



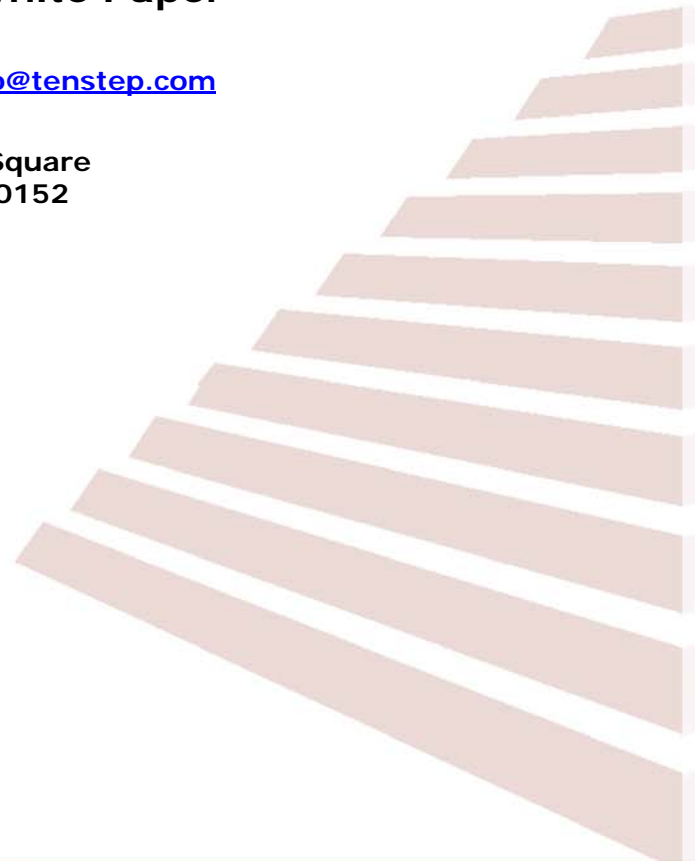
Green Project Management (GreenPM)

A TenStep White Paper

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Overview

The world is going green and it appears that the United States is starting to get the message as well. We are collectively realizing that we do not have an unlimited amount of air or water or space to continue to utilize resources as we have done in the past. The pending concern over global warming merely serves as the central rallying point for an environmentally friendly movement that has been underway since at least the 1970s.

Some ways that we demonstrate our support of the environment are through neighborhood recycling programs, the type of automobiles we purchase, or our attention to carpooling. However, our profession seems to be in its infancy in applying green standards.

At first glance, it appears that any project team could take steps to recycle and reduce the use of resources. This may include reducing the amount of documentation that is printed, and where companies have invested in enterprise project management systems, leveraging these systems and any workflow capabilities to receive approvals (eg, on Project Charters, scope change requests, etc). Project team members may be required to shut off computers and printers nightly if this reduces electrical use.

We believe that this is the beginning of getting project teams, sponsors, key stakeholders, and others to think green about each project. "GreenPM" (green project management), coined by Tom Mochal and Andrea Krasnoff, is a concept in its infancy with a goal of incorporating an organization's environmental aspects into project management processes. It is a model where we think green throughout our project and make decisions that take into account the impact on the

environment, if any. It is a way to ingrain "greenthink" into every project management process.

The point about green project management is not that we make every decision in favor of the one that is most environmentally friendly. The point is that we start to take the environment into account instead of ignoring it. You might make most decisions the same as you do today. But there might be some decisions you would make differently.

We organized this white paper to introduce the International Organization for Standardization's ISO 14000 family of standards. These were developed for organizations to operate in way that sustains the environment. We then investigate how "greenthink" can be applied to project management in support of aligning with these standards.

"GreenPM": Supporting ISO 14000 standards through project management processes

Since the 1990s we have seen an increasing focus on sustaining the environment. The International Organization for Standardization, www.iso.org, established ISO 14000 standards for the environmental field in 1996. Most recently revised in 2004, these standards are voluntary and global. There are an increasing number of companies becoming ISO14001 compliant. It is also common for these companies to request the same from their supply chain partners.

Like the more mature ISO 9000 standards for quality management, the environmental model follows a continuous improvement process. Both follow Deming's Plan-Do-Check-Act (PDCA) model. As opposed to a defined environmental performance level, the ISO 14001:2004

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environmental standard provides a framework for organizations to act in a manner that enables each to comply with its environmentally defined standards. ISO14001:2004 defines a set of elements that comprise an Environmental Management System (EMS), to help an organization improve its overall environmental performance. The EMS describes an approach for how a company will conduct itself in an environmentally friendly and sustainable manner.

People in our profession can learn from their company's approach to environmental awareness and consider how environmental management applies to project management. It is possible that new questions could be asked or new decisions could be made if everyone involved in a project (project manager, sponsor, team members, key stakeholders, etc) participated in "greenthink". Environmentally friendly and sustainable thinking can be applied to all projects, although we cannot expect all projects' outcomes to have the same level of environmental performance or gain.

