



PLANNING A SUSTAINABILITY MANAGEMENT SYSTEM PROGRAM

Introduction

Once the organization is clear what it means when it uses the term, sustainability, it is time to operationalize the sustainability. This means to make it a part of the way the organization is operated day-in and day-out. Sustainability is not nearly as effective or sustainable if it is operated as a separate program or silo. Unfortunately, many organizations operate in that way because they do not see how to create a management system that works in this way.

Many organizations use management system standards only because they are required by a customer to do so. To them, getting a management system means putting a “certificate” (obtained by a third party certification process) on the wall. As long as there is a certificate, they can do business with the customer. It is a shame that they never realize that they could use the management system to operate the business and that their business would improve. The management system was designed for this purpose. Instead of being a cost center to maintain certification, it can help the organization operate much more efficiently thus adding to its bottom line (profits) and its top line (brand recognition).

A sustainability management system (SMS) provides a systematic way to review and improve operations for better environmental, social and economic performance. The SMS can help an organization better meet its various compliance requirements. It can also help an organization make sustainability part of what every employee does every day and part of every management decision. We will begin to look at using a management system as a technical means of integrating environmental, social and economic concerns into organizational management so that it can become more effective in addressing its positive vision of a sustainable future and its three responsibilities.

The basic steps of a sustainability management system roadmap are as follows:

1. Articulate the vision or policy
2. Identify and gather information on how the organization affects the environment, the economy of the local community, and the people in the community and prepare the footprint
3. Understand what legal and other requirements apply
4. Determine what is “important” to work on

5. Establish a program to meet program goals
6. Implement the sustainability management system
7. Determine the leading indicators to drive the performance of the program
8. Determine the lagging indicators or results of the program that must be monitored and measured
9. Document what is being accomplished
10. Track the progress
11. Check to see if the sustainability management system is working to plan
12. Learn from the efforts
13. Continuously improve

Preparing a sustainability management system might sound like an overwhelming task, but it need not be. It is important to find others that have begun the process. If possible, never go on the sustainability journey alone. Look on the Internet for examples. Talk to trade and professional associations for information. There is so much that is available these days. This course will provide some general guidance on how to use this material and organize it to help create a sustainability management system that is truly part of the organization's operations. Taking the time to figure out what you need to do, how you will do it and who must be involved will pay big dividends as you work on the planning and implementation of the management system. Some good references for an environmental management system are as follows:

http://www.michigan.gov/deq/0,1607,7-135-3307_3666_4149-102117--,00.html
http://www.epa.gov/dfe/pubs/iems/iems_guide/
[http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/pro_EMS/\\$FILE/EMS.pdf](http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/pro_EMS/$FILE/EMS.pdf)

You can get some good information on the social responsibility management system at:

http://isotc.iso.org/livelink/livelink/fetch/2000/2122/830949/3934883/3935837/ISO_CD_26000_Guidance_on_Social_Responsibility.pdf?nodeid=7795973&vernum=0

You can find information on economic responsibility management systems by searching for information on the Sarbane-Oxley Section 404 management system and the following:

http://www.sox-online.com/coso_cobit_coso_framework.html
<http://www.coso.org/resources.htm>

This narrative and the ones that follow will provide additional guidance to preparing a sustainability management system.

Another hint is to pace the effort. Many organizations take at least 18 months to complete the process. You should move quickly enough that employees stay interested and engaged, but not so fast that those involved are overloaded or that the effort becomes superficial. A number of how-to guides contain highly prescriptive paths. You should

try to avoid these cookie cutter type approaches. It is best to create a sustainability management system that works at the facility with all the requisite flexibility that is needed for this to happen. If you are part of a larger organization, it is very important that your sustainability management system be carefully aligned with the corporate program. It is best to talk to the corporate representatives about your unique “license to operate” conditions and the stakeholders that you have engaged in your process. Usually the local sustainability programs provide valuable “bottom up” information for the corporate program while the corporate program provides sufficient “top down” information to help the management system be consistent to the extent possible within the company.

Plan, Do, Check, Act (PDCA Cycle)

The PDCA cycle links a repeating series of activities that an organization undertakes to result in continual improvement. During the planning stage, the organization identifies the starting point relative to key sustainability interests, identifies responsibilities for those interests, and defines sustainability goals with positive view of a sustainable future. This planning is conducted with a stakeholder engagement program. During the doing (implementation) stage, the organization translates its sustainability goals into programs and actions. Checking involves collecting information about the actions taken. Finally, this information is reviewed to determine if the goals were achieved, and if not, what adjustments are necessary. The cycle begins again with a new set of sustainability goals for the organization.

