

# GREEN POLICIES & FINANCIAL SUSTAINABILITY TRAINING PROGRAM IO2 – A6

Module 5





# Module 5

# Contents

Introduction	3
Unit 1: What is Process Approach?	3
1. Definition of the concepts Environmental Business practices and Process Approach	3
Process Approach	3
Environmental Business practices	8
Setting Green Objectives.	9
Unit 2: Environmental Business Practices1	4
1. Internal Adjustments	14
What is a green team?	16
How to start a green team?	17
What is the purpose of creating a green team?	17
2. Utilization and enhancement of resources	22
Energy efficient lighting.	22
Water conservation	25
Strategy Development	25
References:	7





## Introduction

This module provides key points to SME's consultants to help decision makers initiate change within their organization and provide an insight on **Process Approach**. Adapting processes according to EU (European Union) climate objectives and making efforts to make a company harmless to the environment requires changes to its practices. However, change often represents a challenging step for SMEs' decision-makers.

This is the reason why this module focuses from its first unit on reinforcing the consultants' knowledge on what is Process Approach. Additionally it defines the concepts of environmental business practices in order to be feasible and effective when setting green objectives for SMEs.

The latter part of this module consists of how the environmental business practices can be implemented with internal adjustments and their utilization and enhancement of resources.

# Unit 1: What is Process Approach?

The content of this module is addressed to consultants who cooperate with companies and enterprises that want to adopt management systems to transform their enterprises into greener ones and more environmental friendly.

#### 1. Definition of the concepts Environmental Business practices and Process Approach.

#### Process Approach

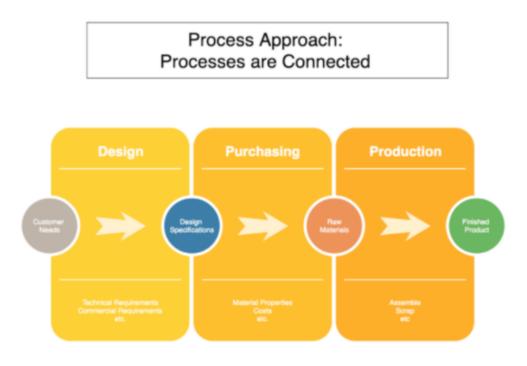
A process approach means that an organization focuses on its activities based on a system of processes required to implement their products or services rather than focusing on the people or the products. A process is an aggregate of actions required to produce outputs by providing the proper inputs. Each of process outputs can be another's process inputs within an organization or/ and the end product for the user.

Process approach can also be seen as a system of highly integrated processes instead of a small set of functions or departments. According to ISO 9001 a Quality Management System and ISO 14001:2015 an Environmental Management System requires seven quality management principles. One of these is the process design. Implementing the process design principle allows the organization to get consistent results, with the understanding that the end product/service is a system of processes that are interrelated and





work together. Process design can be implemented by planning, analyzing, designing and modelling, operating, monitoring and controlling and improvement of the organization.



*Figure 1. The connection between processes.* [1]

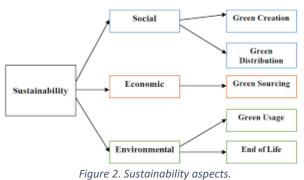
Moving along it is important to relate the business process management with sustainability. Combining these two leads to the creation of a green business process management which is the activities implemented to monitor and reduce the environmental impact of the organization's processes in terms of design, improvement or operation. This can also mean the cultural change in the infrastructure and the mindset of the organization.

After identifying the business processes, then the Environmental Management System (EMS) can be applied. Any environmental management system assures that the organization complies with the environmental legislation. There are six main requirements in understanding the organization's processes and implement the ISO standard 14001:2015. Theses requirements are:





1. To determine environmental aspects. An Environmental aspect is the connection between the organization and the environment. In other words it determines how an action within an organization interacts and affects the environment. Determining the environmental aspects can be difficult. The whole system of multiple consists interconnected processes and can be complex therefore, the company has to



identify every process, the interaction between the processes, their effect towards the environment and each process's environmental footprint.

- 2. To determine the competences by linking two factors. The first factor is about determining the competences of the organization's working environment. The latter factor is about determining the competences needed to carry out processes. Combining these two factors will show the certain competences needed by the employees when producing products and/or services in order to avoid a negative environmental impact.
- **3.** To identify operational controls. This requirement is about understanding the processes and identifying the environmental controls that are necessary for the organization's operations. This way an organization's environmental performance improves while improving the performance of the processes by following both the quality and environmental process instructions.
- 4. To monitor and measure. Each process shall be monitored and measured in both environmental and quality perspectives to ensure everything is according to plan and design.
- 5. To carry out an internal audit. Auditing is about reviewing the procedures of the management system applied within an organization and the outputs of a process. These outputs should be compared to the expected outcomes according to the process plans. Performing an internal audit shows whether implementing changes is needed.
- 6. To perform corrective actions. As mentioned above, once all quality and environmental requirements are followed in every process then the process complies with the standard followed. Any problems that occurs during the audit should be addressed. For this matter a process shall be updated or changed to resolve the problems.

