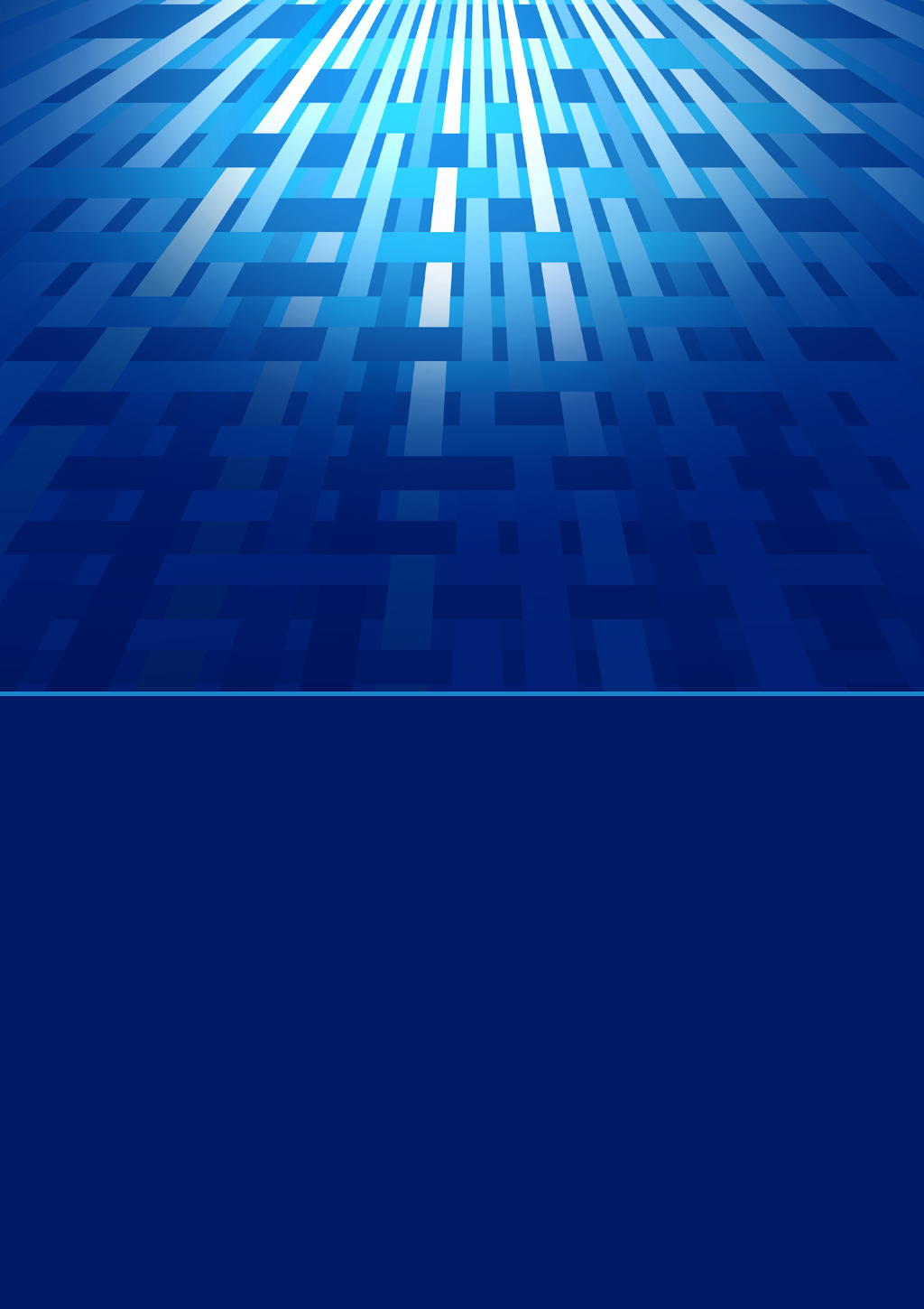


**Learner Guide**

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BSBS40120 - Certificate IV in Business

BSBSUS411 – Implement and monitor environmentally sustainable work practices

**Version Control & Document History**

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About the Business Services Training Package

A group of people posing for the camera

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The BSB Business Services Training Package covers a diverse range of industries and occupations. Business Services covers a range of cross-industry functions and services supporting the commercial activities of all industries.

**Defining Qualifications**

When units of competency are grouped into combinations that meet workplace roles, they are called qualifications. These qualifications are aligned to the Australian Qualifications Framework (AQF). Each qualification will have ’packaging rules’ which establish the number of core units, number and source of elective units and overall requirements for delivering the qualification.

**Delivery and Assessment of Qualifications**

RTOs must have the qualifications (or specific units of competency) on their scope to deliver nationally recognised training and assessment. RTOs are governed by and must comply with the requirements established by applicable national frameworks and standards. RTOs must ensure that training and assessment complies with the relevant standards.

**Qualification Training Pathways**

A pathway is the route or course of action taken to get to a destination. A training pathway is the learning required to attain the competencies to achieve career goals. Everyone has different needs and goals, and therefore requires a personalised and individual training pathway.

**Foundation Skills**

Foundation Skills are the non-technical skills that support the individual’s participation in the workplace, in the community and in education and training.

**Australian Core Skills Framework (ACSF)**

This Assessment meets the five ACSF core skills as described in the Foundation Skills mapping.

About this Unit of Competency

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**BSBSUS411 – Implement and monitor environmentally sustainable work practises**

This unit BSBSUS411 Implement and monitor environmentally sustainable work practices describes the skills and knowledge required to analyse and implement improvements to the environmental sustainability of work practices and monitor their effectiveness.

The unit applies to individuals with responsibility for the practices of a specific work area or who lead a workgroup or team.

No licensing, legislative, or certification requirements apply to this unit at the time of publication.

This Learner Resource is broken up into three elements. These include:

1. **Establish sustainable work contexts**
2. **Implement sustainable work practices**
3. **Monitor performance of sustainable work practices**

At the end of this training, you will be asked to complete an assessment pack for this unit of competency. You will need to access a supervisor, a manager, or your assessor who can observe you perform project or workplace tasks and verify your competency or performance.

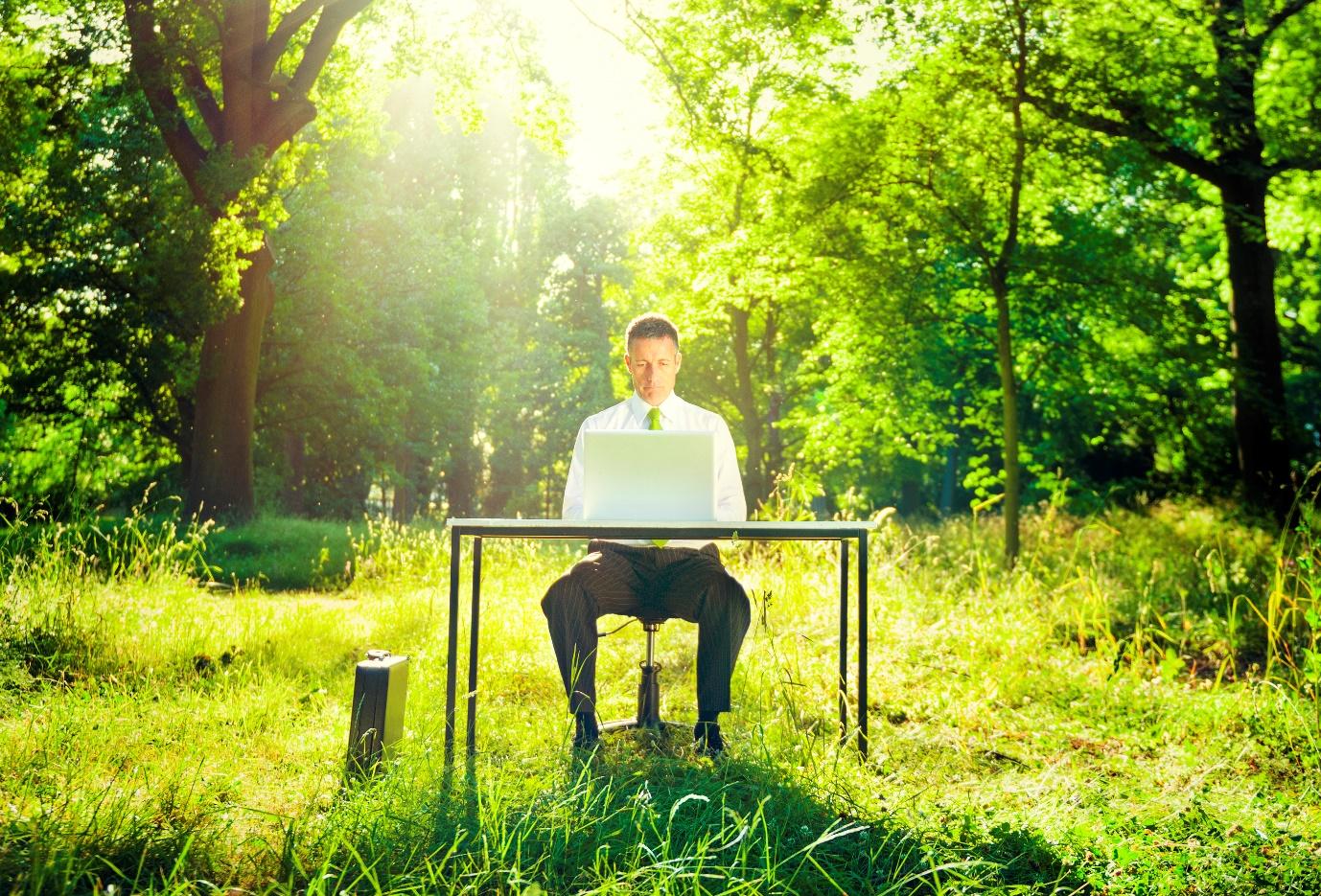
On competent completion of the assessment, you must have demonstrated skills and knowledge required to implement and monitor environmentally sustainable work practices.

Chapter 1: Establish sustainable work contexts

Sustainability is not just another word in the business lexicon; it has become a differentiator and a key indicator of how efficiently a business is run. It is broadly defined as ‘the best practices which an organisation follows to meet its current needs without compromising the environmental and social fabric for future generations’. It includes programs, initiatives, and actions aimed at the preservation of a particular resource. The four pillars of sustainability include human, social, economic, and environmental. In this unit, the focus will be on environmental sustainability. However, it is important to remember that all the four pillars are interlinked and affect each other. Hence, at each stage of the project, the human, social, and economic angles must be kept in mind while designing the project.

To create a sustainable workspace, you must then develop a two-prong approach to disrupting current negative practices and creating new positive practices. Reducing the environmental footprint not only makes the organisation competitive and future-ready but also increases its brand value. What was once considered as a ‘good to have’ feature has now become ‘a benchmark’ for a well-run organisation.

The first step towards sustainability is to recognise and acknowledge its need in your organisation, study the various departments and processes that need transformation, and study the environmental laws and best practices pertaining to your organisation/industry, then prioritise and plan.