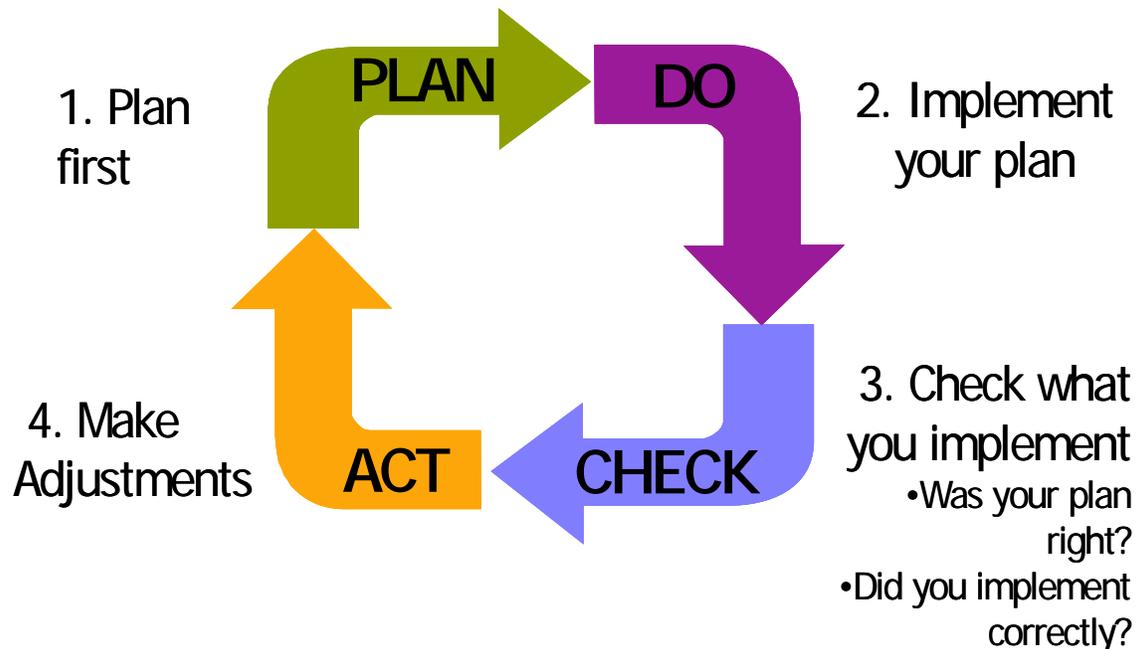


Figure 1 Plan, Do, Check Act (PDCA) Cycle

Explained in other terms, the PDCA cycle is as follows:

- **Plan** – Establish the objectives and processes necessary to deliver results in accordance with the organization’s sustainability policy
- **Do** – Implement the processes
- **Check** – Monitor and measure processes against the sustainability policy, objectives, targets, legal and other requirements, and report the results
- **Act** – Take actions to continually improve performance of the sustainability management system.

There is quite a bit of information on the PDCA Cycle in the literature. Many of the available management systems use this cycle.

Scope of the Sustainability Management System

The focus of this course is at the local level. Therefore the scope of the sustainability management system will be the address of the facility and all of the activities, products and services that it maintains at the facility. If entire buildings are controlled by the organization, the buildings will be included in the scope. If the grounds are controlled by the organization, they will be included in the scope. For an organization that owns and controls the facility and the grounds, everything that happens within the “fence line” will be considered to be within the scope of the sustainability management system.

Some organizations conduct life cycle evaluations on their products and services. As such, they seek to include portions of the supply chain in their sustainability management system. This may include the transportation and other logistical activities involved on both the supply end and also with the delivery of products and services to the customers. Additional stakeholders need to be identified and engaged to deal with these expansions of the scope of the sustainability management system.

The scope is often the place where an organization makes an inventory of its stakeholders. Remember that stakeholders are those organizations and individuals with an interest in the sustainability footprint of your activities, products and services as they occur within the scope of your sustainability management system.

Sustainability Vision or Policy

The organization should define and commit to a sustainability policy that is appropriate to the nature, scale and sustainability interests of the stakeholders for the activities, products and services associated with its sustainability footprint. The sustainability policy will establish an overall sense of direction and the framework for the remaining elements of the sustainability management system. This policy will also establish the criteria against which all subsequent sustainability actions are judged. Along with the sustainability footprint, the sustainability policy will be the foundation upon which the sustainability management system is to be built. It will need to be available and subject

to review by the stakeholders. For these reasons, the statements made in the policy must be carefully formulated to ensure that the commitments are not overreaching.

While management systems specify a policy, it is important that the organization consider changing its vision to reflect the nature of its commitment to sustainability. If this cannot be accomplished, then the sustainability policy must be carefully aligned with the vision, mission and core values of the organization as covered in an earlier narrative.

The sustainability policy should address each of the following elements:

1. It is appropriate to the operations and its potential interests to the stakeholders
2. Includes a commitment to comply with all relevant environmental, health & safety, social, financial legal requirements, customer and product requirements, industry guidelines, and any other commitments made by the organizations management
3. Include a commitment to continually improve
4. Include a commitment to the prevention of workplace injuries and illnesses
5. Provide a framework for establishing sustainability goals
6. Demonstrate senior management commitment to two-way stakeholder engagement
7. Include a commitment to a prevention based approach rather than a reactive approach to stakeholder interests
8. Is documented and implemented
9. Is communicated and understood by employees
10. Is made available to and discussed with all the identified stakeholders
11. Is reviewed and amended, as necessary and appropriate.