Using process design makes it easier to evaluate the environmental compliance because defining environmental related elements such as environmental aspects and implementation actions is essential to become more comprehensible to SME's decision makers.

Within an organization there are plenty of processes running at the same time to implement and achieve all targets set successfully. According to the ISO 9001 Standard in order to manage and improve processes an organization needs to firstly identify the key processes. Secondly, the standards as of these processes need to be defined. Furthermore, these standards need to be measured and evaluated so a system for measurement and evaluation can be decided. Moreover, the organization needs to document the approach in achieving the desired quality as determined. Last but not least, the organization shall continuously try to improve and incorporate a **Plan-Do-Check-Act** cycle.



NO. 2020-1-KA204-079048



These methods are often implemented when developing a new or improved design of a process, product or service. The cycle consists of four actions: recognize a given opportunity to **Plan** a change, carry out a study in order to **Do** the change and test it, analyze the results and **Check** the outcomes the test provided, take Act based on the results. Given the results, the proposed change may or may not provide the expected



Figure 3. The Plan-Do-Check-Act cycle.

outcomes. Once this method has been implemented there are two possible outcomes. In the first possible case where the proposed change generated the expected result, the cycle will go through again in order to make new improvements. In the second possible case, where the proposed change did not generate the expected outcome, the cycle will commence again, but this time using a different plan.

Every process should have the required inputs and outputs determined. Furthermore it is important to identify the resources used by the processes and ensure their availability. To ensure effective operation and control of the processes the organization needs to apply criteria and methods defining the sequence of interaction between them. Finally, the evaluation of effectiveness and success can be performed by a **SWOT analysis** (Strengths, Weaknesses, Opportunities and Threat) and implement changes for further improvement taking into account the results of this analysis.

In some cases an organization's system of processes could be complex. In order to simplify that system, process maps could be created. These maps help in showing how processes interact with each other. it is beneficial to visualize how the system breaks down into sub-processes for better explanation.

A SIPOC diagram is an example of a road map. The acronym SIPOC stands for Suppliers, Inputs, Procedures, Outcomes, and Customers. This map is applicable to only non-complex and linear processes.

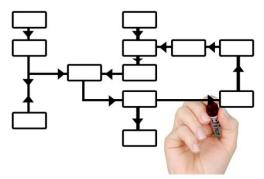


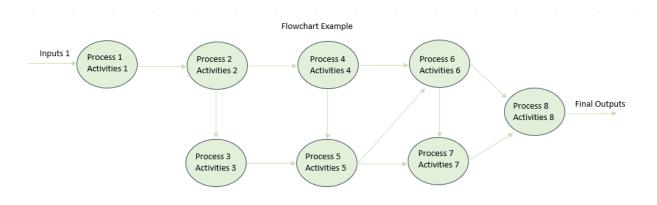
Figure 4. Development of process maps.

Another type of a road map is a **Turtle Diagram**. This diagram extends the SIPOC diagram by providing attachments to show the links of processes interacting with the relevant documents. A turtle diagram can also identify the equipment and owners as well as the evaluation and quality assurance criteria.

The **Swim lane flowchart** can also be useful to the infrastructure of the organization. This flowchart identifies all the individual actions and responsibilities depending on the process. This is particularly useful to all members of an organization to interact with each other in order to work on a process.







*Figure 5. Example of flowchart, simplifying the system of processes in an organization.* 

When applying the business process approach the organization gains several benefits. Some of them are in terms of efficiency, effectiveness and agility. Efficiency is often the first benefit that can be observed. This is due to the high level of waste because of the manual work force, the poor communication between departments and the inability to control the whole progress. Efficiency is typically measured by the time saved on the workload of a process. This can help an organization realize that controlling a process can bring more capabilities and develop the second benefit of process, its effectiveness of the process. Effectiveness can be identified as the ability to handle changes on the processes faster and better as well as making the execution of tasks more consistent. Last but not least, the third benefit that process approach provides is agility. Agility, is a company's ability to comply with changes in its environment. This changes can be



Figure 6. Sustainability benefit.

either internal or external, as costumers may change their demands and new possibilities may arise. With the process approach the changes in the organization can be faster and more controlled to fulfill the new demands. Other benefits from the business process approach can be the

- Continuous process improvement
- Process quality improvement
- Cost reduction
- Customers' satisfaction
- Better control over process performance.