**1.1 Identify and Assess Organisational Compliance Against Environmental Legislation, Regulations and Standards**

All businesses should aim to improve environment compliance, reduce negative business impact, and move towards efficient use of resources. However, these factors will vary from business to business, and organisations need to study the compliances, laws, and best practices that are most relevant to their industry.

It is vital to know the environmental regulation in your country and location, study the best practice, and then list out the points that are relevant to your business.

### 1.1.1 Common Sustainability Issues in a Workplace

A sustainable workplace has successfully established the framework to balance the environment, people, and profits in the long term. It, in turn, produces happier and better-motivated employees and increases employee productivity and fewer work-related hazards, illnesses, and mishaps. This is fundamental to boosting the overall revenue and reputation of the organisation.

The sustainability practices at a workplace are broadly grouped under seven categories. These categories need to be analysed with reference to your organisation and industry. The areas that are identified and prioritised for sustainability measures are then mapped, and an implementation framework and a change management plan are designed for a roll out to create a sustainable working space for employees. The seven categories for sustainable practices at a workplace are:

All the factors listed above not only impact the energy and resource footprint of the business, but they are also often interconnected and affect productivity. Here is a deeper insight into each of the factors and how they affect the workplace:

* **Workplace Layout**

The layout and the flow of the workplace create base patterns for energy and resource consumption like lighting, air quality, and air conditioning.

In the case of a traditional business that had inherited an office with individual cabins dividing the entire space, each unit warranted its air conditioning and lighting. Over the years, the cabin dividers blocked most of the natural light and airflow; hence, the office lights and air conditioning in all the units were switched on throughout the day. The situation became even more challenging when there was a critical requirement for workforce expansion. They went back to the drawing board not only to create more space but also to make it more collaborative and add common spaces for interaction while making the layout more energy and resource-efficient.

Technology and innovative ideas can contribute to making the office space more sustainable. Green workplace practices improve employee health and productivity while cutting operational costs.

* **Energy Management**

An energy audit is key to mapping energy consumption trends and finding opportunities to cut consumption. A study indicates that just sealing leaks in the workplace can cut 20% of electricity bills, so will an increase in the temperature of cooling systems by two degrees and channelling natural light into the work floor.

Multiple technology options are now available to increase energy efficiencies like systems for smart metering and monitoring of energy consumption, automatic turn off and on of the office lighting, A/C, equipment and appliances, occupancy sensors, LED lighting, and energy-efficient office equipment and appliances.

* **Water Efficiency and Conservation**

Water has become a scarce resource in many countries around the world. Therefore, the focus is intense on its consumption and recycling. Some of the measures that can be taken to reduce water consumption include using efficient plumbing, such as low flow toilets, showerheads, and sink taps, water-efficient dishwashers and washing machines.

The second aspect of water management is recycling and setting up a system to use filtered greywater in processes like flushing and watering plants.

* **Waste Reduction**

The waste generated by organisations is broadly put into four categories — wet, dry, hazardous, and electronic. As per an August 2020 estimate, the average waste generated per person per year in Australia is around 540 kilograms. As a result, the country generates 67 million tonnes of waste, out of which only 37% is recycled, and the rest goes to landfills. The cost of disposal is high on the environment and the business.

Various measures can be introduced by businesses to become more aware, use resources judiciously, and recycle more. Some of the initiatives that can be adopted by the business is a clear waste segregation policy, composting wet waste, reducing and recycling dry waste, collecting electronic waste and selling it to specialised disposal companies, and reduce and careful disposal of hazardous material.

It is essential to develop and implement clear waste disposal policies with well-defined reduction and recycling targets. You must implement the practice of sorting, reusing, and recycling policies in all work areas. Additionally, you must evaluate purchase choices and use goods and materials which reduce waste generation, like products with minimal packaging or those using recycled/recyclable materials.

* **Adoption of the Digital Platform**

The digitalisation of workplace activities is often at the centre of environmentally friendly practices. Sustainable spaces use different kinds of technology to work more efficiently. This often involves a shift in culture and behaviour patterns that require clear policies, such as:

* *No Paper is the Greenest Paper*

A significant bulk of office waste is due to documents printed multiple times. The way around that is to set up digital processes that ensure that fewer documents are printed, the efficient use of paper like printing on both sides, recycling wastepaper, upcycling one-sided paper, reducing the number of printers, rationing paper and toner, among others. More than this, it is critical to set up systems to reduce the dependency on paper, like collaborative online sharing tools. For example, a product company had to print out seven copies of invoices for all the products they were shipping out, one for each of the departments, their logistics partner, and the client. In a bid to go completely green, they moved the entire process to the ERP platform and onboarded even the logistics partner onto the process. In the end, they needed only one print of the invoice to stick on the package.

* *Virtual meetings*

Virtual meetings and learning and conferences tools are great ways to connect without the expenses of travel and the carbon footprints associated with them. These tools help save travel time, infrastructure, and refreshment costs associated with organising an event. These tools have been around for a few years now but have not been effectively used or completely embraced, but that changed in the year 2020.

* **Supply Chain**

Sustainable procurement decisions can also benefit the organisation in terms of cost and quality. The products are reviewed on the sustainability scale to see if they are biodegradable, recyclable, reusable, and non-toxic. The credential of the supplier should also be checked to see if they have environmental processes and policies in place. It will necessitate engaging the suppliers to help them put green policies in place.

* **Employee Awareness and Accountability**

Offices are living spaces, and to make sure that they remain sustainable and green, employee awareness and accountability are very important. This involves smart thermal and lighting controls and recycling policies with a continuous improvement plan to communicate with the employees in order to involve and motivate them to become active participants in the program. Heightened awareness and buy-in from the employees with result in better and sustained results.

Employees should have a transparent and effective tool to monitor their resource consumption, carbon footprint, and access to data of their behaviour change. Incentivising employee behaviour changes is an effective reinforcement. Competitions can be organised between departments to reduce the use of paper. This can be done through the switching off of lights and electronics when not in use and using public transport or hybrid electric vehicles.

### 1.1.2 Organisation Compliance Requirements

The organisation should be conversant with the laws and compliances related to the worksite with reference to local, state, and national stipulations. The Australian Government legislation governs the process of assessment and approval of national environmental and cultural concerns while the State and territory environmental protection legislation apply to specific business activities.

All organisations affect the environment by the way they procure, use, and dispose of resources; these include the usage of water, electricity, paper, and waste management.

The laws and compliances for businesses differ according to the industry and the state in which they function. If an organisation has offices on multiple sites, then it must look into the laws specific to those locations.

Key legislation that should be taken into consideration is the Australian Government’s piece of environmental legislation called ‘Environmental Protection and Biodiversity Conservation Act’ Act 1999 (EPBC Act). The EPBC Act enables the Australian Government to join with the states and territories in providing a truly national scheme of environment, heritage protection, and biodiversity conservation. It focuses on the Australian Government’s interests in the protection of matters of national environmental significance, with the states and territories having responsibility for matters of state and local significance.

Here is a list of legislations and guidelines that be relevant to the country, state and territory.

|  |  |
| --- | --- |
| **Territory** | **Legislation/Regulation** |
| Key Environmental Legislations | [Environment Protection and Biodiversity Conservation Regulations 2000](https://www.legislation.gov.au/Series/F2000B00190)  [ISO 14000](https://www.iso.org/iso-14001-environmental-management.html)  [National Greenhouse and Energy Reporting Act 2007](https://www.legislation.gov.au/Series/C2007A00175)  [Australian Packaging Covenant](https://www.environment.gov.au/protection/waste/plastics-and-packaging/packaging-covenant) |
| Australian Capital Territory | [Environmental Protection Act 1997](http://www.legislation.act.gov.au/a/1997-92/default.asp)  [Environment protection guidelines for business and industry](https://www.accesscanberra.act.gov.au/app/answers/detail/a_id/3267/~/environment-protection-guidelines) |
| New South Wales | [Protection of the Environment Operations Act 1997](https://www.epa.nsw.gov.au/licensing-and-regulation/legislation-and-compliance/about-the-poeo-act)  [NSW environmental legislation](https://www.environment.nsw.gov.au/policy-and-law/legislation) |
| Northern Territory | [Environment Protection Act 2019](https://legislation.nt.gov.au/en/Legislation/ENVIRONMENT-PROTECTION-ACT-2019)  [Environmental protection legislation](https://ntepa.nt.gov.au/about-ntepa/legislation)  [Environmental assessments](https://ntepa.nt.gov.au/environmental-assessments) |
| Queensland | [Environmental Protection Act 1994](http://www.austlii.edu.au/au/legis/qld/consol_act/epa1994295) |
| South Australia | [Environment Protection Act 1993](https://www.legislation.sa.gov.au/LZ/C/A/ENVIRONMENT%20PROTECTION%20ACT%201993.aspx)  [Environment protection legislation](http://www.epa.sa.gov.au/data_and_publications/legislation)  [Codes of practice](http://www.epa.sa.gov.au/data_and_publications/legislation/codes_of_practice) |
| Tasmania | [Environmental Management and Pollution Control Act 1994](http://epa.tas.gov.au/policy-site/Pages/EMPCA.aspx)  [Information on environmental policies and legislation](https://epa.tas.gov.au/search?k=Information+on+environmental+policies+and+legislation) |
| Victoria | [Environment Protection Act 1970](https://ref.epa.vic.gov.au/about-us/legislation/acts-administered-by-epa#EPAct)  [Environmental legislation](https://www.epa.vic.gov.au/about-epa/laws) |
| Western Australia | [Environment Protection Act 1986](http://www.slp.wa.gov.au/legislation/agency.nsf/epa_main_mrtitle_304_homepage.html) [Environmental legislation](http://www.epa.wa.gov.au/legislation) |

Similarly, every country has its own set of laws and compliances that need to be reviewed before organisational environment compliance plans can be formulated. Businesses can also follow the ISO 14001:2015 protocol to streamline environmental aspects of their activities, products, and services, regardless of their size, type, and nature. It does not state specific environmental performance criteria and can be used in its entirety or in parts to systematically improve environmental management. Claims of conformity to ISO 14001:2015, however, will not be accepted unless all its requirements are incorporated into an organisation's environmental management plan and fulfilled without exclusion.

**1.2 Collect Data on Environmental Efficiency in Organisational Systems and Processes**

To start the project in the workplace, you must first lay the foundation, which is a bedrock of understanding the organisation’s objectives, processes, and functions, in addition to understanding the environmental laws, corporate sustainability regulations, and the industry best practices.

The next step is to gather, organise, and analyse information from both internal and external sources to get a holistic understanding of the organisation’s current scenario. Based on the data gathered, the framework of the sustainable workplace can be worked out and implemented.

### 1.2.1 Gather Information for the Development of Sustainability Policies

To develop sustainability frameworks, you need to have all the necessary information in place before the strategy and the planning phase. The following internal and external sources may be consulted to gather information:

* **External Sources of Information**
* *Regulatory sources*

The Australian Government’s Department for Environment is a good starting point for information on environmental regulations. It covers grants, funding, permits, assessments, and legislation.