A Closer Look: Applying "Greenthink" to Project Management Processes

"A Guide to the Project Management Body of Knowledge Third Edition" from the Project Management Institute (PMI)", commonly referred to as the PMBOK®, identifies nine areas of project management which are commonly covered in a project management methodology. Here we provide examples of how "greenthink" is applicable to each of these areas.

Integration Management. The most likely part of Integration Management that can incorporate "greenthink" is Integrated Change Control. This is the process where all changes are evaluated and their affects on other

project management processes are considered. The environment should be an aspect that is evaluated with each change and factored into each decision making process.

Project Charters infrequently (or never) contain a section on environmental concerns. Therefore, most project managers never give it a thought as they are defining the project. It is likely that few project sponsors give it a thought either. But perhaps there are ways that your project can be greener if you would only think about it. For instance, if you are upgrading your network infrastructure, it is likely that some of your equipment will be obsolete. Ten years ago, you might take the old equipment and bury it in the middle of a big dumpster. However, maybe the better choice is to seek out a recycling company. You know what – it might even cost you a few bucks. However, if you identify the recycling need upfront you can build the cost into your estimate.

Scope Management. Today your scope change process takes into account the business value of the change and the impact to the project. Let's now add a third factor – impact on the environment. All we are proposing is that the impact to the environment be considered along with value and project impact.

There are a couple of possible outcomes.

- There are no real environmental impacts. In this case, the process is the same as today. This will be the outcome of the vast majority of instances.
- There is an impact on the environment, but the scope change is approved as is because of the business value. Again same process as today, but the environment was considered.

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- There is an impact on the environment, and the sponsor makes a different decision because of it. Perhaps the scope change request is modified to lessen the environmental impact. Perhaps the scope change request is not approved.

You see that in some percentage of cases, the sponsor might make different decisions on scope change requests if they only knew the impact of the change on the environment. Therefore, let's bring this information to the people who need to make project decisions, so they can at least consider environmental impact when they are making decisions.

You may also add new work packages to your WBS for demonstrating performance-related gains that align with your company's environmental policy. For example, if you are manufacturing a new widget, you may want to demonstrate that you are decreasing the amount of scrap that has been historically measured in the manufacturing plant.

Time Management. Time management describes the processes related to the project schedule, from definition to creation to change control. Adopting a green project management methodology may now include activities in support of your company's environmental policy or EMS. Plan the time for these activities into your project schedule.

Cost Management. Your projects can include costs for environment-related processes or activities on the project.

Quality Management. There are two levels of quality management programs – each of which can accommodate GreenPM concepts. One is focused at an organization level and one is focused on a project level. Quality initiatives at an organizational level include Six Sigma or the

Capability Maturity Model Integrated (CMMI). Individual project teams don't implement large scale quality programs such as Six Sigma on their own. This is normally done at an organization level.

It makes sense that if you have a Six Sigma initiative in your organization; you are going to need to adopt Six Sigma principles on our project. Similarly, if you are practicing GreenPM you should first look to see if your organization has an Environmental Management Policy (or something similar). If so, then you should make sure that your project aligns to these environmental policies and standards as well.

The second aspect of quality is the specific quality criteria that make sense for your specific project. The project Quality Management Plan focuses on the stakeholders' expectations (requirements) of quality and the resulting activities needed to meet these expectations. If you are practicing GreenPM, you should seek to expand this discussion of quality to discuss the environmental considerations of the project. This does not mean that every project will have environmental considerations. However, if you start to ask the questions and start to raise awareness, you might be surprised to learn that there may be green areas of interest to your stakeholders.

When you understand the environmental expectations of your customer, you can take these into account as project quality requirements. These can be addressed through your project as you address all other requirements that you have gathered.

Project quality assurance and project quality control may also include activities in support of the environment. For example, a project

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quality audit may confirm that the processes performed are in support of the company's environmental policy.

You may incorporate a quality control checklist to validate deliverable quality. Perhaps it makes sense for your checklist to include questions that tie in environmental aspects to the deliverable you are building. One idea could be to ensure that you use recycled paper to create your project paper-based deliverables. This is a small thing but could have a large impact when multiplied over hundreds or thousands of projects.

Human Resource Management. If practicing GreenPM, educate project team members on the processes that consider the environment. It is also an opportunity to educate them on your company's EMS. Since project team members are often involved in analyzing situations and alternatives and providing recommendations, their introduction to "greenthink" could help them recognize environmental impacts in their work.

Communications Management. When planning project communications, you look at the stakeholders involved in your project and determine the type and frequency of communications needed for the various stakeholder groups. How often do organizations currently identify any environment-related stakeholder groups (internal or external) as a part of a communication plan? Many organizations now compliant with the ISO 14000 family of standards may have individuals responsible for and/or participating in their Environmental Management System processes. These individuals may represent a new stakeholder group who would be interested in your project's alignment with the environmental policy. Your communication plan should include activities to increase these

stakeholders' awareness of your project.