#### **Environmental Business practices**

A business practice is the aggregate of actions needed by a business in order to complete a certain result. The term "Environmental business practices" stands for the development and implementation of the most appropriate actions to provide sustainable results.

Environmentally friendly also can be referred as environmental sustainable. Being sustainable demands three key factors:

- 1. Economically viable
- 2. Socially responsible
- 3. Environmentally friendly.

Figure 8. The expansion of the bottom line.

These factors create the triple the businesses evolve over the



bottom line of a business. As years, so does their bottom

line. More specifically due to climate change and the negative effect on people, the bottom line of a business which is profit that has been expanded into two more lines, the planet and the people. In conclusion: sustainable business strategies are those that negate the negative impact on the environment while still allowing the business to be economic profitable.



When addressing to environmental business practices, the organization should identify its environmental impacts, determine which impact/s is/are more beneficial to address and determine the most effective ways to act. Adopting sustainability benefit

Organizations develop their bottom line in their environmental aspect as well as their social progress and status. The company shall consider that it cannot solve all environmental problems but with sustainable business practices can work on environmental issues that intersect with their business. Depending on the area of focus of the company the sustainability practices should be considered and ranked based on the potential impact on the society and economic benefits. It is in the company's best interest to identify and





implement these sustainable initiatives whose shared benefits, to the society and the company, are significant to further strengthen its position in the competitive marketplace. This creates a "win-win" relationship between the environment and the company increasing its profits.



*Figure 9. Drivers to switching business practices.*[4]

#### Setting Green Objectives.

When Businesses implement environmental practices then they should also set objectives with the focus in improving the local or even the national environment. Setting such objectives is a way to evaluate their performance and impact on the environment. The impact can be measured by targets set either by the business itself or by the regulations of the country of action, by the European Union even by International laws and policies.









Figure 10. Environmental Objectives

Green objectives can vary from small targets to bigger ones. Examples of small targets may be reducing the amount of paper, water and energy consumed. Examples of more complex targets can be reducing by a percentage of the annual emissions and  $CO_2$  footprint of the business.

These targets are evaluated and the business conclude whether or not they meet the targeted goal. This process of evaluation can guide the organization into further improvement and development of their practices and policies.

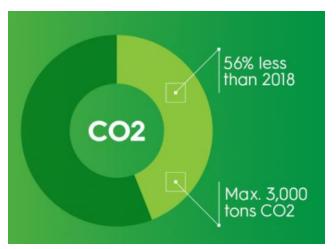


Figure 11.Example of green target of CO2 emissions.[12]

When setting goals consider the terms achievable, reasonable, observable, measurable and realistic. Based on the above goals can be defined and everyone within the organization can help and contribute in meeting its objectives. The foundation of sustainable initiatives is the goal-setting, pointing out the target that the organizations' activities should focus on. The sustainable project would be effective if it is established by realistic goals and targets. Some general guidelines when setting up goals could be:

• Management Commitment.





The first step, when setting a goal, is how committed the management is. This is a crucial factor that will show all business partners as well as the internal and external stakeholders the meaning of being sustainable. In this way the company's leadership demonstrates the policy adopted towards the growth and improvement.

• Set revolutionary goals.

When an organization is about to set a goal it should consider innovative improvements as well. There are some standard goals that every sustainable business can set. These goals are often easily applied with methods that have already been established. But what if new truly innovative ones are created by the companies. These kind of goals could be for example recycled-only inputs in processes or zero and even negative energy infrastructures.

• Set frequent milestones for these goals.

When setting a goal it is important to monitor its progress. It cannot be easy to comply with a target if there is no assurance that the organization truly works towards that goal. Depending on the target there are several steps to keep into consideration and make sure these step are in the right direction. For example, a company cannot expect to increase the recycled products it uses if it cannot identify all sources and needs. Applying certain steps help the organization keep track and on schedule to its goal. For this matter, even a roadmap can be created. This should provide details to employees to ensure they are on the same page with the directions intended by the leadership of the organization.



Figure 12. Step by step towards the goals

• Consider the nine planetary boundaries model.