* *Australian and international standards relevant to corporate sustainability*

These published documents provide requirements, specifications, and guidelines relating to corporate sustainability. A list of the documents for national and territory related regulations have been listed in the previous chapter. Industry associations, green product guides, environment and sustainability websites, and case studies in best practices are also good sources of information.

* *External stakeholders*

External stakeholders are those who are outside of the organisation who are impacted by the policy. They include clients, customers, members of the local community, personnel from agencies or the regulators, specialist lawyers, and consultants. The external stakeholders can also include the Green Army, a government initiative of a practical environmental action program that supports local environment and heritage conservation projects across Australia.

* *Organisational specifications*

Organisations that are planning to reduce their environmental impact for the first time may benefit from initiating an initial environmental review of their operations. This review is not mandatory when implementing a sustainability policy. However, it will provide a starting point for the organisation to identify any environmental management activities, controls, or procedures already existing within the organisation.

* **Internal sources of Information**
  + *Relevant Personnel and Stakeholders*

Internal stakeholders are those within the organisation running the business, such as employees, supervisors, and managers in the organisation.

* + *HR and Department Processes*

The current environmental compliances should be listed out and studied. All the departments in the organisation should be mapped with their active processes and checklists. This mapping should be done for all the teams in every department. This process is critical as it clarifies the workflow and will be later used to map the resource used in all the processes and at all levels. The HR resources and the training provided for the job and soft skills should be mapped.

* + *Resource usage data*

Once the processes are mapped, then the resources used should also be mapped through the process and product lifecycle. The points of purchase, usage, and wastage must be monitored using invoices, bills, visual confirmation, and disposal costs.

### 1.2.2 Organisational Systems and Processes

Organisational sustainability is often interpreted to mean primarily financial sustainability. This point of view takes root because when an organisation becomes unsustainable, the primary impact and first symptoms are seen in the finances. For organisational sustainability, the health and functionality of its interrelated systems and procedures are crucial. However, if some of the key areas managed well, it will ensure the sustainability of the organisation.

In this section, some of the systems and processes will be discussed with reference to a broad spectrum of sustainability initiatives.

* **Strategic Planning, Management, and Approval**

Organisations that are lean and agile are better equipped to react to market inputs and take decisions. Hence, agile structures have moved out from the exclusive lexicon of the software industry to a larger arena. Some of the initiatives taken in this direction include restructuring organisational structures to improve the information flow and operations, simplifying approval structures and hierarchy, combining shared resources, and enabling collaborative working on projects. Apart from better decision making, these initiatives enable more efficient resource distribution and consumption.

* **Costing Strategies**

The sustainability goal is to use fewer resources effectively to produce the same or more products and services. Many innovative ways can be found to increase resource efficiency and decrease cost. Organisations often conduct surveys, focus groups, and contests to encourage employees to contribute ideas.

Cost savings fall under two categories — indirect savings from more efficient processes or direct savings that come from the purchase of machinery or tools that is more efficient.

* + *Indirect costs savings*

The indirect benefits of resource efficiency are more difficult to measure. These may include:

* Increased productivity due to reductions in downtime and maintenance requirements.
* Increased brand awareness and improved reputation due to consumer preferences for more sustainable products.
* Increased employee satisfaction and retention. Studies show that people prefer to work for more sustainable organisations.
* Improvements in workplace safety
* *Direct costs savings*

Direct cost savings can be achieved by purchasing better machinery that can produce more products, energy-efficient equipment, conducting virtual meetings to save significant travel costs, and reducing waste, thus, decreasing its storage and disposal costs, among others. Direct cost savings can be easily quantifiable and measured, so the benefits are easily visible.

In the table below are some direct cost savings methods with benefits and measurement resources:

|  |  |
| --- | --- |
| **Cost-saving/benefit** | **Measurement** |
| **Cost of materials using local suppliers and in time delivery** – lower transportation cost, carbon footprint and leaner inventory | Supplier invoices. |
| **Cost of material due to the re-use of waste** – additional resource without high cost, or can be sold as a resource | Supplier invoices and disposal fees |
| **Energy costs (e.g. electricity, gas, petrol, and diesel)** –due to efficient usage and renewable energy sources. | Electricity bills, invoices from fuel providers. |
| Waste disposal costs due to efficient use of resources, thus, reducing wastage. | Waste disposal fee invoices. |
| Reduced labour costs due to process improvement and reduced waste handling. | Wages paid |
| Profit on sale of redundant equipment or fixed assets. | Sale invoices and other accounting records. |
| Cost savings from using lower quality or lower cost inputs (e.g. using medium-grade rather than high-grade paper for the copier. | Supplier invoices. |

* **Quality Assurance**

Significant saving of cost is achieved if the wastage or defective pieces percentage is reduced in the production line. The savings then cascade across many heads like the purchase of raw material, operational costs, waste storage, and disposal.

* **Supply Chain**

Sustainable supply chain management helps organisations streamline their end-to-end operations to achieve greater cost savings and profitability. Sustainable practices can be integrated into every stage of its lifecycle, from product design and development to material selection, manufacturing, packaging, transportation, warehousing, distribution, consumption, and disposal.

* **Procurement**

Sustainable procurement practices must address the environmental, social, and economic aspects. It is important to curate a supplier base that follows sustainability practices too. One key strategy is to source sustainable material locally.

* **Marketing and Sales**

Sustainable marketing and sales involve the promotion of environmentally and socially responsible products and services. The companies are not just expected to implement green practices, and they also need to demonstrate social responsibility and how safe their products and services are. The focus is on moving the promotion of products and services to the digital arena, with the content being targeted to points of consumption like websites, social media, blogs, e-mails, word-of-mouth, cold calls, cross-promotions, and community programs. A good example of green marketing is by the Lego Company that has a dedicated section on its website for its sustainable practices and goals.

* **Operations**

Other words for sustainability in operations are intentional, deliberate, and conscious. Every aspect of the operations process is scrutinised with the mantra of less is more from choosing energy-efficient equipment, checking the HVAC systems, upgrading lighting, reducing water waste, increasing recycling, and opting for energy-efficient transportation.

* **Human Resources**

Sustainability in human resources can mean different things to different people. It goes beyond creating the company policy and designing HRMS systems that make a recording of the metrics more efficient and transparent. Core department functions like people management, performance management, training and employee data systems can be made digital. Additionally, the department plays a significant role in drafting other policies, processes, change management programs, and employee communication.

This brings you to resource management across the entire workflow of the organisation. Resource efficiency can be defined as, ‘usage of resources such as water, energy and workforce efficiently’. This can be achieved by reducing the amount of material used, manufacturing costs, waste materials, and impact on the environment and increasing output, and compliance with environmental legislation.

Energy consumption, office consumables, and waste disposal cost businesses a significant percentage of their annual turnover. Sustainable measures can help reduce these costs significantly.

**1.3 Analyse Data on Environmental Efficiency and Current Purchasing Strategies and Identify Areas for Improvement**

Material, energy, and waste assessments have an important role to play in environmental efficiency analysis. They give the organisation an insight into consumption patterns and help them reduce costs, streamline processes, and find new and less expensive ways to manufacture products or provide services. It pays to be sensitive to the environment, not only from the perspective of brand equity building and superior workplace parameters but also from the fact that environmental efficiency results in reducing the number of materials and amount of energy that is purchased or from reducing waste disposal costs.

To understanding where you can make improvements, you need to study how much of something an organisation uses and determine an easy way to monitor this is to track supplier invoices, inventories and bills.

Visual assessments can be used to confirm how a resource is being used by observing the amount, type, and volume of waste or recording how many lights, air conditioners, computers or machines are left on at the end of the day.

Determining all inputs and outputs can be used to define how efficient your organisation is and, therefore, identify areas for improvement and cost reduction.

The information that is collected then needs to be analysed so that planners can see patterns based on which sustainability framework can be designed and targets set. Life Cycle Analysis (LCA) or the Abridged Life Cycle Analysis are usually used to analyse the data.

* **Life Cycle Analysis**

To enable decisions on resource efficiency to be made based on facts, the Life Cycle Analysis was developed as part of ISO14001 (ISO is the International Standards Organization). The entire product life cycle is studied from purchase, processing, to disposal to assess its environmental and cost impact. This is a complex exercise.

In the break down of the cost differential between paper hand towels and electric hand dryers when a full life cycle is used, the analysis suggests that the long-term cost impact is higher in the case of paper towels. It is a good example of how this analysis can bring clarity and quantifiable facts into the decision-making process.

In the case of the above example, the data can be collected in the table given below to arrive at the short term, medium-term, and long-term cost differential:

|  |  |  |
| --- | --- | --- |
| **Factors of measurement** | **Paper Towels** | **Hand dryer** |
| Number of units |  |  |
| Cost per unit |  |  |
| Refill cost (per month) |  |  |
| Energy consumption per use |  |  |
| Energy consumption per month |  |  |
| Waste (per month) |  |  |
| Cost of waste disposal (per month) |  |  |
| Cost of maintenance |  |  |

* **Abridged life cycle analysis**

If it is not possible to get reliable values, nor to compare incompatible units of measurement, then the Abridged Life Cycle Analysis can analyse the patterns using notional or estimated values.

The Abridged Life Cycle Analysis can be as detailed or as simple as required. It can prompt ideas on where improvements and reductions can be made and give insight into the use of resources and their impact.

The template below will help study the impact on the environment at each stage of the production process using the abridged life cycle method. The factors studied can be entered either as a range where 0 means no effect and 10 means a substantial effect or actual costs.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Effect** | **Pre-production** | **Production** | **Distribution** | **Use** | **Disposables** | **Total** |
| Air pollution |  |  |  |  |  |  |
| Water pollution |  |  |  |  |  |  |
| Soil pollution |  |  |  |  |  |  |
| Solid waste |  |  |  |  |  |  |
| Energy consumption |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |

Based on the patterns that emerge after analysing the data using one of the methods, planners and the management will have better insights to shape their purchase strategy and design area of improvement. For example, in the case of the paper towels and hand dryer comparison, it becomes evident that at the estimated cost of $350 a unit, with minimal maintenance and no refill and waste disposal cost, the hand dryer is a more sustainable and economical option than paper towels with their requirement of 20 packs a day at $7 a pack. In this scenario, the cost of paper towels refills alone for one washroom is estimated at $980 per week. Such comparisons make decision making easier. Another example of the purchasing department adding value is by opting for 100gsm paper instead of 120gms for the photocopier machines. This reduced the cost from approximately $18 to $14 a bundle, thus, making substantial saving for the company. After the analysis, the decisions and plans become more meaningful and focused.

**1.4 Consult Stakeholders and External Data Sources on Sustainability Best Practice**

The first three steps of the process are now completed with the collection and analysis of the data. Before an organisation starts working on its environmental strategies, it needs to develop a holistic understanding of the issues from all perspectives and see how they will affect people. One of the ways of doing this is to engage with all the stakeholders.

Stakeholder consultation involves the development of meaningful relationships with people both inside and outside the organisation. These relationships are mutually beneficial and enable the organisation to identify emerging trends and challenges.