The sustainability policy is a formal document that states the organization's intentions regarding its overall sustainability performance. The policy is periodically reviewed and kept up to date. Its purpose is to let people know what's important to the organization's management. Policies are generally not too specific or lengthy. It should be written so that it is meaningful to all of the stakeholders inside and outside of the organization.

There is no prescribed way to write a sustainability policy. It is totally up to the organization. However, it should address all of the elements described above and be supportive to and consistent with the organizations vision, mission and core values. It is the responsibility of senior management to ensure that the policy is implemented and understood by all stakeholders as a part of the stakeholder engagement process. This sustainability must be communicated to and understood by all employees since it will become a part of how they perform their prescribed activities each and every day.

Before creating a sustainability policy, it is advisable to check to see if the organization has any existing policies or vision or mission statements. It is possible that these existing policies are only known throughout the organization based on word of mouth (i.e., not in writing). Use these as a starting point for the sustainability policy development. If not

policies exist within the organization, it might be useful to conduct a vision development process.

It is wise to have a number of people involved in drafting the sustainability policy. By involving many people the organization can develop a sense of ownership in this important document. The policy must then be checked against the items mentioned above. If any are missing, revise the policy to address them.

If an organization is drafting a sustainability policy from scratch, it can refer to numerous examples that can be found on the Internet as a starting point. However, the drafters must make sure that the statements make sense to the organization.

Next the draft sustainability policy must be discussed using stakeholder engagement. It needs to address the key interests that the many varied stakeholders have in the organization.

Once the sustainability policy is ready, the organization may consider conducting employee training sessions (the management must also be trained). The policy can be one topic in an already scheduled training session, or it can be discussed in departmental or start-of-shift meetings. Actual training sessions show that the organization is committed to the sustainability policy and allows a forum for discussing how the policy relates to the specific work of all employees. Copies of the policy can be posted throughout the facility and placed in newsletters and in other communication media. The organization must find a suitable means to make the sustainability policy available to all stakeholders. Many organizations post the policy on their website in addition to making it part of all contracts and other transactional paperwork.

Once written and implemented, the sustainability policy should not be forgotten or ignored. The organization must consider the commitments in the policy when setting goals. The organization needs to have a way to determine how well the policy is working for the organization. Commitments have been made in the policy – is the organization making progress towards meeting them? Are the commitments in the sustainability policy still appropriate or have operations or locations of facilities or activities been changed, warranting revisions to the policy? At a minimum, the sustainability policy should be reviewed as part of the management review process to determine whether the sustainability management system is performing consistent with the policy commitments. If the organization is addressing goals and embarking on programs that are not at all linked to commitments in the sustainability policy, it may be time to revise the policy for suitability to the organization's activities and stakeholder interests. Management review will be discussed in further detail in a later narrative.

Sustainability Management System Planning Elements

Planning elements are necessary within a sustainability management system to ensure that the system facilitates continual improvement and keeping the organization moving down the path to sustainability. There is an old adage, "Failing to plan means planning to

fail!” While this appears to be universally true, it is especially poignant in the world of sustainability program development. Once the decision is made to become sustainable or socially responsible, managers look for the quick fix. There is no time for a journey! “The stakeholders are demanding this and we have to get there – NOW!” Unfortunately, it doesn’t happen this way and one could even say that such a quick start program cannot really be sustainable. The planning components fit into two categories: those that contribute to defining the sustainability footprint of an organization and those that center on the achievement of goals to actually improve performance once the footprint (or profile) is understood.



Figure 2 Sustainability Management System Footprint

Identifying the Sustainability Footprint

It is important to identify and document the sustainability footprint so that the organization will be able to set goals and implement appropriate controls and monitoring consistent with the sustainability policy. This footprint must be kept up to date and include the following:

- Environmental protection, resource conservation and health & safety hazards/risks
- Operational risks associated with social practices both at the facility and within the community
- Operational risks associated with the general level of prosperity in the community and the financial well being of the organization
- Legal, product and other relevant requirements involving environmental, health & safety, social consciousness and economic prosperity & continuity.

Before the organization can effectively manage the sustainability interests of the stakeholders, it needs to identify them. To identify the sustainability footprint, the organization will need to look at the activities the organization conducts, the products that the organization creates, the services that it provides and those activities, products and

services provided to the organization by contractors and/or suppliers, all in terms of their potential operational, regulatory and reputational risks. You will look at each activity and identify those elements of the activity that have potential and actual operational risks for the process that produces the product or service. You will need to determine which of these operational risks are most important for the organization to control. Legal requirements, product and customer requirements and other sustainability requirements will also need to be identified as part of the process. This includes the interests from the stakeholder engagement process. All of this information should be assigned to the activities associated with each product and service.