In order to set new goals rather than the standard ones (which evolve carbon emissions, plastic reduction and recycling) the nine planetary boundaries model can be considered. This method proposed by Johan Rockstrom of the Stockholm resilience center. This model consists of nine areas where the organization can implement changes. These nine areas are:

- Climate change
- > Lost biodiversity as species become extinct
- The addition of phosphorus, nitrogen (and other elements) to the world's crops and ecosystems
- Deforestation and other land use changes
- Emission of aerosols (microscopic particles) into the atmosphere that affect climate and living organisms
- Stratospheric ozone depletion
- Ocean acidification
- Freshwater use
- Disposal of organic pollutants, radioactive materials, nanomaterials, micro-plastic and other novel or man made substances into the environment.





Depending on the area of focus of the organization these "boundaries" can be considered. In this way the companies can see their options and set goals in a wider range and perspective. Another look alike framework has been developed by the United Nations (UN) and released as "Sustainable Development Goals" (SDGs) containing seventeen goals.



Figure 13. Sustainable development goals by the UN.

• Use a full lifecycle approach.

Using a lifecycle approach for the company's activities, allow the management to identify the most meaningful impact on the environment. The main activities' lifecycle are the ones that define the most critical aspects that a company can interact and effect the environment. Based on these, a company can decide the most critical goals for the company's widest environmental impact. The most common one used is the environmental footprint of the company.

• Measure the goals with the help of resources needed.

After setting up a target, measurement is one the most difficult aspects to keep track on the progress of the ambitious goals. These goals often contain percentages and statistics by the end of a certain time period. If the goal cannot be measured then the company will not be able to implement the actions needed to achieve it. The target has no value if the progress cannot be measured. A great example of measurement is the greenhouse carbon emissions. This kind of measurement need specific tools and methods that usually a company does not have. For this matter, the help of external resources are obligatory. In the example of carbon emissions, carbon offset organizations often have great tools to help companies estimate their emissions. Similar tools and guidance can be provided for several measurements. Ensure that when setting up a goal the appropriate data is set in order to track of the progress.

• Set goals according to priorities.

When setting up goals, consider the priorities raised in local, national or even global scale. There are frequently held conventions about the environment in many scales. These conventions aim to create the





general guidelines for organizations and businesses. For example a guideline could be to reduce the carbon emissions by 70%. This should be a priority to the organization when trying to be sustainable.

• Determine the suitable goals.

Ensure that the goals set will benefit both the company and expand opportunities for future prospects. Consumers demands are sifting towards more sustainable products and services leading to the creation of new markets. Companies shall be ready for theses changes and implement adjustments. For this matter, establishing goals that have traction with consumers and costumers shall be considered.

• Consider the balance.

As mentioned before, target should be both achievable as well as realistic. For this matter, a balance between these two terms shall be established. Setting low targets will not require enough effort, innovation and change to be achieved. On the other hand, setting high targets can be unrealistic in terms of changes and financial status. This results to the need of creating a balance when setting up a target to be realistic and achievable with the right amount of adjustments and effort.

• Listen to employees.

The company's employees can provide with important feedback when it comes to sustainability. They know the processes of the company and their every day routines, thus they can recognize viable opportunities and provide with ideas to create realistic and achievable sustainability goals.

• Consider collaboration.

Last but not least, non-governmental organizations and partners can help the advancement of the company's sustainability agenda.



Figure 14. Green Objectives.





# Unit 2: Environmental Business Practices.

Environmental business practices can be either internal or external. Internal practices refer to those practices that can be implied by the organization for the organization. These include changes within the limits of the organization and internal structure. External practices refer to those practices that can be implied by the organization for its suppliers or partners. These may include associates who execute green practices and activities.

#### 1. Internal Adjustments

Internal Adjustments can either be simple changes in the infrastructure of the organization or more complex. The first step to an internal adjustment is employee's education and training. This step is highly significant to help employees understand the policy of the organization and raise environmental awareness in order to change their point of view and make them more environmental sensitive. This can impact the organization as well as their personal life. The company can organize seminars, webinars and lectures for this matter. An adjustment should impact the economic growth and add value for the organization.

When it comes to adjustments and changes there always be the possibility of failure. Many organizations even though they are committed to implement green objectives often fail due to a various of reasons such as the lack of management support, the lack of communication, the lack of overcoming the challenges to implement several sustainability initiatives. The general challenges an organization might face can be the following.

The first challenge an organization can face is to realize how it can adopt



Figure 15. Overcome the challenges.

sustainable initiatives in its structure. This challenge is often presented when the organization cannot fully comprehend the processes taking place as well as the understanding of sustainability initiatives that can be adopted. The solution to that can be to firstly define the processes as described above. In addition, when an organization gets started on sustainability it can build on proven best practices that several businesses have used. Another solution could be to get training by professionals and acquiring certifications for green practices.