Meaningful consultation with stakeholders adds value in different ways, including:

* It captures the views of the stakeholders during project design and implementation. This helps avoid or reduce conflicts and issues.
* It validates and verifies the data, thus, improving the quality of the impact assessments.
* It helps people understand their rights and responsibilities.
* It encourages greater transparency, involvement, enhances trust, project acceptance, and ownership.

Consultation on a project is a two-way process of dialogue and engagement with the stakeholders. Rather than a one-way flow of information, it encourages an active discussion and exchange of ideas and concerns.

Seven stakeholders need to be consulted during this process, and they include:

* **Process Users**

This includes the people who will be using the tools or running the process. You should discuss their requirements, expectations, and challenges and then ensure that the project plan has solutions for them.

* **Product or Service Users**

Their aspirations and expectations should be incorporated into the change process, as they will be impacted by the change. They can be people of the local community in which the organisation operates.

* **Subject Matter Experts**

There are two types of SME’s that you need to consult — the first are people who have expertise and skills in environmental projects and workplace compliance. The second type of SME’s is the people whose skills you need for the project, such as the engineering staff, communication experts, technicians, architects, data analysts, developers, business analysts, testers, IT team, and more. The SME is critical for giving design and direction to the sustainability project. It is critical to get people aboard who are experts in both sustainability implementation and have knowledge of the industry to be a part of the strategy team.

* **Finance Team**

A good finance team is essential for creating and reviewing your budget plan, analysing models, helping with the finances, and put together a business case for the project.

* **Senior Management**

Any project should be in alignment with the business strategy and goals of the organisation. Hence, the senior management must be consulted during this stage.

* **Legal Team**

The legal team will guide on potential issues and changes in codes and practices. They will also deal with any issues with legal or compliances issues. The legal teams who specialise in sustainability practices should be consulted.

* **Project Managers**

Seasoned project managers are critical for determining the best practices to be incorporated into the project, resources allocation, templates, models, estimates, and coordination.

External stakeholder consultation is very important in setting the larger framework of laws, regulations, and compliance. The SMEs help lay the context of the best practices in the industry and the optimal customisation for your organisation. The clients, suppliers, and investors help with the business context of the project, while the local community helps lay the social context. To summarise, the inputs from the external stakeholders form the bedrock on which the sustainability plan is built.

### 1.4.1 Approaches to Stakeholder consultation

The tools used for stakeholder consultation should be chosen based on whether the requirement is for in-depth qualitative information or broad-based quantitative information.

The qualitative research approaches are used when detailed information is required. The tools use open styles of discussion and debate. These tools include focus groups, individual interviews, semi-structured interviews, and brainstorming workshops. These tools use open-ended and leading questions to elicit responses.

If a broader spectrum or ‘breadth’ of data is required, such as the opinions of a larger number of people, then standardised measurement tools like surveys, short street interviews, town halls and e-surveys are used. Though the methods reach wider audiences, they are restricted to closed-ended questions and rating scales.

Some methods can give both depth and breadth. These include large public meetings and online open debate through digital media.

### 1.4.2 Ten Elements of Meaningful Stakeholder Consultation

These ten key points can help guide the development and execution of meaningful consultation. These points are rarely sequential or discrete and may partly or fully overlap. Professional experience is required to assess the right approach for each project. The points are as follows:

* Identification of priority for issues that affect the company and the stakeholders
* Stakeholder analysis and consultation plan
* Prior information to stakeholders
* Appropriate mediums and methods for the consultation process
* Grievance redress mechanisms
* Design and implementation of the process/project considering the stakeholder perspectives
* Feedback to stakeholders and transparent decision making
* Baseline data and action plans
* Documentation and public communication
* Continuing stakeholder consultation during implementation

Addressing these ten elements clearly and systematically is key to designing and implementing a meaningful stakeholder consultation process.

## 1.5 Develop Efficiency Targets and Methods to Monitor Outcomes

Efficiency targets aim to achieve more output for each unit of input. This has many variations, including goals for productivity, process, financial, machine, and resource efficiency. Some examples of efficiency targets are as follows:

* To develop a process to pick out the minimum size of the box for each order, thus, reducing the cost of packaging by 30% in one year
* To change the lighting fixtures to energy saving options to reduce electricity consumption by 5% in one year
* To increase production by 20% to 2000 units per hour by upgrading assembly line 4, 7, and 19

The commonality between the efficiency targets mentioned above is that they are SMART goals. A SMART goal is used to help guide goal setting. SMART is an acronym that stands for Specific, Measurable, Achievable, Realistic, and Timely.

When efficiency goals and targets are set, it is first done at an organisational level, as you have previously read in the Lego Company sustainability plan. Then, these goals are cascaded down to the department and individual level, clearly defining action points.

When SMART targets or goals are set, you must define and articulate the big picture, the big goal and then break it into baby steps. These are the pit stops on your journey where you can measure your progress, regroup, and reassess.

### 1.5.1 Steps for Developing SMART Efficiency Targets

As mentioned, SMART is an acronym that can be used to guide goal setting. Its criteria are commonly attributed to Peter Drucker's ‘Management by Objectives’. SMART goals are:

* **Specific**

Specific goals must answer the five ‘W' questions:

* *Who*: Who is involved in this goal?
* *What*: What do I want to accomplish?
* *Where*: Where is this goal to be achieved?
* *When:* When do I want to achieve this goal?
* *Why*: Why do I want to achieve this goal?

For example, a general goal would be ‘We want to reduce paper consumption in the department’, and a more specific goal would be ‘We want to be sustainable.’

* **Measurable**

A SMART goal must be measurable because anything that is not measured is not achieved. To make a goal measurable, the following questions must be considered:

* How many/much?
* How do I know if the goal has been reached?
* What is my indicator of progress?

For example, building on the specific goal above: ‘We want to reduce paper consumption in the department by 40%.’

* **Achievable**

The achievable goal should be stretched to make it challenging but must be well-defined to make it attainable. The following questioned should be asked while defining it:

* Are the resources and capabilities available to achieve the goal?
* What additional resources and capabilities are required to achieve the goal?
* Have others done it successfully before?
* **Realistic**

A SMART goal must be achievable given the available resources and time. The following questioned should be asked while defining it:

* Is the goal realistic and within reach?
* Is the goal achievable, given the time and resources?
* Will the stakeholder be able to commit to achieving the goal?
* **Timely**

A SMART goal must have a start and finish date. If the goal is not time-bound, there will be no motivation to achieve the goal. The following questions should be asked when it is being defined:

* Does my goal have a deadline?
* By when do you want to achieve your goal?

For example, building on the goal above: ‘In April, we will launch the Save Paper initiative in the department with the unveiling of the Cloud Management System. By the end of April, the number of printers on the floor will be reduced 20%. By June 1, the process will be completely online. By June 30, we will reduce paper consumption in the department by 40%.

### 1.5.2 Measuring Efficiency Targets

Monitoring performance for sustainability targets needs to be conducted at all levels. At the individual and department levels, it helps to set SMART goals to monitor and achieve targets. At an organisational level, there are multiple ways of measuring efficiency, including productivity, process, machine, financial, supply chain, and resource efficiency. The onus is on the organisation to select the metric to use to measure its sustainability targets.

The best-known and widely used sustainability measurement reports at an organisation level include the Corporate Sustainability Reporting and Triple Bottom Line Accounting,

The highlights of these reports are given in the shown in the diagram below:



|  |  |
| --- | --- |
|  | **Further Reading**  The Australian government site has useful information on the country’s climate change policies and regulations.  [Australia’s climate change strategies](https://www.industry.gov.au/policies-and-initiatives/australias-climate-change-strategies) |

Read more about Lego’s sustainability initiative by accessing the link below.

[Lego Sustainability initiative](https://www.lego.com/en-us/aboutus/sustainability/environment)

|  |  |
| --- | --- |
|  | **Notes** |
|  | |

## Key Points: Chapter 1

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| --- |
| * The term ‘sustainability’ is broadly used to indicate programs, initiatives, and actions aimed at the preservation of resources. * The four pillars of sustainability are human, social, economic, and environmental. * The sustainability practices at a workplace are broadly grouped under seven categories — workplace layout, energy management, water efficiency and conservation, waste reduction, adoption of the digital platform, supply chain, and employee awareness and accountability. * The organisation should be conversant with the local, state, and national laws and practices and compliances related to their worksite. * For organisational sustainability to be effective, the health and functionality of its interrelated systems and procedures are important. Some of the key areas of focus are strategic planning, management, and approval, costing strategies, quality assurance, supply chain, procurement, marketing and sales, operations, and human resources. * The organisation’s consumption pattern in terms of inputs and outputs of resources and waste can be measured and analysed using a Life Cycle Analysis (LCA) or the Abridged Life Cycle Analysis. * Material, energy, and waste assessments give the organisation an insight into consumption patterns and help them reduce costs, streamline processes, and find new and less expensive ways to manufacture products or provide services. |

## Activity 1: ‘True’ or ‘False’ Quiz

Let’s review what you’ve learnt from this Chapter. Read each statement below.

Tick ‘True’ if the statement is correct, and ‘False’ if not.

|  |  |  |  |
| --- | --- | --- | --- |
| **Statement** | | **True** | **False** |
| Icon  Description automatically generated | Sustainability is the best practice of complying with all the laws of the land. |  |  |
| Icon  Description automatically generated | In Australia, State and territory environmental protection legislation apply to specific business activities. |  |  |
| Icon  Description automatically generated | Resource efficiency is measured by a Full Analysis or a Half-cycle Analysis. |  |  |
| Icon  Description automatically generated | Material, energy, and waste assessments have an important role to play in environmental efficiency analysis. |  |  |
| Icon  Description automatically generated | Only the team that is executing the sustainability project needs to be consulted. |  |  |
| Icon  Description automatically generated | Savings from sustainability efforts can be direct or indirect. |  |  |
| Icon  Description automatically generated | Increased employee satisfaction and retention is a type of direct savings. |  |  |
| Icon  Description automatically generated | Environmental Protection and Biodiversity Conservation Act’ Act 1999 is a key legislation for environmental protection and sustainability. |  |  |
| Icon  Description automatically generated | Efficiency framework, targets, processes, and monitoring methods should be designed at the planning stage. |  |  |

## Activity 2: Matching Type

|  |
| --- |
| Match the description with the appropriate option from the Selection column. |

|  |  |  |
| --- | --- | --- |
| **DESCRIPTION** |  | **SELECTION** |
|  |  |  |
| Environmental Compliance |  | This aims to assess advantages and disadvantages, enabling decisions to be made based on facts. |
|  |  |  |
| Resource Efficiency |  | In sustainability projects, it comes from more efficient processes. |
|  |  |  |
| Life Cycle Analysis |  | These should be defined and described in the planning stage. |
|  |  |  |
| Indirect savings |  | This reduces negative business impacts. |
|  |  |  |
| Efficiency targets and monitoring framework |  | This involves reducing material usage, production costs, waste materials, and impact on the environment. |

## Activity 3: Identify Concepts

|  |
| --- |
| Identify any two groups in the workplace that should be mapped for a sustainability study. |
|  |
|  |
|  |

## Activity 4: List Activity

|  |
| --- |
| List three direct ways by which your organisation can save money by following resource efficiency. |
|  |
|  |
|  |
|  |

Chapter 2: Implement Sustainable work practices

Making your workplace greener is a great way to contribute towards a more sustainable and healthier planet. Additionally, it is also a significant business differentiator. As more businesses move towards sustainable practices, it has become essential to set guidelines and tools for effective implementation of resource utilisation and efficiency targets.

