

GREEN BUILDING: BEST PRACTICES FOR ENVIRONMENTAL PROJECT TEAMS

ACTUAL CHALLENGES AND SOLUTIONS FOR PROJECT MANAGEMENT IN THE GREEN INDUSTRIAL CONSTRUCTION

V.S. Palagin

United Chemical Company, LLC
*Dinmukhamed Kunaev street, 8, block B, 34 floor,
Astana, Kazakhstan, 010000*

Process model of Project Management is inefficient without well tuned Quality Management System and developed competences of the project team. The development of Green Construction function should be done on the base of integration of methodologies under approach of Eurasian Project Management Standard in cooperation with others components of Corporate Project Management System.

Key words: Project Management, Green Construction, Eurasian Project Management Standard, Kazakhstan, Chemical Industry.

Realization of investment projects industry meets various challenges, such as instable world economy, complicated technologies, sophisticated value creating chains, controversial stakeholder's expectations, lack of competences in new borne project teams etc. Many of them have direct or collateral effects in the ecological risks. The challenges created by such risks require special carefulness in organization of PM and project team's development in the Green Construction paradigm.

The construction branch is traditionally marked by high Project Management culture, which was developed starting from practice since hundreds of years before appearance of modern approach to PM, starting from "best practice and methodology" and pretending to universal solution. Formal and content diversity of the two approaches produce a lot of collisions, including ones in ecology area.

The universal Project Management model [1; 2] doesn't speak at all about special issues of ecology and supposes that every project team will manage it independently with help of actual legislation. Obviously, the non-critical use of such approach doesn't lead to "Green Construction".

Understanding of the fact has brought to the life the special version of Project Management process model for Construction projects [3]. The model has, between others inclusions, special process "Management of Project Management Environment", which includes such components as Environment Protection Planning, Environment Protection Realization, Environment Control.

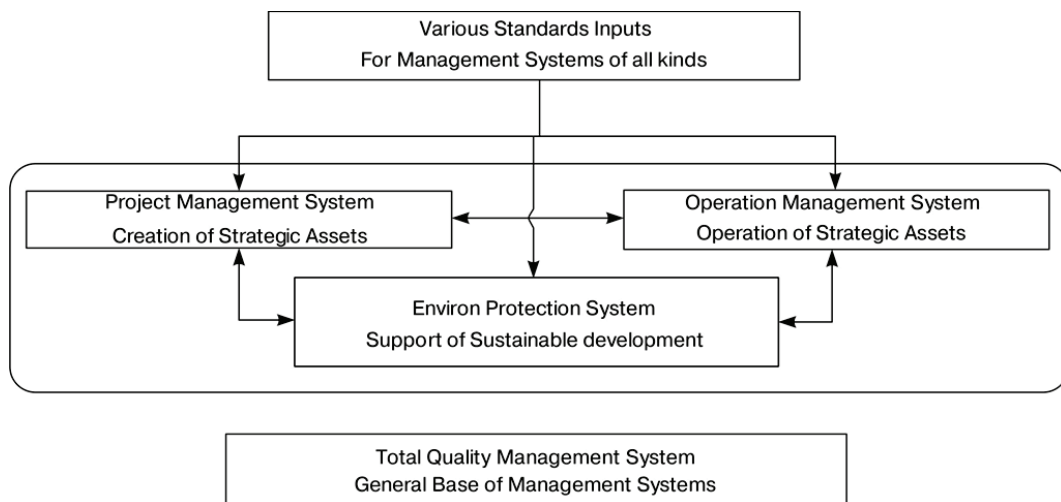


Fig. 1. Standards Inputs and Configuration of for Management Systems of Green Industrial Construction

Nevertheless, the detailed business process regulation itself doesn't guarantee the really efficient excellent realization if the project has no efficient Total Quality Management (TQM) system.

It's worth to mark that external environment of investment projects in Kazakhstan enjoys relatively high level of managers' development, legislative [4] and resource base. It enables the concentration on the internal components optimization, and first of all, on the organization assets.