Furthermore, when starting green initiatives the organization may not be in position to afford them financially. The strategy behind the implementation of adjustments is to begin with projects that their payback period is short. These kind of projects are mainly related to lighting. Energy efficiency lighting have





a short payback period with immediate results in energy bills, without the need to make any changes in the infrastructure of the facilities.

Another difficulty an organization could face is the lack of time to implement all the changes that it wants to make. For this matter, first of all priorities shall be set. The changes cannot be made all at once, setting priorities help the organization to realize where the focus should be. The highest priority should be on those initiatives that are aligned with the business goals, have a significant impact on the environment, and have good payback. Organizing a green team can also help implement those initiatives. Lastly, an organization should start initiatives based on day to day activities the employees execute.

Moreover, the lack of employees' engagement can be a great challenge. Not having engaged employees can be a factor that contributes to the failure of initiatives. Employees are often those who implement changes in their activities and help the



Figure 16. Think Green.

organization fulfill their objectives. In order to engage employees, and organization should share the initiatives and targets that the business is currently working on, and let everyone know how they can contribute to this purpose.

Sustainability is a quickly evolving field. The organization may often not have the time to focus and keep up with the trends in the sustainability sector. This lack of information can change by creating a green team to focus amongst others to find suitable practices according to the business plan.

Another challenge is that the company culture doesn't support sustainability. This is happening when the minority of people involved in the organization are thinking about being sustainable. For this matter, the engagement from the management is highly important in order to support the employees in green practices. The expansion of sustainability on the whole infrastructure of the business and not in only one department can also be beneficial. When changing the company's culture the education of employees should be considered. Providing sustainability training to employees can make a significant difference.



Figure 17. Support sustainability.

As mentioned above, the engagement from the management could be the key when adopting sustainable initiatives. But, sometimes there might be lack of support from the management to the employees. In order





to address that, the management needs to understand what are the projects taking place, their payback period as well as their metrics. For this matter, the organization should identify the projects that will take place, the current level of these projects as well as the target set. It is important to set clear and measurable targets for the projects to receive and find support from the management.

Last but not least, attracting the customers could be a challenge. The customers need to be educated about the benefits of purchasing the products or services provided by the organization. Some examples of these benefits can be the removal of chemicals in the product, the higher added value, etc. Also, share publicly the initiatives and targets that are set. Being honest and transparent about the organization's targets will allow customers to appreciate the organization's actions for the environments.

On the other hand, acquiring sustainable practices can have numerous benefits for companies, such as reduced costs and resources, increased satisfaction and loyalty from the customers as well as increased satisfaction of the employees. When it comes to costs and resources savings, implementations such as lighting efficiency, water saving features can have an immediate reduce in utility bills. Other changes may affect as well the resources used inside the company, making the production process more efficient. Furthermore, with the climate changing customers become more and more self-aware about environmental policies. Having in place several practices to be environmental conscious can lead to the attraction of customers who appreciate these practices and environmental awareness. Lastly, employees' satisfaction and morale can be increased while knowing they are part of an organization that is environmental friendly.



Figure 18. Sustainability benefits.

#### What is a green team?

As mentioned above the education of employees is a critical aspect when adopting sustainable practices. For this matter a green team can be developed. Starting from the basis, a green team is a group of people, in this case employees, whose purpose is to advance the sustainability inside the infrastructure of the organization. There are two areas of focus for this team. The first one is about the organization's processes and activities. While examining the processes the green team can identify the sustainable opportunities they might arise as well as develop a plan to design the proper adjustments. The second area of focus is about educating employees on sustainability. For this matter, employees learn about the organization's goals and targets and how



Figure 19. Establish a green team





they can contribute as well as actions they can do at home and adopt sustainability in their everyday lives.

#### How to start a green team?

When starting a green team, the organization shall consider how to select the team members. The simplest solution to this is to ask for volunteers. By letting employees know about the green team initiative, can lead people to their self-selection which is a great way to create an enthusiastic group. If the response from the employees is not what expected, consider more actively recruiting and methods. One such method can be to encourage people bring someone new with them the next time a meeting is taking place. Lastly, it is important when starting a green team to have representation from different departments of the company. This could be helpful when defining the processes and activities inside the company as well as when brainstorming for possible environmental practices.

#### What is the purpose of creating a green team?

As mentioned, one of the focus areas is the education of employees. The green team is an effective way to engage employees at work. This may be the most important reason to create a green team. Additionally, having employees from different departments lead to a greater diversity of ideas and support about sustainability initiatives. This can be key in understanding and identifying the opportunities that arise from different departments. Having a green team, also ensures that the efforts of the organization does not rely on a single individual that might leave, rather than in a group of people that will continue to further develop green practices. Lastly, a green team promotes and reenforces the company's policy into sustainability initiatives.