The sustainability footprint identification process will need to be consistent with the scoping decisions discussed above. The footprint will be used for goal setting, training, communication, implementation of operational controls and monitoring and measurement. It is a critical component of the foundation for the sustainability program. It should not be created solely using a brainstorming session or by interviewing key supervisors and managers. Cutting corners here will jeopardize the effective use of the information during the operation and checking of the sustainability management system.

Organizations typically begin by listing all of the products and services that occur within the scope of the sustainability management system. The core process is identified for each product and service and a hierarchical process map is prepared. These maps identify the “activities” associated with each core process. Activities must cover all the elements of the work instructions and standard operation procedures that may be in use at the facility. Each of the core processes are supported by a number of supporting processes that need to be identified (e.g., compressed air system, electrical system, process water system, pollution control, logistics, etc.). There will also be activities associated with the management of the facility and the grounds (e.g., janitorial service, lighting, HVAC, forklift maintenance, cafeteria, parking lot cleaning, stormwater handling, etc.).

The core processes and supporting processes are examined under normal conditions. They must also be viewed under “abnormal” operating conditions including: start-up, shutdown, emergency shutdown, reasonably foreseeable emergency conditions and maintenance. The footprint must also consider planned or new developments or new or modified activities.

Hierarchical process maps can be supplemented with resource accounting sheets or spreadsheets to show all the resources used and lost at each of the activities. It is important to keep a glossary of terms used to describe activities and resource uses and losses. There needs to be consistency in nomenclature throughout the organization to support the leveraging of lessons learned when this information is used to support the sustainability management system program.

In addition to the processes involved in producing products and services, there are a variety of administrative and management processes – often referred to as business

practices. This category would include all people activities that do not consume the resources that are used in the product and service categories:

- Product Design
- Quality
- Human Resources
- Environmental Health and Safety
- Purchasing
- Sales/Marketing
- Public Relations/Communications
- Accounting/Finance
- Logistics
- Supply Chain Management
- General Management
- Governance

Some of these functions are included in the quality management system (ISO 9001:2000) and some of them are covered in the business excellence framework and ISO 26000. We will also see these functions when we discuss controls placed on the activities.

There are a number of terms used by existing environmental (ISO 14001 and health & safety (OHSAS 18001) management systems that should be understood to avoid confusion with the work that will be conducted in the sustainability management system.

- **Environmental Aspect** – an element of an organization’s activities or products or services that can interact with the environment (ISO 14001: 2004)
- **Hazard** – source, situation, or act with a potential for harm in terms of human injury or ill health, or a combination of these (OHSAS 18001: 2008)
- **Core Subjects** – specific issues/interests (human rights, labor practices, fair operating practice, consumer issues and community involvement and development) that an organization should take into account when identifying its social responsibility (ISO 26000: CD2008)

All of these terms are covered as resources used and lost and “interests” for each of the activities described in the sustainability footprint (see Figure 2). The various core subjects will be described in more detail under operational controls.

The footprint will take a while to prepare. This effort will help you understand the organization at the activity level. If the employees are to become the stewards of sustainability in an organization, they must understand how their use and loss of resources and the other social and economic interests are influenced by how they do their work. It is very important that the focus of any sustainability effort be placed at the employee performing the activities defined by their position description and that they be properly trained to perform this work in a sustainable manner.

Many organizations prepare a footprint only at a very high level. It is not detailed enough to understand the actual work performed by the employees or machines. This is a critical flaw in most local sustainability programs because it does not allow one to leverage the “lessons learned” from successful sustainability projects to other parts of the organization. Also if the employees are not completely engaged in sustainability in their work, it takes a number of auditors to go around and police the activities to make sure that sustainability is taking place. This is not an effective way to run a program.

Operational Risk and Importance

Instead of focusing on “impacts” (e.g., environmental impacts, health & safety risks, customer/stakeholder complaints and social and economic impacts), many organizations determine the risk to their operations should such an impact occur. The risks are to the social “license to operate” and may be operational, regulatory, financial or reputational. There are risk management standards that are used by organizations to determine the risk at the activity level in an organization. An article, “Risk 101,” has been posted to the class web site to explain the general concept of what we will refer to as operational risk.

Risk is defined as the chance of something happening that will have an impact on the ability of the organization to achieve:

- A more confident and rigorous basis for decision-making and planning
- Better identification of opportunities and threats
- Being proactive rather than reactive
- More effective allocation and use of resources
- Improved incident management and reduction in loss and the cost of operational risk, including commercial insurance premiums
- Improved stakeholder confidence and trust
- Improved compliance with relevant legislation, and
- Better organizational governance.

A risk is often specified in terms of an event or a combination of the consequences of an event and their likelihood. Risk may have a positive or negative impact on the organization.