The first step on that way can be regulation of business process, as well as development of IT support and corporative culture up to the level strong enough to deliver the real support to the efficient business process management, compatible to all relevant TQM requirements, especially permanent business process improvement.

The system approach in the issue can be efficiently implemented by the certification of the project management systems under the national standards development on the base of international standards ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007.

Under our approach, the TQM system and Environment Management System are developed in the same patterns, the supports each other and use common process and procedures.

The creating and support of solid process base is impossible without complex development of project team competences [5] that is why the next important step is development of competences of so called intellectual, self-developing organization [6].

Organizational assets of project have to include the efficient Knowledge Base with strong Green Constructions components, such as:

- Data Base of regulation;
- Data Base of Metrics;
- Files and Papers;
- Knowledge Base;
- Financial Data Base.

For development of intellectual organization, one has to use as well following additional tools, such as:

- Actualization of organization rules and ethic;
- Forum;
- Distant learning;
- Ideas management;
- The model of Specialist;
- Theory of Resolving of Inventor's Tasks.

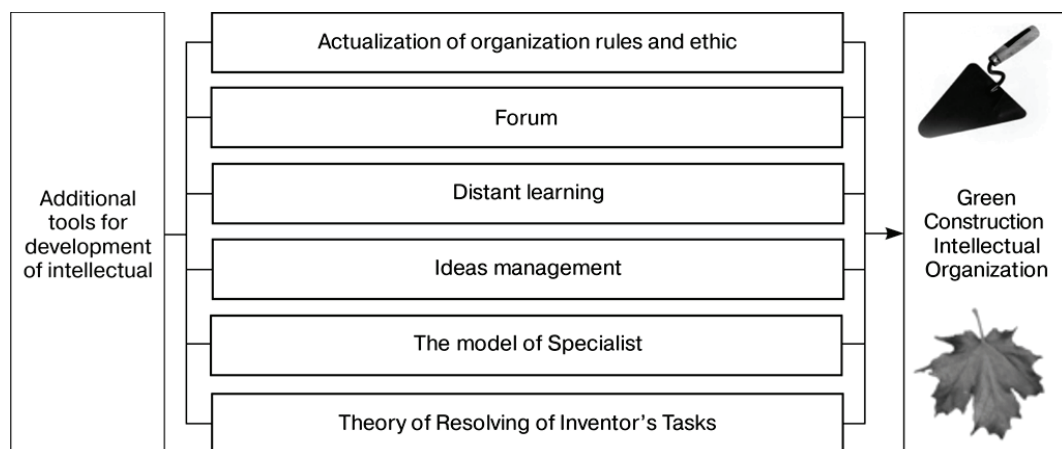


Fig. 2. Additional tools for development of intellectual organization

It's important to remember, that Green Construction has to optimize Project Management system by using ecological quality criterions and requires the realization of consequent system approach.

The diversity of challenges and solutions makes inefficient the use of fixed “ready for use” methodology and demands their integration and creative development depending on the Project specific character.

It's exactly the creative and integrative approach used in Eurasian Project Management Standard [7; 8].

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АКТУАЛЬНЫЕ ПРОБЛЕМЫ И РЕШЕНИЯ ДЛЯ УПРАВЛЕНИЯ ПРОЕКТАМИ В «ЗЕЛЕНОМ» ИНДУСТРИАЛЬНОМ СТРОИТЕЛЬСТВЕ

В.С. Палагин

ТОО «Объединенная химическая компания»
*ул. Динмухамеда Кунаева — 8, левый берег, блок Б, 34,
Астана, Казахстан, 010000*

Процессная модель управления проектами неэффективна без отлаженной СМК и развитых компетенций команды проекта. Развитие функции «зеленого» строительства должно осуществляться на основе интеграции методик по схеме Евразийского стандарта управления проектами в комплексе с другими компонентами корпоративной системы управления проектами.

Ключевые слова: управление проектами, зеленое строительство, Евразийский стандарт управления проектами, Казахстан, химическая отрасль.