#### What are the activities of a green team?

After establishing the green team, regular meetings should take place to organize and discuss the actions and activities needed. In the first meeting, the green team should define why the sustainability is important for the company and what are the actions that will contribute towards that goal.

Meetings aim to brainstorm possible areas of focus for green practices. If there are not specific areas of focus to be discussed a sustainability audit can be conducted. A sustainability audit can cover the following areas:

- *Infrastructure:* whether the organization's infrastructure can support a sustainable program.
- *Social impact:* whether the employees are engaged. Whether the organization contributes to the community.



Figure 20. Define areas of focus using Sustainability audits.





• *Environmental impacts:* in terms of waste reduction, resource conservation, carbon footprint and toxics reduction.

Meetings should be organized regularly on quarterly, monthly or even weekly basis to share updates on targets and goals.

The green team can also organize, except of meetings, several other activities. These may include:

- Organize lunches with topics of discussion related to climate change, recycling, water conservation, etc.
- Organize volunteer opportunities for the employees.
- Getting certified in green practices.
- Provide training to the employees.

Some strategies to engage employees in the company's sustainability initiatives are:

- Define the company's long-term goals.
- Define the economic aspect of sustainability.
- Develop knowledge and competence for sustainability.
- Take into account employees' ideas and practices.
- Develop a point system depending on sustainable actions, to encourage healthy competition between employees.
- Make sustainability goals and target visible inside and outside the company.
- Showcase the purpose and impact of the suggested changes.

When it comes to changes, simple internal adjustments can be implemented by all types and scale of businesses. Such adjustments are developing a recycling program, switching the lighting bulbs to LEDs, reducing paper use and installing water saving fixtures.

As far as the recycling program, paper and plastic are the most common materials used every day in companies. Implementing recycling of these materials has no cost for the organization and contributes effectively to the environment. Recycling, can be achieved by setting up proper signage for each type of waste in each bin. Another type of recycling can even be glass, metal depending on the company's activities.



When it comes to lightning the company, LED bulbs use 75% less energy and last about 25 times longer than incandescent

Figure 21. Implement recycling.

bulbs. This switch can be done as soon as the current bulbs need replacing with no further change. With less energy usage LEDs can reduce significant the utility bills as well as the maintenance costs.





Furthermore, the use of paper can be reduced drastically in today's digital era. The majority of documents can be sent via email. Also digital databases can ensure the safe retention of any document needed. Another solution could be the usage of recycled paper which is not costly and can decrease the company's environmental footprint. Setting up printers to print on both sides of the paper automatically reduces the paper use and cost by half.

Moreover, toilets are generally the biggest source of water consumption in an office environment, installing water saving fixtures in faucets and toilets in bathrooms requires some investment, but the payback period is rather short.

In addition, an organization can develop a supplier policy. When choosing partners, an organization can conduct a review of the existing suppliers to decide that the purchases are aligned with the company's values. Another way to identify the partners is to look for certifications such as B Corporations certifications. A B Corporation certificate is provided to businesses that meet high standards of social and environmental performance while aiming for further improvement.

Another change to be considered could be the use of green cleaning. Every organization uses industrial cleaning products to keep their business environment clean. These products can contain chemicals which can harm people and the planet when they are disposed. For this matter, switching to green cleaning products can be considered. These type of products can have third-party certifications to ensure their green impact to the environment and the people.







Figure 22. Best practices for environmental sustainability. [13]

Depending on the company, more adjustments can be implied. These adjustments consist of allowing flexible work from home options, replacing unnecessary business trips with video calls, replacing company cars with electric ones and even consider renewable energy involvement. Up to recently, the pandemic caused many companies to have employees work from home schedule in order to avoid contact. This change highlighted the significant decrease of the employee's commute emissions. Another change could be the reduction of unnecessary business trips with online meeting and calls, reducing the expenses and the carbon footprint of the company.





When providing electric vehicles as company cars, the enterprise can reduce emissions in the area of use. Furthermore, the energy mix of the European countries shift towards renewable sources. Businesses can consider changing their energy supplier into one who uses renewable sources (external adjustment). In the case of bigger companies or factories, that might cover their own needs in terms of energy, they can consider the implementation of renewable energy sources. This can be a complex and costly investment, but with proper research, design and execution the payback period can be determined in order to be affordable.



Figure 23. Provide electric vehicles.

