementation, achieving results, monitoring and reporting and continual improvement.

### **What a PSM system looks like**

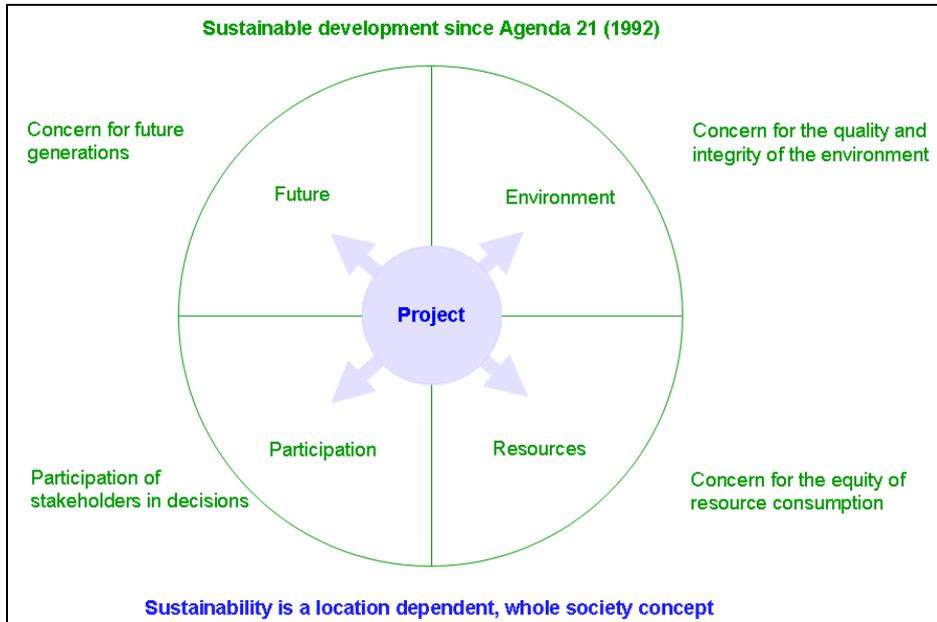
A management system helps an organization implement, monitor and achieve policies and objectives based on a set of accepted principles. A PSM system, should, in addition to the well-known management system requirements, assist an organization in:

- identifying the relevant (significant) issues, objectives and performance levels to meet;
- establishing its own ethical framework as a basis for establishing policies, codes of conduct, etc. and as a internal reference to assess how it will respond to external references for sustainability- related issues (e.g. codes, principles, conventions);
- consulting with, and maintaining dialogue with, its stakeholders; and
- Accounting for results achieved.

The framework for a management system approach to PSM involves interaction with the classic Plan – Do – Check – Report quality management loop that is extended to cover the scope and processes required to address the sustainability aspects of projects.

The global principles of sustainable development, illustrated below, are:

- Future: concern for future generations
- Participation: participation of stakeholders in decisions
- Resources: concern for the equity of resource consumption
- Environment: concern for the quality and integrity of the environment.



*The principles of sustainable development*

PSM drives projects towards these global goals for sustainable development by forcing:

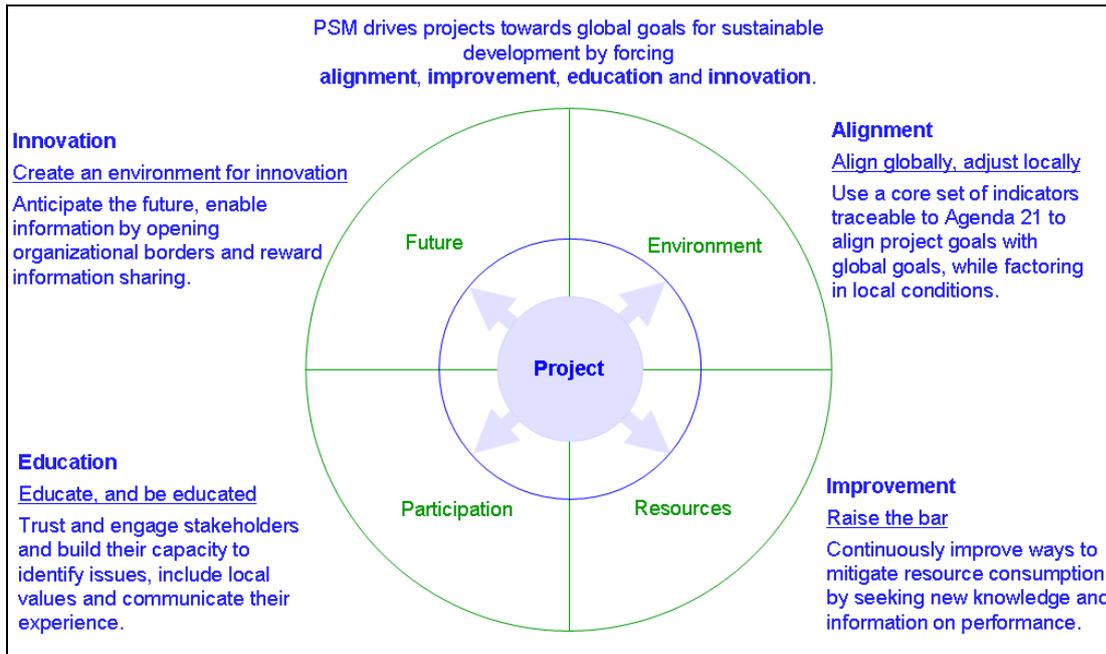
- Innovation (to improve the basis for the future)
- Education (to improve participation)
- Improvement (to improve resource use)
- Alignment (to improve align global standards to local conditions).



*PSM drives projects towards global goals for sustainable development.*

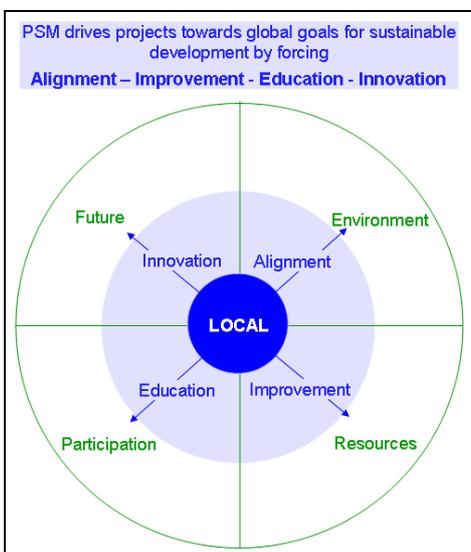
For each of the four aspects, PSM applies a principle, illustrated below:

- Innovation (“create an environment for innovation”): anticipate the future, enable information by opening organizational borders and reward information sharing;
- Education (“educate, and be educated”): trust and engage stakeholders and build their capacity to identify issues, include local values and communicate their experience.
- Improvement (“raise the bar”): continuously improve ways to mitigate resource consumption by seeking new knowledge and information on performance.
- Alignment (“align globally, adjust locally”): use a core set of indicators traceable to Agenda 21 to align project goals with global goals, while factoring in local conditions.