As you have learnt in the previous chapter, it is essential to set the right targets before implementing the sustainability plan. The process of setting targets is a strategic exercise to establish performance targets for energy, water, and waste utilisation and management. Different tools are used in each of these areas to set a baseline criterion. These are used to identify and set short- and long-term goals. Based on the baseline measures and the best practices in the industry, targets can be set for the organisation.

Setting a baseline is a critical process as these figures are invaluable in setting targets and comparing the progress made. For example, at the start of the project, your organisation’s energy consumption is ‘x’, and you develop a long-term strategy to reduce it by identifying Basic, Intermediate, and Advanced targets. It is important to choose the path and timeframe that is appropriate for your organisation.

## 2.1  Identify and Source Tools to Set Efficiency Targets

Companies cannot manage what they cannot measure. Sustainability can be measured by assessing a project or an organisation’s parameters against existing compliances or industry best practices. In the sustainability framework, the Triple Bottom-line Principle is used for achieving the goal in an ideal scenario. In this framework, the triple pillars of social, economic, and environmental performance are measured. Using this, many organisations are developing organisation-specific or industry-specific measurement tools to help them achieve their goals. These principles should be applied across planning, operations, and maintenance of the project.

The measurement tools for energy, water, and waste are different and varied. Hence, it is crucial to identify the tool best suited for the industry and the project. The Project Managers or Subject Matter Experts should be able to guide the organisation on the selection of the tool.

Once the tools are used to measure the current rate of usage in the organisation, the levels should then be compared with the recommended levels, and then the efficiency targets should be set for the basic, intermediate, and advanced goals. In this context it must be noted that the energy efficiency of a building or its Energy Star rating is on a scale of 1-100, where the median rating is 50. The higher the rating, the better the energy efficiency. However, if the rating falls below 50 then the energy efficiency performance is considered poor.

When the energy efficiency target is set for an old building, then the starting point is the rating estimated after all the current parameters are measured. Below is an example of how the energy targets can be set for old and new buildings.

* The energy efficiency of older buildings are usually lower due to issues with maintenance and leaks. Hence the work required to achieve the goals is higher, for example:
  + **Basic**: At a 60% above median
  + **Intermediate**: 80% above median
  + **Advanced**: carbon neutral
* The starting energy efficiency level is usually higher for new buildings. For this example, consider it to be at 65 points. Then, the goals set would be as follows:
  + **Basic**: 60% above the current level
  + **Intermediate**: 80% above current level
  + **Advanced**: carbon neutral

### 2.1.1 Measurement of Resource Consumption

* **Measurement of Energy Usage**

Organisations must review their energy consumption and devise ways of cutting down. The targets that they can set is also to switch to renewable sources of energy over time which causes no long-term damage to the environment and helps to drastically reduce the carbon footprint (this will be discussed later in the chapter).

Here are some of the tools for energy framework and measurement:

|  |  |  |
| --- | --- | --- |
| **Scope** | | |
| **Tool** | **Dimension** | **Dimension Name** |
| ESI | 3 | Economic, environmental, social |
| EISD | 3 | Economic, environmental, social |
| EDI | 2 | Residential, community |
| MEPI | 5 | Cooking, lighting, household appliances, entertainment/education, communication |
| SEDI | 5 | Economic, environmental, social, institutional, technical |
| RISE | 4 | Electricity access, clean cooking, energy efficiency, renewable energy |
| SDEWES | 7 | Energy consumption and climate, penetration of energy and CO2 saving measures, renewable energy potential and utilisation, water and environmental quality, CO2 emissions and industrial profile, city planning and social welfare, R&D, innovation and sustainability policy |
| SISED | 3 | Security of energy supply, competitive energy market, environmental protection |

*Sourced from* [*Tools for Measuring Energy Sustainability: A Comparative Review*](https://www.mdpi.com/1996-1073/13/9/2366/htm#B104-energies-13-02366)*, used under* [*CC BY 4.0*](https://creativecommons.org/licenses/by/4.0/)*.* [*MDPI*](https://www.mdpi.com/)

* **Measurement of Waste Generated**

Establishing a consistent set of metrics and procedures for collecting data to monitoring and evaluation waste is the first step. Tracking the data helps in estimating the following:

* The quantity and composition of waste generated
* Waste removal costs
* Purchasing costs
* Waste prevention and recycling revenues
* Greenhouse gas emission reductions
* **Measurement of Carbon Footprint**

A carbon footprint of an organisation is the total amount of greenhouse gases (including carbon dioxide and methane) that are generated by its operations.

This is an interesting factor to be included in the study for organisations that have manufacturing units, emission from units, high travel bills, and high-energy consumption. A July 2019 paper by Climate Analytics titled ‘Evaluating the significance of Australia’s global fossil fuel carbon footprint’ states that Australia’s share of global CO2 emissions from domestic use of fossil fuels was about 1.4% of global fossil fuel combustion emissions in 2017. Australia is one of the highest per capita CO2 emitters in the world. On a per-capita basis, Australia’s carbon footprint, including exports, surpasses China by a factor of nine, the US by a factor of 4 and India by a factor of 37.

Many factors affect the carbon footprint in the workplace. Here is a list of initiatives that can be taken up at a corporate and individual level to make a positive impact on the levels.

* Switch to LED Lights
* Go paperless
* Take public transport
* Cycle to work
* Carpool
* Switch of electronics when not in use
* Enable power-saving mode
* Unplug chargers
* Swap from desktops to laptops
* Recycle waste
* Upcycle waste
* Use recycled products
* Switch to rechargeable batteries
* Energy-efficient appliances
* Use a microwave to heat food rather than a stove
* Use online newspapers and magazines
* Work from home
* Replace business trips with video conferencing
* Efficient heating and cooling
* Sustainable office furniture
* Recycle electronics
* Plant trees
* Using ceiling fans instead of air-conditioning
* Advocate meat-free day

## 2.2 Implement and Integrate Efficiency Targets with Other Operational Activities

Effectiveness and efficiency are partners of progress. The organisation should never stop pursuing efficiency measures. At the same time, the focus should firmly be on organisational effectiveness.

In a sustainability project, efficiency targets and operational activities go hand-in-hand. To define it, Operational efficiency is the relationship between the organisation’s output and input. When that ratio is healthy, then businesses will be able to cut unnecessary costs and increasing revenue. The operations manager must identify the baseline of operations, incorporate efficiency targets, streamline processes, review the improved operations, and incorporate the feedback into a Continuous Improvement cycle. The efficiency targets are met most effectively when they are incorporated into the operational framework and processes right at the strategy and planning stage.

The base line of operations in an organisation describes the resources required for its functions to run. It can also be taken as the current level of resource utilisation or a metrics for the start of the resource utilisation improvement project. Then, to achieve greater operational efficiency, the same output should be produced with less input. Efficiency can be calculated by dividing the output (consider all the elements that contribute to the output cost such as production, revenue, and sales among other things) by input (both internal and external resources, hours, and licences).

To calculate efficiency, it is important to identify key output and input variables that are determined by the performance indicators that reflect the health of an organisation.

Here are the steps that can be used to set efficiency targets and track them through the operational workflow:

1. Record your performance and compare it against industry standards. This will give a reference point to set efficiency targets and measure improvement.
2. Review the baseline of operations and set goals for them to align with the efficiency target.
3. Identify and understand the key players who will be pivotal in the functions to execute the goals.
4. Set the timeline it takes to achieve the goals and the deliverables at each stage.
5. Identify the bottlenecks that make that process slower in each step.
6. Remove those bottlenecks. The leadership team must collaborate and guide the team in the right direction.
7. Measure performance and compare it to the baseline operations to track improvements. Ensure that the quality of work is not reduced.
8. Track performance by creating a dashboard.

## 2.3 Support Team Members to Identify Possible Areas for Improved Resource Efficiency in Work Areas

Resource efficiency is about deriving maximum value from material and energy inputs by efficiently converting them into finished products or services while minimising environmental impacts.

Here are some insightful results from three studies conducted in Australia:

* The Ai Group research shows that for more than 90% of businesses, the energy costs are around 5% of the business’ costs.
* The ABS research suggests that material and water costs range from 10% to 50% of a business's revenue.
* The results of the Sustainability Victoria’s Smarter Resources, Smarter Business (SRSB) program (2012-2015) study that conducted more than 40 material assessments showed that manufacturer’s material costs are 30 to 80% of the production cost and many businesses this was higher than the labour costs.

These studies show that there is great potential for savings through resource efficiency for businesses. However, the area of the maximum impact is dependent on the business and the industry.

To improve resource efficiency, you must consult with all the stakeholders. People who run the business and the process will be in a good position to offer insights and then take on the new process to run them to attain efficiency targets. However, the planning team must work closely with the stakeholders to help them identify areas of improvement and give them tools to measure the metrics to make the improvements.

### 2.3.1 Identifying areas of Resource Efficiency

All departments of the organisation have a set of resources that they consume to deliver a product or service. When the resources are measured by the stakeholders in their functional groups by listing out their activities and input and output, it gives an organisation-wide perspective of the usage. This data is the benchmark information based on which the resource efficiency targets are planned.

For example, to calculate the resource efficiency of the marketing department of an organisation, consider one factor — it purchased 200 bundles of paper a month, the average wastage is 40%, and recycling is at 5%. This baseline measurement was given to the team, and they were asked to come up with ideas to improve resource efficiency and set up targets.

The suggestions for improvement by the team are listed in the table below:

|  |  |
| --- | --- |
| **Problem Statement** | **Solutions by the team** |
| There are multiple printers on the floor; when the team gave print orders, they were not sure which machine it went to, and hence, multiple print orders were given. | * The printers that were used less were removed. * People were mapped to a particular printer, and they could use only that one. * Digital copies were made of documents, so the need for physical prints reduced. * One-sided papers were made into note pads and left on desks for note-taking. This was to replace the purchase of notepads for the department. * The papers used on both sides would be given to the upcycling company to be made into papers covers and bags. * The recycled covers and bags would be used internally. |

The human factor is a key element in the success of a project or process. As mentioned earlier, it is essential to get inputs from all the stakeholders while designing a project. Specifically, in the case of resource utilisation, it is important to consult with the people running the process and using the resources. Their insights, inputs, and efforts play a crucial role in the success of the project and in achieving the targets.

To support teams in identifying solutions, setting targets, and implementing resource efficiency plans, the following steps must be followed:

## 2.4 Seek and Act on Feedback from Stakeholders on Implementation

Stakeholder ideas, concerns, and feedback are a valuable source of information. They will help the organisation identify and control external risks. They are also a valuable source for feedback for the project and a key link for the internal Continuous Improvement process.

The stakeholder should be consciously sought out over time to develop a constructive and productive relationship. This mutually beneficial relationship will help the organisation identify trends and challenges that will affect the business.