Some of the activities in the sustainability footprint may cause the following operational risks:

Environmental Risks

Consumption of Energy

Consumption of Water

Consumption of Materials

Consumption of Packing Materials

Handling of TSCA Regulated Materials

Handling of a Radioactive Source

Generation of Packaging Waste
Generation of Defective Product
Generation of Air Emissions
Generation of Greenhouse Gas Emissions
Generation of Dust
Generation of Noise
Generation of Vibrations
Potential Spill or Release
Potential Fire/Explosion
Generation of Solid Waste
Generation of Hazardous Waste
Generation of Universal Waste
Generation of Used Oil
Generation of Wastewater
Generation of Stormwater Runoff
Generation of Infectious Waste
Generation of Recyclables
Material Reuse OnSite
Handling of Returned Goods
Protection of the Natural Environment

Health & Safety Risks

High Temperature and Flame
Fumes
Ladders
Noise
Moving Machinery/Hydraulic Parts
Falling Material
Confined Space
Particulates/Dust
Electric Shock
Workplace Violence
Chemical Exposure
Producing Metal
Radioactive Materials
Conveyors
Hazardous Energy
Exposure to Elements
Ergonomics
Fire
High Velocity Flying Materials
Compressed Gases
Pinch Points
Sharp Objects/Edges
Slippery Surfaces

Explosion
Moving Equipment
Truck Unloading
Working Near Water
Bloodborne Pathogens
Material Handling
Welding Burn

Human Rights Risks

Due Diligence with Suppliers
Avoidance of Complicity
Resolve Grievances
Discrimination of Vulnerable Groups
Civil and Political Rights
Economic, Social and Cultural Rights
Fundamental Rights at Work

Labor Practice Risks

Employment and Employment Relationships
Conditions of Work and Social Protection
Social Dialogue
Health and Safety at Work
Human Development and Training in the Workplace

Fair Operating Practice Risks

Anti-Corruption
Responsible Political Involvement
Fair Competition
Promoting Social Responsibility in the Sphere of Influence

Consumer Issue Risks

Fair Marketing, Information and Contractual Practices
Protecting Consumers' Health and Safety
Sustainable Consumption
Consumer Service, Support and Dispute Resolution
Consumer Data Protection and Privacy
Access to Essential Services
Education and Awareness

Community Involvement and Development Risks

Community Involvement

Education and Culture
Employment Creation and Skills Development
Technology Development
Wealth and Income Creation
Health
Social Investment

Financial Risks

Financial Audit
Sarbanes-Oxley Section 404 Audit
Income Taxes
Bribery
Market Conditions

It is important that risks be related not just to the facility, but also to the activities that might cause the risk. This will help generate awareness of the risk and lead to the prevention of risk.

Risks are scored to determine the *importance* to the organization. ISO 14001 calls scoring – the determination of significance. (See Appendix 1) Either way, the operational risks are prioritized in this way. The sustainability footprint can indicate where these operational risks originate within the organization.

Some organizations approach sustainability with initiatives that are selected often to illicit the quick wins. This helps the program move forward. What has been discussed here is fundamentally different. ALL of the operational risks are identified and the important risks are singled out for attention in the next section of the planning program.

Legal and Other Requirements

It is very important that you can create a complete listing of all your legal requirements. These requirements should be linked to the activities in the footprint as mentioned above. Environmental, health and safety compliance specialists are required to take a good look at the regulatory requirements for the activities, products and services. It really helps if there has been a regulatory compliance audit conducted on the facility. The US Environmental Protection Agency and the US Occupational Health and Safety Administration post information on the regulations on their web sites and have further information on compliance assurance. You need to establish, implement and maintain a procedure to keep the regulatory requirements up to date. You can subscribe to a service to provide you with information so you can regularly review it. In some cases, trade associations provide this kind of information to its members.

It is important to identify any product or customer requirements. These may be documented in contracts and agreements with customers. They could be verbal or internal quality requirements that apply to all customers all the time or to some customers

some of the time. You will need to establish a process for how you will identify and have access to these requirements. Through implementation of the sustainability management system, you will need to determine how you are going to ensure that this requirement is met. You should consider documenting these requirements in a “customer, product and other requirement worksheet.”

There are many other legal requirements for social and economic responsibilities. Just as in the case for environment, health and safety, these regulatory requirements must be documented for applicability to the site and the specific activities in the sustainability footprint. These requirements must be covered by the same procedure as discussed above.

The “other” requirements include any other commitments the organization makes. Examples of other requirements are as follows:

- agreements with public authorities,
- agreements with customers,
- non-regulatory guidelines,
- voluntary principles or codes of practice,
- voluntary environmental labeling or product stewardship commitments,
- requirements of trade associations,
- agreements with community groups or non-governmental organizations,
- public commitments of the organization or its parent organization,
- corporate/company requirements.

Commitments, especially those involving the three responsibilities, must be treated in the same manner as the legal obligations within the sustainability management system.

Building the Sustainability Program Around the Footprint

The sustainability footprint is the key element in the foundation for much of what you will do in your sustainability management system. In the sections below and in the next narrative, we will be looking at elements used to “improve” and “control” the sustainability footprint and lower the overall operational risks (Figure 3). As you progress in the development of the sustainability management system, you will constantly refer back to the footprint. It will be the guide for knowing what areas of your operation you must focus the sustainability efforts for continual improvement.