*The four PSM principles, innovation, education, improvement and alignment.*

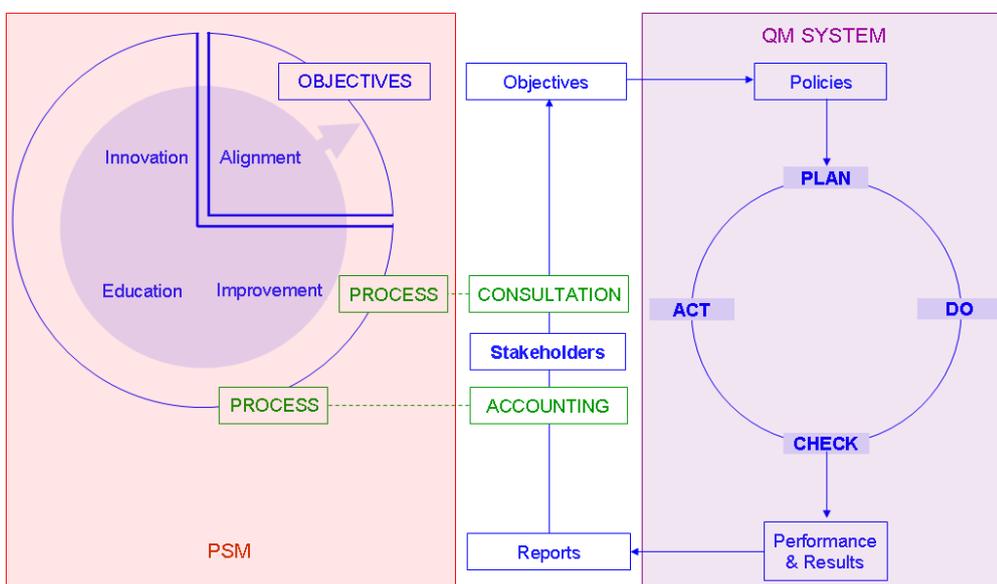
PSM can be summarized as aligning local project management to the goals of sustainability, as illustrated below. This alignment involves introducing innovation, education and improvement in processes so that outcomes align with objectives. So objectives and the processes to meet the objectives are involved, and not simply objectives which is the case for many approaches for implementing sustainability.



An effective PSM system must enable an organization to implement the PSM principles by ensuring that management systems address:

- Innovation: enhance the collection and assimilation of knowledge about new products and processes;
- Education: enhance the interactions with and capacity of stakeholders;
- Improvement: introduce processes to ensure that new knowledge and information on performance is used into project design;
- Alignment: assimilate new knowledge on global environmental standards and of the effects of projects on the environment; use of tools and techniques to align project goals and outcomes with whole-society goals.

PSM implements this forcing towards sustainability objectives through quality management. As shown in the figure below, a quality management system's Plan - Do -Check - Act loop generates, for instance, reports as outputs based on policies as input. Introducing innovation, education and improvement to drive projects towards sustainability objectives involves adjusting quality management processes so that they incorporate innovation, education and improvement.



The figure illustrates the use of PSM to force the quality management of processes towards sustainability objectives.

As an example, an essential element of PSM is the engagement of stakeholders in the various phases of a project: what are the relevant issues; what are the organization's policies and objectives; continuous dialogue; periodic accounting (reporting) of results achieved. Stakeholder interaction involves:

- Identification and selection of relevant stakeholder and stakeholder concerns
- Techniques for engaging stakeholders
- Processes and systems to ensure effective operationalization
- Techniques for verification of progress
- Techniques for stakeholder and public reporting