Stakeholder consultation during the planning and implementation of the project will help to:

* Identify and track needs and expectations
* Identify and track perceptions and attitudes
* Provide feedback on specific planned developments
* Evaluate implementations and actions

The feedback helps with the effective allocation of resources, the progress of the project, and roadblocks. Stakeholder consultation usually helps with the following:

* Consultation on specific developments, roadblocks, and projects
* Ongoing consultation to track and monitor stakeholder perceptions is a part of the Continuous Improvement Cycle.

Specific project-based consultation often gives insightful information at different stages of the project that can be critical for course correction and implementation. The feedback should always be shared with the management and planning, and implementation teams as it is critical for the success of the project.

Ongoing consultation is necessary to guarantee continued buy-in from stakeholders, understand areas of improvement, and ensure the organisation and its projects are in alignment with the expectations of its stakeholders. It can be a critical metric in the evaluation of the progress, a new idea, or direction.

**Benefits of stakeholder consultation**

Whatever the reason for conducting stakeholder consultation, there are some clear benefits:

* Informed decision-making that is in tune with those who will be affected by the project.
* Greater buy-in from the stakeholders and higher engagement/ownership; this, in turn, will lead to a greater chance of a successful implementation.
* Stakeholder consultation is a best practice that promotes transparency and meaningful two-way communication and recognises the importance of their contribution.

|  |  |
| --- | --- |
|  | **Further Reading**  Here is some additional reading material you can access.  [Tools for Measuring Energy Sustainability: A Comparative Review](https://www.mdpi.com/1996-1073/13/9/2366)  [Wastes - WasteWise](https://archive.epa.gov/epawaste/conserve/smm/wastewise/web/html/measure-progress.html)  [DuPont Tracking Water Performance: Metering and Metrics](http://gemi.org/water/businesscase.htm)  [1255: Hints and tips for improving resource efficiency in your business](https://www.epa.vic.gov.au/about-epa/publications/1255) |

|  |  |
| --- | --- |
|  | **Notes** |
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## Key Points: Chapter 2

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| --- |
| * To set effective sustainability targets, you need to ensure that you have baseline measures in place. * Sustainability targets should be set at three levels — basic, intermediate, and advanced. * While measuring water, three aspects need to be taken into consideration — input, effluent, and recycling. * The cost of waste includes the cost of purchase of the material, processing, and disposal. * A carbon footprint of an organisation is the total amount of greenhouse gases (including carbon dioxide and methane) that are generated by its operations. * Operational efficiency is the relationship between the organisation’s output and input, and when that ratio is healthy, the businesses will be able to cut costs and increasing revenue. * The efficiency target performance should be continuously tracked using a dashboard. |

## Activity 1: ‘True’ or ‘False’ Quiz

Let’s review what you’ve learnt from this Chapter. Read each statement below.

Tick ‘True’ if the statement is correct, and ‘False’ if not.

|  |  |  |  |
| --- | --- | --- | --- |
| **Statement** | | **True** | **False** |
|  | Sustainability targets should be set at the planning stage. |  |  |
|  | Companies can manage what they cannot measure. |  |  |
|  | The water is tracked as the number of litres per day or year and normalised with data on revenue. |  |  |
|  | A carbon footprint is the total amount of organic waste generated by business actions. |  |  |
|  | Baseline operations is the minimum resources required to run the operations. |  |  |
|  | Stakeholder consultation is a best practice that promotes transparency and meaningful two-way communication. |  |  |
|  | Energy usage is a key factor in the success of the project or process. |  |  |

## Activity 2: Fill in the Blanks

|  |
| --- |
| Fill in the blanks in the paragraph given below with appropriate words from the options provided |

|  |
| --- |
| **FILL IN THE BLANKS**  Sustainable practices are a great business       that also helps organisations save resources and money. In the sustainability framework, the       Principle is used for achieving the goals. In this framework, the triple pillars of social,      , and environmental performance are measured. When the same output is achieved with less input, then       efficiency is said to have been achieved. The       should be regularly consulted for feedback. |

|  |  |  |
| --- | --- | --- |
| **SELECTION** | | |
|  | | |
| Operational |  | Triple Bottom Line |
|  |  |  |
| Differentiator |  | Stakeholders |
|  |  |  |
| Economical |  |  |

## Activity 3: Explain the Concept

|  |
| --- |
| Explain Carbon Footprint and list ten things that impact it. |
|  |
|  |

## Activity 4: Role Play

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| --- |
| **SUSTAINABILITY 101**  **DJRV MARKETING**  DJRV Marketing is a medium-size business that works on promotions and communications for multiple clients. Most of the clients in the portfolio have high volume, low margin products that require high visibility promotions. DJRV Marketing’s target audience is primarily young adults in their late teens to working professionals around 30 –35 years. They have to print a huge volume of pamphlets and brochures to achieve recall and a 20 –30% conversion rate.  You are a marketing executive at DJRV. Some of your daily tasks include filing marketing reports to your supervisors and clients, drafting the plans for new promotions and campaigns, briefing the creative team on the latest campaign, preparing roll-out and dispatch schedules for the marketing plans, coordinating with the creative team, printers, and the logistics team to ensure that the marketing material reaches on schedule, keep a record of feedback from the market and the clients through the customer satisfaction surveys and summarising this into a report for management action.  Your supervisor comes to you this morning and asks you to design a marketing plan for a client called Am1zeus International to promote 20 products to an audience between ages 15 –23 years. Am1zeus wants to be seen as a green company. They want eco-friendly and economical options to promote products that fall broadly under three categories:   * Clothes * Accessories * Jewellery   Am1zeus International’s communication style parameters have been placed in the shared folder under **Client Style Guide/Am1zeus International**. This folder has all the material required to design their communication, in addition to samples of all previous communications.  The client’s new range with photographs and details can be accessed from the shared folder under **Am1zeus International Products/New Range 2021**. |

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| **Role Play Activity**  Role-play the scenario with two volunteers to list out the challenges of the current marketing/promotion plan and discuss effective, eco-friendly options while demonstrating the practical skills listed in the checklist below.  Perform this activity while being observed by your trainer. If your trainer is not available to directly observe you, you may video record the role-play activity and submit the recording to your trainer.  **Your role**  For this activity, you will take the role of the marketing executive.  **The volunteers’ role**  For this activity, the volunteers will take the role of:   * Supervisor * Client representative from Am1zeus International. |

Chapter 3: monitor performance of sustainable work practices

The third angle of the sustainable work practices triangle is monitoring. While strategy and planning set the strong foundation, the roof of your structure is your monitoring process. It ensures that the building is protected from the elements and continues to stay strong.

In a sustainability workplace project, evidence matters. Data offers insights into the resource usage patterns, waste generated, costs of purchase and disposal. As discussed in the earlier chapters, the data will help design the framework for a sustainable workplace and set targets. Hence, this evidence needs to be gathered methodically using a variety of resources, including:

* **Supply records and invoices**

These can be used to gather data on the resources and material purchased by the organisation, with details on the source, specification, quantities, and cost. Some examples of the measurable criteria are electricity, water, production input material, and stationery, among others. There are additional costs involved in the lifecycle of the process/product, such as marketing communication expenses. Costs like these can also be measured through supplier bills.

* **Questionnaires and surveys**

Surveys are used to obtain data about a service, product, or process from a defined audience. It collects data from a targeted group about their opinions, preferences, priorities, behaviour, response to proposed or executed change, or employee satisfaction over time.

Common types of surveys are written questionnaires, face-to-face or telephone interviews, focus groups, and electronic (e-mail or website) surveys. This information is important in measuring the effectiveness of the second pillar of a sustainability project, the human factor.

* **Internal and external audit documents**

The data in audit documents help provide consolidated and verified data over a period of time. Different types of audits provide meaningful insights into organisational processes such as:

* *Internal audits*

These audits commonly used for information on the following:

* Proposed improvements
* Monitor effectiveness
* Ensure compliance with laws and regulations
* Review and verify financial information
* Evaluate risk management policies and procedures
* Examine operation processes
* *External audits*

A third party that is not connected with the company or its employees conducts these audits to verify the accuracy of the organisation’s records. Some audits are conducted by both the internal and external auditors, and the former ensures that processed are followed and compliances met, while the latter verify the accuracy of the data. Some external audits include:

* Financial audits
* IT audits
* Compliance audits
* **Visual confirmation**

Some of the factors in the sustainability project require visual confirmation to measure compliance. Some examples of visual calculation include how many systems and lights have been switched off by employees at the end of the day or how effectively waste has been segregated or calibration of systems.

Using these resources to collect data at the start of the project and then at pre-determined intervals, the health of the project can be measured in qualitative and quantitative terms. In the following subchapters, this aspect will be discussed in detail under Process and Performance monitoring.

## 3.1 Assess Outcomes Using Monitoring Method Developed

There are two main components of monitoring — process monitoring and performance monitoring. Process monitoring evaluates the various steps and stages of the program to assess for effectiveness and variance. Performance monitoring gathers data to evaluate progress against the set goal.

Process monitoring evaluates the critical steps in the process, analyses its effectiveness, identifies the roadblocks, and recommends remedial actions. It ensures that the project stays on course and is not derailed due to implementation issues. In short, Process Monitoring is directly related to projective objectives.

Performance monitoring is more geared to the numbers with relation to a pre-set target. It focuses on the physical, financial, and logistical aspects of the project.

For example, Performance Monitoring looks at the number of bundles of paper used, the percentage of reduction in the electricity bill, and the number of training sessions done. Process Monitoring, on the other hand, evaluates the effectiveness of the documentation process that requires less paper, the process of switching off the lights and air conditioners in the office, and the quality of training and community involvement.

Here is a comparison between Process and Performance Monitoring

|  |  |
| --- | --- |
| **Process Monitoring** | **Performance Monitoring** |
| Concerned with the key processes of the project | Concerned with physical inputs and outputs of the project |
| Measures results against the project objectives | Measures results against the project targets |
| Flexible and adaptive | inflexible |
| Continuously testing of key process | Indicators/targets identified in the beginning |
| Evolves during the project | Remains static |
| People-oriented and interactive | Data-oriented |
| Identifies the reason for the problem | Focuses on the result of the problem |
| Self-evaluating and correcting | Is not self-evaluating and correcting |
| Measures both quantitative and qualitative indicators, but the main focus is on qualitative indicators | Measures both quantitative and qualitative indicators, but the main focus is on quantitative indicators |

### 3.1.1 Process Monitoring

In the previous chapter, you looked into how the Process Document was prepared after studying the problem statement, creating the strategy to overcome the problem, and coming up with the implementation plan and the process for the rollout.

Process Monitoring evaluates the effectiveness of the rollout in the community and gives continuous feedback about emerging issues and roadblocks faced by stakeholders. It considers the wider socio-economical context to give constructive feedback to the decision-makers.