You should include project-related environmental actions in status reports.

Risk Management. Risk Management includes identifying risks and determining their probability and impact on a project. When applying "greenthink", your project team may now analyze each risk's impact on the environment, and how it relates to their organization's environmental policy. With GreenPM, you may identify some risks that are defined with a different impact level and therefore a different risk rating and risk response strategy that may not have been considered previously.

For example, your project may be prototyping a new technology. If the new technology does not prove to be a solution, you may then resort to an existing technology. Prior to GreenPM, you may have considered the risk to be associated with a schedule and/or budget impact. By considering the environment, you may recognize that additional resources (electrical power) were used for you prototype that otherwise would have been avoided. If your company's environmental policy is looking to reduce its use of such a resource, then the prototype results may now include an environmental impact in addition to a schedule and/or budget impact.

Another example may be a schedule risk if you cannot rely on overtime as an alternative for getting a project back on schedule. While this has never been a recommended best practice in project management, overtime is often a reality based on project constraints (eg, schedule, scope, and budget). If your company's environmental policy includes an objective to maintain or reduce its use of natural resources, then overtime could impact this

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objective by requiring additional electrical power and water usage. Now, your Sponsor may determine that the project team should not work overtime.

Procurement Management. Educate vendors on your company's EMS and use of GreenPM. Vendors should follow your GreenPM methodology and focus on the environment in their work for your projects.

Summary

Applying GreenPM enables everyone to be more cognizant and better stewards of potential environmental impacts in their decision making processes. It does not mean that all resulting project decisions will change from what may have been prior to incorporating "greenthink". Ultimately it is up to the sponsor and client organization to make the final decisions. Over time, we may begin to understand how many decisions might be made differently if the environmental impact (if any) is taken into account. These different decisions, multiplied by tens of thousands each day across the world, can make a difference.

We are barely scratching the surface on GreenPM techniques and processes. The point is not to invent (many) new project management processes. The point is to adopt GreenPM into our existing project management methodologies. Green thinking is part of the ISO 14000 standard. Since companies are now applying this thinking through their environmental policies and EMS, the question is how best to apply it on your projects in support of your company's environmental direction.

As green becomes more routine within the world of project management, we will further understand how to best apply and adapt current project management processes into a

structured, proactive approach for managing environment-related aspects to our projects, and contribute to our organization's environment policies and goals.

Project management does not have to be a daunting task.

We have done it before.

Contact us for more information.

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About TenStep

TenStep, Inc. (www.TenStep.com) is headquartered in Atlanta, Georgia (USA), and specializes in developing, consulting and training in business methodologies. The company's flagship product is the TenStep Project Management Process®, which has been licensed to thousands of companies and individuals around the world. In addition, TenStep has training, consulting and business methodology products covering Project Management Offices, portfolio management, software development and application support.

The TenStep process is translated into 14 languages, allowing it to be utilized by organizations in most parts of the world.

TenStep meets the needs of local businesses with a network of offices in the USA and around the world.

Our training classes include:

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- **Project Management (advanced and basic)**
- Preparing for the PMP Exam
- Earned Value Management
- Setting up and Running Project Management Offices
- Setting up and Running Portfolios
- Gathering Business Requirements
- Many, many more

Our consulting services include:

- Project management deployment and customization
- Project Quickstarts
- Setting up PMOs
- Project management coaching, auditing documentation review
- Managing your projects
- Many more

About the Authors:

Tom Mochal, PMP is the president of TenStep, Inc. (www.TenStep.com), a methodology development, consulting and training company. He is also the head of The TenStep Group, a network of TenStep offices supporting the TenStep process in numerous languages and countries around the world.

Mochal is author of a book on managing people called "Lessons in People Management" and a companion book on project management called "Lesson in Project Management".

Mochal also authored all of the TenStep methodology products.

Mochal recently won the **Distinguished Contribution Award** from the Project Management Institute for his work spreading knowledge of project management around the world.

Mochal is a speaker, lecturer, instructor and consultant to companies and organizations around the world. He is a member of the Atlanta, Georgia (USA) chapter of the Project Management Institute (PMI), the American Management Association (AMA), the American Society for the Advancement of Project Management (asapm®), and is a partner in The Management Mentors, a group dedicated to building knowledge in project management, IT management and leadership/personal development.

Andrea Krasnoff, PMP, is Director of Consulting Services of TenStep, Inc. She is a member of the Atlanta, Georgia (USA) chapter of the Project Management Institute (PMI).

Krasnoff has more than 17 years in project management, program management, and PMOs. She has managed and delivered projects of various sizes, including rescuing and successfully delivering troubled projects for several clients. Andrea has been responsible for development groups and consistently delivered business-related systems to meet strategic business needs.

In addition to the GreenPM TenStep white papers, Mochal and Krasnoff have co-authored columns on the subject of Green Project Management (GreenPM) for Tech Republic, www.techrepublic.com, The International Community for Project Managers, www.theicpm.com, and allIPM.com.

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