To summarize and provide more examples of internal adjustments towards environmental business practices: [9]

- Switch All Lighting to LEDs
- Implement a Comprehensive Recycling Program
- Use No-VOC Interior Paints (VOC, stands for volatile organic compounds which contribute to atmospheric photochemical reactions)
- Allow Flexible Work-From-Home Options
- Eliminate Paper Use
- Strive for Zero Waste Break Rooms
- Install Water-Saving Fixtures
- Consider Renewable Energy
- Choose a Green Web Hosting Service for Your Website
- Recycle or Donate Your Office E-Waste
- Replace Unnecessary Business Trips with Video Calls
- Install Motion-Sensors for Office Lighting
- Encourage Employees to Choose Greener Commute Options
- Institute a More Flexible Dress Code
- Eliminate Phantom Power with Programmable Power Strips
- Buy Remanufactured Ink and Toner Cartridges
- Apply Window Film to Block-Out Heat in the Summer



NO. 2020-1-KA204-079048



- Use Non-Toxic Cleaning Products
- Introduce Plants Into Your Office Space
- Buy Second-Hand Office Equipment When Possible

*Note: These adjustments can be considered where applicable.* 

Before an internal adjustment the company should consider making a plan to ensure that all three bottom lines meet the proper requirements.

An organization after implementing changes and adjustments, can consider to get certified as a B Corporation. In this way, the company can show all stakeholders that its practices and policy are developed towards sustainability.

#### 2. Utilization and enhancement of resources.

In a matter of a company, resource efficiency is essential for economic growth. When using any kind of resource the company must ensure its efficiency in order to minimize their waste. These resources can be raw materials, food, soil, water, air, biomass and ecosystems. In terms of the environment, extracting resources and raw materials results in soil degradation, water shortage, biodiversity loss and shortage of materials. The company shall be aware and not compromise the needs of future generations.

Using resources efficiently has benefit to the environment as well as for companies. It can improve productivity while reducing the costs and creating employment opportunities. As far as the community goes a healthier living environment is provided by the better usage of resources. Innovation and growth could be another aspect of resource efficiency.

In terms of efficiency, there are several areas that can be taken into account.

#### Energy efficient lighting.

As mentioned above, replace the lighting can be one of the easiest changes that can be implemented. This change can save energy and money to the organization. First of all, the company should evaluate the currently used lighting and consider the options available. The classic screw-in light bulbs can be replaced easily and quickly by two different types of lights. The types of available bulbs are:

- *Incandescent:* these are the traditional light bulbs that are used throughout the years. They are quite inefficient and need to be replaced.
- *CFLs (compact fluorescent lights):* These kind of lighting bulbs are more efficient and being commonly used in recent years. On the down side, these bulbs contain small amounts of mercury that harm the environment and the people.
- *LEDs (light emitting diodes):* These kind of lighting bulbs are both efficient and do not contain any mercury. This kind has a diversity of shapes and sizes and can replace almost any kind of lighting bulb.





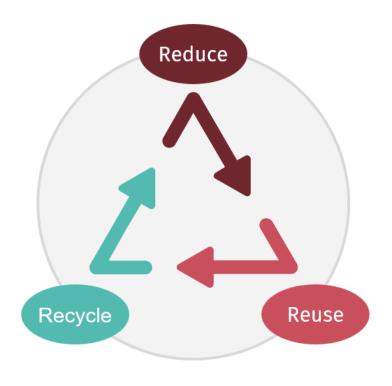


Figure 24. Types of lighting bulbs

It can be concluded that the best fit for an organization is to replace incandescent bulbs and CFLs with LEDs.

Reducing the waste.

When it comes to the reduction of the waste, there are three terms that come to mind. These are: reduce, reuse, recycle.









First of all is to reduce the waste. The best way to do this, is by conducting a waste audit. By checking the everyday waste and the materials used by the activities of the processes, it can be concluded what is the waste based on specific products. Then, these products can be evaluated to ensure they include minimum amount of waste in terms of packaging. Contacting with the suppliers and purchasing products in bulk can help address the problem of the overpackaging and reduce the waste.

In addition, when all items are reduced to the minimum, the next step is to identify the products/items that can be reused without their degradation. After the identification process, replace all disposable items with reusable ones. A great example of such reusable items are paper/plastic plates and utensils used in the kitchen. These products may cost a bit more upfront, but purchasing them will save money to the company because it will not need to keep purchasing them over and over again.

Moreover, after the first two filtrations (reduce and reuse) occurred, recycling is the last option to consider before disposing a product. The first step into recycling is to identify the most commonly used materials that can be recycled. These materials can be paper, plastic, glass and even food waste. After the identification the organization should provide its employees with fitting bins and signs to recycle each type of material. Last but not least, depending on the organization there might be frequent waste that is not easily recyclable. For this matter, the company



Figure 26. Recycle bins.

should consider communicating with organizations that might help dispose them in an environmental manner.