**A Five-Step Approach to Implementing Process Monitoring**

To put an effective monitoring process in place, the following five steps are a good place to start:

* 1. **Establish process monitoring**
* Identifying the right candidate to monitor the process. In internal projects, it would be prudent to identify candidates who have a stake in the project to take on this role. If a new talent is hired, then the person should have subject matter expertise and experience in project implementation and monitoring. A supervisor will be required to step in case of crisis or conflict. Team members with experience in data collection, collation, and analysis are critical to the team.
* Effective training of the monitoring team is crucial. They need to understand the scope of the process, methodology of collecting, collating, and validating the data.
* The monitoring team should have good working relations with the other teams in the project so that the data analysis, feedback, and recommendations are seamlessly communicated to the planning and implementation teams to ensure a smooth course correction or the resolution of the issue.
* The scope of the process monitoring should be clearly defined to enable the audit team to understand what information needs to be collected and when. The feedback mechanism, frequency, and escalation points also need to be defined.
* Documentation and information should be recorded meticulously and shared with the various team and stakeholders in an easily readable and usable form. The results can also be shared with the larger community/organisation in the form of newsletters, articles, or case studies.
  1. **Select key project processes and indicators**

This is a core process of the monitoring cycle that involves:

* Collecting data relevant to the project process, its outcome, project areas, and its community and stakeholders.
* Discussing the roadblocks and issues with key people to get an in-depth and broader perspective of the challenge.
* Using the existing information to analyse the issue.
* Selecting key processes: The key processes that need to be monitored should be selected. Processes that are linked to the project cycle and objectives at every stage should be selected. For example, the three processes could be Problem Identification, Planning, and Implementation. The number of processes selected should be limited.

In case the project experiences problems or bottlenecks, then processes that were previously not considered for monitoring can be added to the list. For example, there was a roadblock in a project where the reduction of paper consumption was to be achieved through digitisation of the work process. The stakeholders of the unit went on protest; hence, there was a problem with project implementation due to the conflict. Process Monitoring should investigate to understand the nature of the conflict, how it affects project implementation, and how to solve it.

* 1. **Observe key processes**

It is important to understand that monitoring has its limitation because people have inbuilt biases that predispose them to certain things and prevents them from seeing others. Therefore, the monitoring staff must undergo rigorous training to identify and minimise biases and train people to see, observe, collect, and analyse qualitative data objectively.

* 1. **Reflect on/analysing findings**

The data and information collected should be rigorously analysed, and the findings mapped to the objectives and problem statements of the projects to see if the parameters have been met and the variances have areas of failures and successes have been identified. These outcomes should be meticulously documented and the results shared with the stakeholders.

* 1. **Follow up actions**

The monitoring loop can be completed with the feedback. The team should make its recommendations to the relevant project group along with the outcome that can be expected with the proposed change.

### 3.1.2 Developing Process Monitoring Indicators

The variables that measure the change in an activity or situation over time are called indicators. They are a useful tool for monitoring the progress of a project.

There is a three-step method for identifying indicators, as discussed below:

1. **Define Project Objectives and Activities**

The Logical Framework Analysis (LFA) is used to show the logical relationship between project objectives, activities, and outputs.

1. **Ask Questions**

It is important to design a questionnaire that covers the objective, activity, and output. The team must agree upon what information needs to be collected, from where, by whom, and how often.

1. **Identify Indicators**

This difficult process needs to be done in conjunction with all the teams on the project. There will be multiple ways to measure different indicators. However, one needs to identify the measures best aligned with the objective. Additionally, as the project’s environment and activities change, the indicators may also change over time. This necessitates that indicators should be reviewed periodically to ensure that they remain relevant.

Expanding on the example given earlier, the sustainability objective of the organisation was to decrease the consumption of paper by 40%. To achieve this goal, it was decided that the company would integrate its financials, supply chain, operations, reporting, manufacturing, and human resource activities using a cloud-based ERP system. The successful implementation of this system will ensure that the sustainability objectives are met. Hence, in monitoring the process, it is important to ensure that the implementation steps are achieved. In the case of roadblocks, the process owners, ERP consultants, and IT team should be consulted through one-on-one discussions or group discussions to identify the issue and resolve it.

In a process effectiveness study, the extent to which planned activities (run rate) and planned results (objectives) are achieved is measured. For example, the objective of the organisation is to produce and ship 2000 units a day with a 0.25% rate of defects. At the end of the week, the production records showed that 2000 units per day had been achieved but fell short of the planned result, as there was a 2.5% defect rate. Hence, the production fell short of its delivery rate. In this case, the process monitoring discussion will include a discussion of current operations, the reason for the defect rate and opportunities for improvement. Inputs from these monitoring discussions, feedback, and suggestions will help put the process back on track.

## 3.2 Document and Communicate Outcomes to Key Personnel and Stakeholders

The findings of the monitoring should be effectively presented and communicated to make sure that the data, analysis, research, and the feedback loop is completed. This step ensures that all the teams are aware of the information, feel a sense of buy-in and ownership to the process, and can effectively act on the feedback.

As mentioned in the earlier chapters, the human factor is critical to effective implementation. Hence, the communication should be effectively packaged as documents, mailers, social media posts, or meeting communique to be shared with both external and internal stakeholders to help them stay connected to the process/project. The tools used to communicate with the stakeholders will be further discussed in this subchapter.

The Monitoring findings can be presented to the stakeholders in the following ways:

* **Informal and Formal Meetings**

These meetings can be called by any of the teams to discuss the project. These meetings are very important in facilitating the flow of information, promoting discussions and clarity. Formal meetings can also be organised to disseminate information to all the stakeholders.

* **Field Visit Reports**

These contain critical reports on important project processes and progress milestones. These reports are important documentation from the historical perspective of the project lifecycle.

* **Process Monitoring Working Group Meetings**

These meetings are a forum for the Monitoring team to discuss their data with the Project Management/Implementation team.

* **Field Notes**

External consultants usually prepare these if they are engaged in the project. They have an outsider’s perspective of the project.

* **Progress Reports**

This report presents and discusses different milestones of the project, either monthly or quarterly. These are shared with key internal or external stakeholders.

* **Supervision Missions**

These are undertaken by key stakeholders to visit and study the progress of the project. Key findings and progress reports are shared with them.

The documentation and presentation methods mentioned above are targeted at key stakeholders who need to take definitive action on the outcomes. However, there is a larger audience in an organisation that will be impacted by the results of the project and can directly or indirectly influence the outcome. Information about the project needs to be broadcast to them at regular intervals through various channels like town hall meetings, emails, newsletters, websites, and the company’s social media handles. This will smoothen out the path of implementation.

## 3.3 Identify Changes Required to Targets and Tools From Strategies and Improvement Plans

The sustainability project can be managed and monitored using two key methods – Change Management and Continuous Improvement process. The former is used to facilitate significant or drastic change in the organisation, usually associated with the start of a new project. The latter is associated with project maintenance. However, both change management and continuous improvement process are inextricably interwoven as many of the components are linked.

Change management is used to describe and implement change in both the internal and external processes of the organisation. A structured approach to change management is critical to ensuring a smooth transition and minimal disruptions.

A well-planned Change Management process smoothly drives the successful adoption of change. It allows all the stakeholders to understand the change criteria, commit to the shift and work effectively. Without effective change management, the organisation's transition can be rocky and expensive in terms of both time and resources.

In the current dynamic marketplace, change is an integral part of the organisation's lifecycle that enables it to adapt to the shifting paradigms of its business environment, technology or to improve its efficiency and profitability metrics. Hence, there are two general goals of organisational change:

* Adapting to an environment
* Transforming behaviour, systems, and processes of the organisation's stakeholders.

### 3.3.1 Change Management:7 Main Steps

Changed management needs to be planned and detailed to cover human, technology, and social factors to enable successful implementation. The following steps are a useful guideline for planning:

* 1. **Identify the need for change**

The Strategy Committee or Management Group should conduct an analysis and discuss the external and internal forces that trigger the need for change. The information required for the discussion should be gathered from external and internal environments and systems. A debate about the pros and cons of the objective and impact of the change must be initiated. A clear statement of objectives will facilitate planning strategies of change, determine the time, pace, and quantum of change.

* 1. **Determine the elements to be charged**

Identifying the elements that need to be changed is the next step. The elements could be structure, technology, and people. Structural changes include department realignment, job design, the span of control, integrations like technology upgrade, and change in production techniques and so on. Changes in organisational members are expedited through modification in their attitudes, behaviour, and interactions.

* 1. **Plan for change**

The planning stage involves arriving at decisions for questions such as when and how to introduce change, who will introduce and spearhead the change, who will be the stakeholders, and who will be affected by the change. It is imperative that the resources for change are available, the timing is favourable to the organisation, and the stakeholders are receptive to the change. It is critical to prepare the change agents for the challenge on hand and the communication of change, using either persuasion or coercion to roll out the plan to all the stakeholders.

* 1. **Conduct a force-field analysis**

Two types of forces are at play during a period of change — the driving forces in favour of the change and the restraining forces that oppose change and prefer the ‘status quo’. The strength of these forces should be estimated accurately if the change is to be introduced effectively.

* 1. **Ensure stakeholder participation**

The proposed change should be discussed with the stakeholders to convince them about the rationale behind the change and attempt to garner their buy-in. This will ensure that it is voluntary participation and not something they are forced into. Participation gives the people involved a feeling of importance or purpose, and they are likely to be more committed to the change.

* 1. **Implement the change**

Communication regarding the change should be a two-way road. Management should use multiple channels to effectively communicate, like conferences, meetings, town halls, update bulletins and newspapers. The information should percolate top-down with managers at every level sharing information with their teams. Feedback should be actively encouraged, and the stakeholders should be allowed to ask questions and gain clarity on the proposed change. To successfully implement the change, the teams should be trained in the new processes, workflows, skills, and behaviours. Effective leadership, persuasion, incentives, and punishment should be used to usher change.

* 1. **Review**

A periodic review is essential to study progress in the change management process to help identify and solve problems and detect variances over time. The feedback and information from all departments impacted by the change efforts must be continuously monitored to ensure effective change implementation.

The table below shows the ten principles of Change Management.

| **Principles** | **Description** |
| --- | --- |
| The Human Side | Prepare the groundwork for the people who will experience the change by introducing the concept, answering questions, teaching skills and preparing them for the new responsibilities. |
| Change Starts from the Top | During times of change, people look to Senior Management for guidance, who should lead from the front. |
| Involve all levels | Change impacts the whole organisation. Hence, every level should be involved in the communication and transformation. Leaders need to be identified throughout the company to cascade the change. |
| Make a formal case | A formal presentation about the change should be made to the stakeholders so that they can understand the need and rationale for the change, the commitment and capability of the leadership to lead the change, the roadmap for the process and the changes required from the individual. |
| Create ownership | The leadership should actively work at all levels to creating a sense of ownership and commitment towards the change. |
| Communicate the message | Change leaders should not take any aspect of the process for granted and initiate proactive and continuous communication with their teams. |
| Assess the cultural landscape | The cultural predisposition of the stakeholders needs to be studied to identify patterns and biases that can be potential roadblocks for the project. |
| Address culture explicitly | Any concerns and biases that are uncovered by the cultural study should be directly addressed before the start of the project. |
| Prepare for the unexpected | Prepare for all scenarios and remain agile to handle any unexpected upheavals. |
| Speak to the individuals | It is important to speak to all the stakeholders. However, it will be prudent to identify individual influencers and speak with them separately. |

*Based on* [*10 principles of change management*](https://www.strategy-business.com/article/rr00006?gko=dab72)*.* [*strategy + business*](https://www.strategy-business.com/)*.*

While change management is key to establishing new processes, the organisations that want to stay on top of their game in a dynamic marketplace must make sure that their products and processes keep pace with the changing market by following the continuous improvement process. This five-step process sets in place a periodic review, then based on the data and the feedback, appropriate action is taken. The five steps are as follows:

* 1. **Plan**

This is the phase where the strategy, description, framework, processes, metrics and implementation rollout are detailed. This is the roadmap for the product/process implementation.