Every *important* operational risk from the footprint must be addressed in the sustainability improvement program. You need to ensure that the operational risk is controlled. You may have something already in place for dealing with the risk. If it is working, there is no need to develop something new. Once the operational risk is addressed, you should document the results and note the improvement.

You should communicate the footprint within the organization to ensure that everyone understands the operational risks in their work. I like to state the *consequences* of not

following the work instructions and make these consequences available to the employees during their training and sustainability sessions held like safety sessions used to be held (now safety is a part of sustainability). I have called this consequence thinking. It follows many of the patterns of behavior-based safety programs and is real important for reinforcing sustainability practices as part of everyone's job. On-going communication can be reinforced with a display such as a bulletin board, a Five-S board, a sign or photograph, an interactive screen display or a newsletter or other written document.

The footprint must be kept up to date. Operations, equipment and regulations are all subject to change as is your customer base. In addition, new acquisitions, injuries, non-conformances or accidents might warrant a review of the footprint and/or the criteria used to prioritize the operational risks. The footprint needs to be updated accordingly. Many organizations use something called a "*management of change*" program to make certain that the changes are identified by the management team and that there is a signoff process to make sure that all of the changes are made.

Because the footprint drives so many parts of the sustainability management system, a change in the footprint may also trigger a change in training requirements, monitoring and measurement requirements, operational controls, regulatory requirements, and emergency preparedness and response. Remember that everything is linked to everything else as part of the systems approach to management that is part of the "eight quality management principles."

Improving the Organization's Sustainability Footprint

Once the sustainability footprint has been completed, it will be time to determine how to improve. Sustainability is all about making a commitment to continually improve!

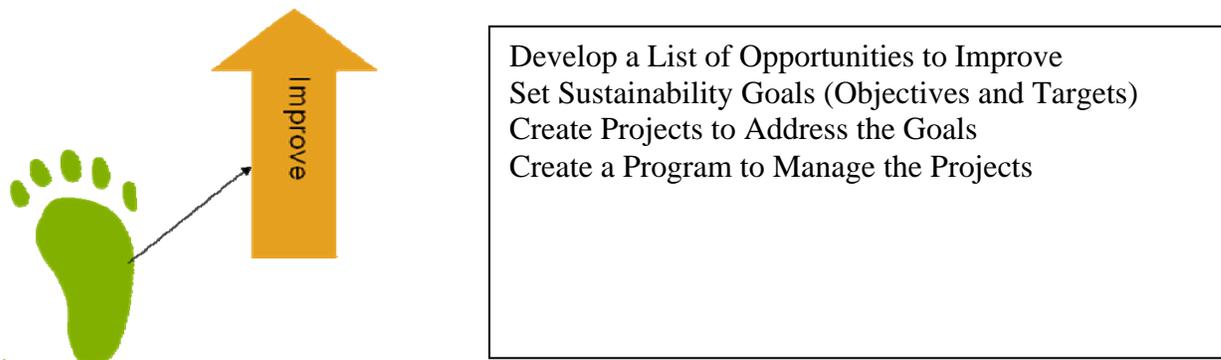


Figure 3 Improving the Sustainability Footprint

Improvement starts by setting sustainability goals. The goals may apply to the entire operation (see scope) or may be specific to one area (department) or activity. Many organizations start the program by having one goal for environmental performance and one for health & safety. They also set quality, social and financial goals. Other

organizations set integrated goals that encompass the three responsibilities. In setting goals, it is important not to overreach. Decide what the organization can achieve with its available resources.

The goals must be documented and must have designated responsibilities and timeframes for achievement (part of the action planning). This means that once a goal is set, the individual(s) responsible for leading the project effort must be identified and the completion date must be determined and established. Where appropriate, goals should be measurable and quantitative.

When planning improvement projects, it is important to select a realistic number of attainable sustainability goals. However, before you limit your possibilities, try to identify all of the areas that require improving. This will come from looking at the activities that cause the important operational risks. Remember that certain operational risks may have many causes that are spread throughout the organization. With a broad list in hand, you can later narrow it down so that it is possible to choose goals that are realistic, meaningful and measurable. It is always best to have a lot of information before setting goals by pulling numbers out of the sky!

When identifying your potential list of operational improvement areas, consider the sustainability policy, the sustainability footprint, legal and other requirements, product and customer requirements, other past improvement goals, and identified management system non-conformities. When developing the list, do not focus only on problems that need to be addressed. Goals can also take the form of opportunities for improvement – the so called, good risks.