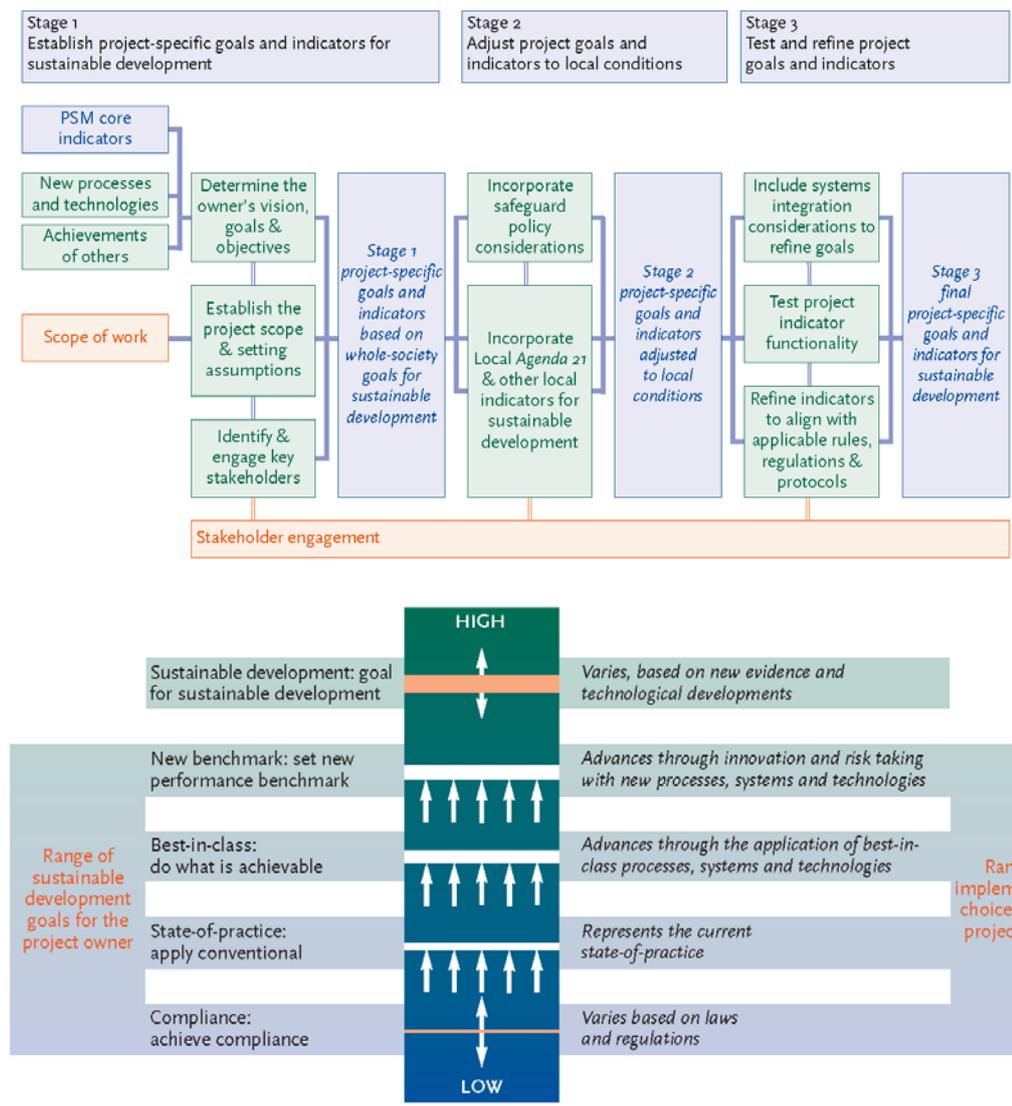
In the figure, processes for interacting with stakeholders illustrate the coupling of a Quality Management System (QMS) and PSM. Each process is subject to quality management (the right-hand side of the diagram) and the requirements of PSM, namely the introduction of measures which enhance innovation, education and improvement with the alignment of objectives to sustainability goals (the left-hand side of the diagram). In implementing PSM, an organization will need to show that its QMS ensures a) adequate innovation,

education and improvement in processes involving stakeholder interaction; and b) that project objectives are aligned to sustainability objectives.

Since project objectives apply to all processes, a vital first step for PSM has been to develop a rigorous approach for aligning project objectives to whole-society goals for sustainable development. The following section describes this approach, taken from FIDIC's *Project Sustainability Management Guidelines*. A comprehensive description of how to implement PSM's innovation, education and improvement principles in processes through *PSM System Guidelines* for project delivery is being considered.

### Aligning project objectives

Goal alignment in PSM uses a three-stage process, see figure below, to establish, adjust and test goals and indicators for the project using a framework which maps back to the whole-society issues, goals and priorities of Agenda 21, and the corresponding sustainability indicators developed by the United Nations Commission on Sustainable Development (UNCSD). The project goals and indicators are made consistent with the vision and goals of the project owner, compliant with Agenda 21, and tailored to local issues, priorities and stakeholder concerns. In other words, they are customized to actual project conditions and requirements while retaining their whole-society scope.