#### Usage of recycled paper products.

Another implementation mentioned was the introduction of recycled paper products in offices and corporations. There are four types of recycled paper that can be used:

- Recycled: The standard procedure when paper is recycled and turned back into paper again.
- Post-consumer waste: This includes paper that was used by the consumers and then disposed in recycled bins.
- Recyclable: This type of paper does not actually come from recycled paper. Instead, it states that the paper can be recycled.
- Processed chlorine-free/unbleached: For this type of paper bleach was not used to make the paper take its white color. This is why, the appearance of this type of paper is not pure white. Bleach is harmful

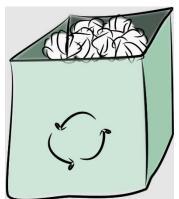


Figure 27. Acquire recycled paper.





for the environment when tossed and certain recycling companies adopt a policy of chlorine-free recycled paper.

Many companies avoid using recycled papers thinking it blocks printers. This fact is untrue while plenty of companies and organizations have been using recycled paper without any problem for years.

#### Water conservation

While considering water conservation, toilets are the primary source of water usage in an office building. For older buildings and facilities, toilets use larger amounts of water up to 13 liters of water per flush. During the recent years this amount of water has been reduced to 6 liters per flush, which is equivalent of less than half that it used to be.

#### Strategy Development

When an organization is about to develop a strategy for sustainability, it needs to address its greenhouse gas emissions and the actions needed to manage these emissions. The first step is to identify the emissions. The next step is to start monitoring them. This is followed by setting reduction targets and implementation of changes.

The ultimate target for every organization should be the net zero strategy, where no emissions are released to the environment. In order to establish such strategy the organization should:

- Get advised: on both individual and organizational level in terms of global warming.
- Commit to the sustainable practices: which cannot be postponed or delayed.



Figure 28. Strategy development for sustainability.

- Calculate the carbon footprint: identifying the emissions and the quantity that are emitted.
- Develop the reduction strategy: identify the actions needed to be implemented.
- Share results and practices: the environment is an important matter of all organizations and communities. Sharing the knowledge help to develop further the tools and practices to fight climate change.

Resource utilization is the process of measuring the availability of all the resources inside the company. This process helps plan how to utilize the resources more effectively and ensure that the organization is as productive as possible. Effective utilization of resources can be helpful for both employees and employers.





It ensures that specific resources are not being over or under-utilized maintaining the long-term use of resources while maximizing social benefits and minimizing environmental impacts.

Resource utilization -	Time	
g	ter Four Work	g John's Work
	Over Utilized	
Underutilized		

Figure 29. Example of resource utilization. [11]





### References:

1.<u>https://the9000store.com/iso-9001-2015-requirements/iso-9001-2015-context-of-the-organization/what-is-a-process-approach/</u>

2.https://www.ideagen.com/thought-leadership/blog/iso-90012015-explained-what-is-the-processapproach

3.https://hbr.org/2016/10/the-comprehensive-business-case-for-sustainability

4.https://www.cultivatingcapital.com/sustainable-business-practices/

5. <u>https://ehsdailyadvisor.blr.com/2012/09/setting-environmental-objectives-and-targets-for-iso-14001-compliance/</u>

- 6. https://online.hbs.edu/blog/post/sustainable-business-practices
- 7. https://thethrivingsmallbusiness.com/sustainable-business-practices/
- 8. https://flygrn.com/blog/sustainable-businesses-best-practices

9.<u>https://greenbusinessbureau.com/green-practices/20-sustainable-business-practices-for-your-workplace-and-office/</u>

- 10. https://www.ibm.com/cloud/blog/what-is-resource-utilization
- 11. https://www.accelo.com/resources/help/guides/user/dashboards/utilization-dashboard/
- 12. https://www.wfc2022.ch/green-goal/
- 13. https://www.slideteam.net/best-business-practices-for-environmental-sustainability.html
- 14. https://asq.org/quality-resources/pdca-cycle

15. <u>https://advisera.com/14001academy/blog/2017/01/30/application-of-the-process-approach-in-iso-14001-implementation/</u>

16. <u>https://isoupdate.com/resources/process-approach/</u>

17.https://saylordotorg.github.io/text\_the-sustainable-business-case-book/s05-06-a-strategic-approachto-sustai.html

18. https://www.fitreach.eu/content/resource-efficiency





- 19. http://www.wastecosmart.eu/en/resource-efficiency/
- 20. https://www.greenbiz.com/article/setting-bold-goals-6-ways-shoot-higher-sustainability