Take your list of potential goals and evaluate each to determine those most realistic for your organization as defined in your sustainability scope. When evaluating the goals, consider your business requirements, financial requirements, operational requirements, legal requirements and the stakeholder interests from your stakeholder engagement program. You may want to choose goals that are simple and then build on them over time. When I developed the Systems Approach for Process Improvement, I learned that organization should have 7 – 11 projects in order to have a working program. The thought process reckoned that 6 projects does not provide a sufficient basis for program oversight and that 12 projects was too many for the management review team to keep track of. You can have fewer goals and then have projects that address other quick wins or have multiple projects for certain important operational risks. The goal setting gurus like the number of 3 – 5! Their thinking is that once you succeed in the early phases of the sustainability program, you may wish to increase the number of goals. However, I would recommend that the number of projects is not increased beyond 11 projects. You can see there is no science to this area of the management system planning. Senior management should approve the sustainability goals since they will have to ensure the availability of resources for the projects and program. The sustainability goals need to be formally established, implemented and maintained using proper documentation.

Once the goals have been established, you can use the Systems Approach to Process Improvement to have an employee team create an action plan for each of the sustainability projects identified. This will be described in the following section.

Once the goals and projects have been determined, you need to ensure that those individuals who have been assigned responsibility to help achieve the goals have the resources they need to manage the sustainability projects. Communications of goals throughout the organization will also help you gain buy-in and support. Goals and progress towards the goals can be communicated during meetings, training efforts, a visual display or through a newsletter. Communications will be discussed in more detail in the next narrative as part of the implementation of the sustainability management system.

Changes may occur within and/or outside of your organization that may require modifications to existing goals or the addition of new goals. The management review function will also decide whether new goals and projects are required. Some organizations add corrective and preventive action projects to their list of tracked projects. This will be discussed in the implementation narrative. The management review constitutes the “act” part of the PDCA cycle.

Once an organization has achieved a goal, it can be archived in the documentation system. However, the steps taken to achieve the goal are not part of the management system – perhaps as a procedure, control or monitoring and measurement mechanism. The procedure remains in place as an operational control within the sustainability management system, but the goal does not need to remain current and documented.

Systems Approach to Sustainability Projects

I have developed an approach to process improvement that involves employees in a substantial way. This approach has been called the “Systems Approach.” It is consistent with the “eight quality management principles” that link management systems to business excellence framework systems. A paper has been posted along with this narrative to provide some background on the use of the Systems Approach. A second paper is posted that specifically describes the action plan that is produced. This is a critical component of the Systems Approach that addresses many of the requirements of responsibility raised in the narrative sections above.

To be consistent with the PDCA cycle, yet mindful to the way projects are typically run, many organizations choose to use what is referred to as the ADRI Cycle (Figure 4). The cycle describes the four steps:

- Approach
- Deployment
- Results
- Improvement

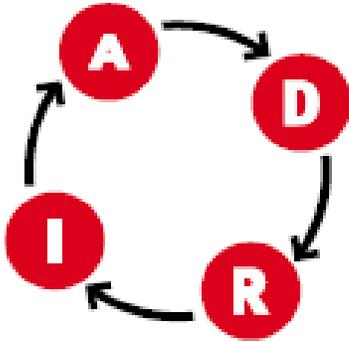


Figure 4 The ADRI Cycle

A description of what should be involved in each of the project definition steps using the ADRI cycle is described in Figure 5.

APPROACH	<p>'Thinking and planning'</p> <ul style="list-style-type: none"> ■ What are you trying to achieve for the Item—what is your intent? ■ What goals have been established? ■ What strategies, structures and processes have been developed to achieve your intent, and why did you choose them? ■ What quantitative and qualitative performance indicators have been designed to track progress? ■ How does your approach align with the Business Excellence Principles?
DEPLOYMENT	<p>'Implementing and doing'</p> <ul style="list-style-type: none"> ■ How have those strategies, structures and processes been put into practice? ■ What is the depth and breadth of their implementation throughout the organisation? ■ To what extent have they been accepted and integrated as part of normal operations?
RESULTS	<p>'Monitoring and evaluating'</p> <ul style="list-style-type: none"> ■ What are the trends in the performance indicators for this Item? ■ How do these results compare with best-known performance? <p>Give examples.</p> <ul style="list-style-type: none"> • To what extent are these results indicative of the entire organisation's performance? • How do you know that these results flow from the Approach and its Deployment? • How do you communicate, interpret and use these results?
IMPROVEMENT	<p>'Learning and adapting'</p> <ul style="list-style-type: none"> ■ What is the process to review the appropriateness and effectiveness of the Approach and its Deployment for the Item? How do you use the Results for the Item to do this? ■ What have you learned, how have you captured this learning, and how have you used the learning to improve the Approach and its Deployment?

Figure 5 Questions to be Answered by the ADRI Approach to Project Management

Many management systems do not have a strong project definition component. They often call every project a program and do not see the need to define the two as interrelated components that will define and drive the sustainability program.