* 1. **Implementation**

This is the action phase where the product and processes are rolled out. Here, it is important to have the relevant functions like training and stakeholder’s communication in place to support the implementation.

* 1. **Measure**

The metrics that were selected and designed during the planning phase are used in this phase to measure the effectiveness and progress of the plan. This is a data-intensive phase in which it is collected from the sources as planned and analysed and recommendations prepared.

* 1. **Feedback**

The prepared recommendations are then presented to the key stakeholders such as the planning and implementation teams, senior management and/or the external stakeholders who should be kept in the loop.

There are many formal and informal formats in which feedback can be given:

* One-on-One feedback – face to face discussion
* Group feedback – This can be in the form of group discussions
* Written feedback – questionnaires, surveys, emails, dual card feedback (positive and things to change), sealed envelopes
  1. **Integration**

The recommendations are then analysed and incorporated into the process or product workflow. The positive, corrected action becomes a part of the improved structure.

Below is a diagrammatic representation of the Continuous Improvement Process.

The beauty of the Continuous Improvement Process lies in self-correction and adjustment. When the project runs into roadblocks, they can quickly be identified and overcome. Even in the case of new requirements, the feedback system can be used to get inputs on the integration process, then be prioritised and incorporated into the project.

The periodicity of the feedback should be incorporated into the plan of the project — once in three or six months, or it can be planned at the middle of each stage of the project. The periodicity of the feedback depends on the requirement of the project — in some cases or stages, more frequent feedback might be required at others after a longer interval.

## 

## 3.4 Promote Successful Strategies in Development of New Efficiency Targets

A project involving data collection, analysis, strategy, planning, implementation, and monitoring is followed by analysing results and setting new efficiency targets to realign the project to the initial or enhanced goals. At each step of the way, it is essential to celebrate the progress. Often, through the course of the project implementation, the situation or parameter changes. In that case, it becomes imperative to realign the efficiency targets.

Before realignment, it is important to review the status of the project progress using the following checklist:

### 3.4.1 Implementing Change Management and Continuous Improvement Process

Change management lays the groundwork for the transformation, while continuous improvement is an integral part of this process that encourages the active monitoring of the process and targets at every stage, identifies improvements and roadblocks, gives feedback with recommendations, and implements the changes to ensure successful implementation.

Major organisational changes require multi-level cooperation. A well-defined and structured approach to change management is critical for a smooth transition and implementation with minimal disruption.

Usually, changes fail due to the human factor in the equation. The planners did not take into consideration human emotion and reaction to change in their routines. Effective communication is one of the key factors in successful change management. All stakeholders must understand the ramifications of the project, see its progress, and cascade change at every stage.

You can implement Change Management by following these steps:

|  |  |
| --- | --- |
| Icon  Description automatically generated | **Notes** |
|  | |

## Key Points: Chapter 3

|  |
| --- |
| * Two types of monitoring are done in a project: process monitoring to ensure that project is being implemented as per the defined plan and performance monitoring to ensure that the targets and milestones are being met. * Process monitoring evaluates the critical steps in the process, analyses its effectiveness, identifies the roadblocks, and recommends remedial actions. It ensures that the project stays on course and is not derailed due to implementation issues. In short, Process Monitoring is directly related to projective objectives. * Performance monitoring is more geared to the numbers with relation to a pre-set target. It focuses on the physical, financial, and logistical aspects of the project. * Indicators are variables that measure the change in an activity or situation over a defined period. * The presentation and effective communication of monitoring findings are important to ensure that the data, analysis, research, and the feedback loop is completed. This step makes sure that all the teams are aware of the information, feel a sense of buy-in and ownership to the process, and can effectively act on the feedback. * Change management is used to describe and implement change in both the internal and external processes of the organisation. A structured approach to change management is critical to ensuring a smooth transition and minimal disruptions. * Continuous Improvement Process involves continuous and periodic monitoring of the project to enable self-correction and adjustment. When the project runs into roadblocks, they can quickly be identified and overcome. |

## Activity 1: ‘True’ or ‘False’ Quiz

Let’s review what you’ve learnt from this Chapter. Read each statement below.

Tick ‘True’ if the statement is correct, and ‘False’ if not.

|  |  |  |  |
| --- | --- | --- | --- |
| **Statement** | | **True** | **False** |
| Icon  Description automatically generated | Process monitoring and performance monitoring are equally important. |  |  |
| Icon  Description automatically generated | Performance monitoring indicators evolve during the project. |  |  |
| Icon  Description automatically generated | Process Monitoring evaluates the effectiveness of the rollout in the community and gives continuous feedback about emerging issues and roadblocks faced by stakeholders. |  |  |
|  | Performance Monitoring is measured against the project objectives. |  |  |
| Icon  Description automatically generated | Communication of monitoring findings is important to ensure that the data, analysis, research, and the feedback loop is closed out. |  |  |
| Icon  Description automatically generated | Including change management as a part of the project plan is an additional benefit. |  |  |
| Icon  Description automatically generated | The definitions, processes, indicators, and measures should be finalised at the stage of implementation. |  |  |

## Activity 2: Complete the Process

|  |
| --- |
| Project implementation is a five-stage process that is the key to the success of the implementation. Arrange the different stages in order of the execution. |

|  |  |  |
| --- | --- | --- |
| **SELECTION** | | |
|  | | |
| The data for the various indicators should be meticulously collected, collated, and analysed |  | Suggestions should be integrated into the process |
|  |  |  |
| Achievements acknowledged and celebrated |  | The objectives, definitions, data collection, tools and measures should be completely planned |
|  |  |  |
| During Implementation, the performance and process indicators are the guidelines |  |  |

|  |  |  |
| --- | --- | --- |
| **SEQUENCE** | | |
|  | | |
| Sequence 1 |  | Sequence 2 |
|  |  |  |
| Sequence 3 |  | Sequence 4 |
|  |  |  |
| Sequence 5 |  |  |

## Activity 3: Case Study

|  |
| --- |
| **SUSTAINABILITY 2025**  **AM1ZEUS INTERNATIONAL**  Am1zeus International is a clothing and accessories company that manufactures, distributes, and retails products for adults between the ages of 20 to 40 years. Their range has both casual and formal wear. The company has four factories manufacturing its products, out of which three focus on textiles and one on accessories. To cater to the continuously changing design trends and styles, the company has a design studio that hires 2000 designers. The products are all stored centrally in the company’s large warehouse facility. This facility also stores mass-printed catalogues, leaflets, and other promotional material. It also becomes the storehouse for outdated or extra marketing material.  In the last couple of years, Am1zeus’ brand is increasingly being diluted in a crowded marketplace. Many clone products available are creating confusion in the marketplace. To regain lost ground, Am1zeus International has decided to rebrand itself on the green product platform and launched a sustainability initiative covering all aspects of its workflow from sourcing to manufacturing, distribution, logistics, and marketing.  The key initiatives launched as a part of the sustainability project:   * Sourcing organic cotton and alternate fibre for weaving * Cultivating local vendors for supplies * Running the design centre completely on renewable energy * Creating an open floor layout for the design studio * Moving towards digital media and formats * Moving from central warehousing to regional storage units. * Opting for an ERP system to integrate all processes in the company * Redesigning the packaging with sustainable material and using less material * Using recycled material for packaging. |

To support the implementation and measuring, Am1zeus has selected the following metrics:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sustainable Growth** | | | | |
| * Reduce carbon footprint by 20% by 2025 * Reduce energy use by 15% by 2025 * Reduce water use by 15% by 2025 * Achieve 80% waste diverted from landfills by 2025 * Achieve 100% recyclable or compostable packaging by 2025 | | | | |
| **Indicator** | **Unit** | **Outcome** | **Remarks** |
| Fuel consumption | GJ |  |  |
| Renewable energy use | GJ |  |  |
| Specific CO2 emissions | gCO2/KWh |  |  |
| Waste generated | T |  |  |
| Waste recycled | T |  |  |
| Water consumption/Overall production | M3/KWh |  |  |
| Recyclable or compostable packaging | % |  |  |
| **Responsible sourcing** | | | | |
| * Achieve 100% organic cotton by 2025 * Achieve 100% sourcing of alternate fibre for weaving cloth by 2025 * Achieve 40% sourcing from local suppliers by 2025 | | | | |
| **Indicator** | **Unit** | **Outcome** | **Remarks** |
| Certified organic cotton sourced | % |  |  |
| Alternate fibres (like jute, bamboo, flax, hemp) | % |  |  |
| Purchases from local suppliers | % |  |  |

|  |
| --- |
| Question 1: List any two sourcing initiatives that Am1zeus has taken towards their green goals. |
|  |
| Question 2: Discuss any two initiatives that were taken to cut energy consumption. |
|  |
| Question 3: List any two initiatives that have been taken to decrease waste. |
|  |

Summary



**‘The world rewards those who take responsibility for their own success.’**

Curt Gerrish

In this manual, you have been presented with an overview of ways to implement and monitor environmentally sustainable work practices and the skills and knowledge required to consult with stakeholders to develop, implement and evaluate a sustainability project in an organisation. Sustainability is no longer just a buzzword or a feel-good factor. It is an integral philosophy that guides an organisation’s policies and practices to be responsible towards society and the natural environment while contributing to economic development.

The process for implementing a sustainable work environment for your organisation includes the following:

* Identifying the context for a sustainable workplace, specifically the drivers relevant for the organisation, qualifying and quantifying them to allow you to make informed choices. Identify, address, and discuss the barriers to a sustainable workplace. Study the national, regional, and local legislation, regulations, and local industry and global environment and compliance standards.
* The next step in the process is to draft a corporate sustainability plan, define, and describe processes, targets, measurement metrics, and communication plan. It is critical to engage with key stakeholders systematically to develop sustainable workplace objectives, strategy, and processes. The plan should then be communicated to all the stakeholders with concerns addressed and buy-in secured. The sustainable workplace project then needs to be carefully integrated with the organisational workflow.
* Once the sustainable workplace plan is under implementation, a monitoring and evaluation framework needs to be implemented for continuous tracking of progress and periodic assessment of performance indicators against stated objectives and targets to determine the success of the project. The outcomes should be measured and analysed, and recommendations should be made to the key stakeholders for integration with the project.

References

A computer sitting on top of a desk

Description automatically generated

These are some references that we feel may be of assistance to you in completing the Assessment for this unit of competency:

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