*Project Sustainability Management's three-stage procedure, upper figure, for establishing project goals and indicators for sustainable development that are customized to project conditions and requirements yet*

*rigorously referred back to whole-society objectives and, lower, how the 42 core project goals and indicators each range from achieving compliance to setting a new performance benchmark.*

FIDIC's PSM is based on a set of project sustainability indicators that are derived directly from the UNCSO list of sustainability themes which encompass all the main universal values and principles. By referring its projects to the FIDIC set, an organization ensures that it is addressing the fundamental sustainability issues. PSM provides for a situation and context specific addressing of sustainability issues on the basis of universal principles and values as articulated in UN and other conventions through the UNCSO indicator themes.

Priorities and objectives for projects are then set based on an organization's own policy and level of ambition, the views of its stakeholders and the applicable legal and other normative frameworks. Secondary principles such as the precautionary principle and the Global Compact anticorruption principles are then incorporated through processes such as the adjustment of performance objectives.

PSM also recognizes the distinction between types of performance objectives:

- ones that are universally applicable without adaptation (e.g., integrity of the human body),
- ones that need to be adapted to the specific situation (e.g., many environmental issues)
- Ones that are important for stakeholders in a specific situation but have little or no relationship with universal principles.

### **Certification and conformance**

The management system, process-based approach to PSM usually does not include performance requirements, other than compliance with applicable legislation and continuous improvement. The approach is therefore particularly useful in situations where:

- the applicable performance requirements are situation specific, as is clearly the case for infrastructure projects;
- Organizations need to demonstrate that they are capable of identifying and establishing the applicable requirements, and are able to comply with them.

Management system standards assist organizations in setting their own performance requirements (by identifying customer requirements and needs, legal requirements, environmental risk assessment, taken account of views of interested parties, etc.).

As discussed above, this does not mean that specific requirements come out of the blue. In the case of PSM, they are referred directly to the global goals for sustainable development to establish a clear link between the global principles and values of sustainability and organization-specific performance objectives.

In the case of stakeholder engagement, for example, how important is independent verification for these stakeholders in addition to activities involving their engagement? And what is more important: certification of the management system or verification of reported results?

In the absence of standardized sustainability management systems, let alone certification of such systems, there is a growing practice of independent verification of sustainability reporting.

One can argue that from quality management, via environmental management to managing project sustainability there is a shift in relevance of certification of the management system to verification of reports on results achieved.

In the case of quality management, it is important that an organization demonstrates its ability to deliver on an ongoing basis products and services that conform to stated requirements, especially those of the customer. This is an alternative to the former practice of inspection and approval of the individual final products or

outcomes. Certification of the quality management system is an important assurance for the customer and he or she will surely complain when the product or service nevertheless does not meet requirements or does not function well.

Similarly, in the case of project sustainability management, a well functioning, possibly certified, management system is important to assure adequate prevention of negative environmental, social and economic effects.

But there is more than simple prevention. The environment cannot speak for itself and society speaks with difficulty as one voice on social issues. When the environment or social issues are affected by an organization's activities, other parties acting for the environment's and society's behalf, such as governments, environmental NGO's and assurance companies, need reliable and sometimes verified information to assess the results of an organization's project sustainability management.

Project sustainability will therefore initially focus on:

- what are the relevant issues for stakeholders;
- what practices and performance are expected by the stakeholders;
- What are the actual achievements of an organization?

Transparency and accountability are the key elements of PSM, and any need for external verification at the early stages of implementation of PSM in an organization will tend to focus on these key issues, and less on the underlying management system.

The conclusion is that certifying processes that report outcomes is more important for organizations starting out on PSM. But as a PSM system matures within an organization, certifying conformance of the entire underlying management system with the PSM principles of innovation, education becomes equally important.

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26 July 2005; /pgb-filing/documents/psm