Sustainability Program

When you read about an organization's sustainability program, it describes the projects or initiatives that have been implemented in order to move the organization down the path to sustainability. However, these organizations have probably not engaged in the other planning activities described here in this narrative and have not implemented the remaining elements of the PDCA-based sustainability management system. Hopefully you will see the benefit of moving from an initiative-based program to a management system driven programs. Many of the organizations with corporate sustainability programs have management system programs at their facilities. These management systems are casually mentioned in the sustainability reports, but there is no indication that the authors understand that these programs are their best chance to operationalize sustainability at the local business level. Smaller businesses can gain great benefit from instituting a sustainability management system since it can help them operate their business in a more systematic and practical way.

The sustainability program is a set of projects or initiatives that has a consistent theme - sustainability. In this case, the projects will be to help involve employees to meet the sustainability goals (objectives and targets). The Systems Approach for Process Improvement can be used to help prepare action plans for each employee team. The top management will review the plans before they are implemented. If management accepts the plans and the resources request for each project, the employees are held accountable for the completion of the project. Hopefully they will meet their plan and the organization will meet its objectives and targets.

In the following narrative, the "do" or implementation phase of the sustainability management system will be presented.

APPENDIX 1

Determining Importance Scoring Guidance for Operational Risks

The following provides guidance for rating the operational risks. The scoring should reflect your best judgment with the knowledge you have at this point in time. If it is decided that further information is required on a particular operational risk, it can be developed as goal within the management system when it is operational.

Physical Characteristics of the Operational Risk

Size / Amount – refers to the scale of the risk in relation to the other risks at the facility.

Score as follows:

3 = Size/Amount is noteworthy compared to other facility risks.

2 = Size/Amount is moderate compared to other facility risks.

1 = Size/Amount is limited compared to other facility risks.

Severity / Inherent Quality – refers seriousness or worth of the risk that results from the operational risk in relation to others.

Score as follows:

3 = Severity/Inherent Quality is noteworthy/high.

2 = Severity/Inherent Quality is moderate/medium.

1 = Severity/Inherent Quality is low/poor.

Duration – refers to the length of time the operational risk will occur.

Score as follows:

3 = Duration is long term. Operational risk, when it occurs, is long lasting without intervention.

2 = Duration is medium term. Operational risk is of medium duration.

1 = Duration is short-term. Operational risk is over within a short time of occurring.

Weighting Factor

Probability of Occurrence – Score 1 if the operational risk is occurring. If the operational risk is one that could occur in an abnormal or emergency situation, score it with the probability of that abnormal or emergency situation occurring. For example, if there is a 10% chance of a operational risk happening, multiply the physical characteristics score by 0.10.

Stakeholder Interest in Operational

Legal Requirements – refers to whether legal requirements are associated with the operational risk.

Score as follows:

3 = Extensively regulated. The operational risk has important regulatory requirements associated with it.

2 = Some regulation may be triggered or regulation is anticipated. Some part of the operational risk is regulated or regulation is anticipated.
1 = Not regulated. No regulatory requirements are associated with the operational risk and none is reasonably anticipated.

Public Concern – refers to the interest of the public/stakeholders in a particular operational risk. Consider such things as inquiries, letters, interest groups, etc.

Score as follows:

3 = Public is very concerned.
2 = Public is somewhat concerned.
1 = Public is not concerned.

Facility Concern – refers to the interest of your facility in a particular operational risk.

Score as follows:

3 = Our facility is very concerned.
2 = Our facility is somewhat concerned.
1 = Our facility is not concerned.

Customer Concern – refers to the interest of customers in the particular operational risk.

Score as follows:

3 = Customers are very concerned.
2 = Customers are somewhat concerned.
1 = Customers are not concerned.

Operational Risk Importance Rating Chart

The following chart sets forth a methodology for rating operational risks. Use this chart for analysis of each individual operational risk. See the ***Determining Importance Scoring Guidance for Operational Risks*** document for guidance on each of the rating criteria.

Operational Risk: _____

Physical Characteristics of Risk				
1	Size/Amount	3 Size/Amount is significant.	2 Size/Amount is moderate.	1 Size/Amount is limited.
2	Severity/Inherent Quality	3 Severity/Inherent Quality is significant/high.	2 Severity/Inherent Quality is moderate/medium.	1 Severity/Inherent Quality is low/poor.
3	Duration	3 Duration is long term.	2 Duration is medium term.	1 Duration is short term.
Weighting Factor				
4	Probability of Occurrence of Operational Risk = _____			
Stakeholder Interest in Operational Risk				
5	Legal Requirements	3 Required by law or regulation.	2 Law or regulation is anticipated.	1 Not required by law or regulation.
6	Public Concern	3 Public is very concerned.	2 Public is somewhat concerned.	1 Public is not concerned.
7	Facility Concern	3 Facility is very concerned.	2 Facility is somewhat concerned.	1 Facility is not concerned.
8	Customer Concern	3 Customers are very concerned.	2 Customers are somewhat concerned.	1 Customers are not concerned.

Add Rows 1, 2 and 3. Multiply this sum by the probability of occurrence in Row 4. Add Rows 5, 6, 7 and 8 to arrive at Total Score.

Total Score_____

If the total score for the operational risk is greater than ____, the operational risk is ***important***.