

GREEN POLICIES & FINANCIAL SUSTAINABILITY TRAINING PROGRAM

Module 5

SME Decision-Makers



Module 5

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Introduction

This module provides key points to SMEs decision makers to start implementing change within their organisation and an insight on process approach. Adapting processes to EU climate objectives and making efforts to make a company harmless to the environment requires changes in its practices. However, change often represents a challenging step for SMEs' decisions-makers.

This is the reason why this module focuses on clarifying what Process Approach is, as well as identifying its benefits and also the relevant Environmental business practices in order to transit more effectively.

After identifying the concepts of environmental business practices and process approach and setting the green objectives for SMEs, the environmental business practices will be analysed in terms of internal adjustments and the utilization and enhancement of resources.

Unit 1: What is Process Approach

The following pages are intended for those companies and enterprises that want to environmentally improve by adopting management systems that comply with environmental standards, laws and regulations and therefore transform the enterprises into greener ones and more environmentally friendly.

The objective is to introduce the Process approach concept to SMEs and help them implement it in order to elevate environmentally and become more sustainable.

Definition of the concepts of Environmental Business practices and Process Approach

Process Approach

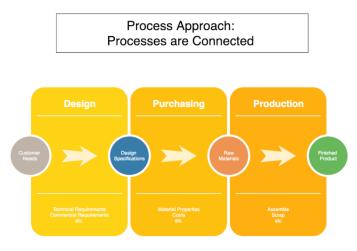
A process approach is a method through which an organization manages their business as a system of processes – not departments or people or products. Saying that again, it is a planning method for processes with their internal interactions as part of the management system. Businesses can get more consistent results when they carry out and manage their activities as interrelated processes, in other words as a whole system.

The purpose of the process approach is to provide consistent products and services based on requirements of environmental legislation or even international standards (e.g. ISO 14001 for Environmental Management or EMAS) to enhance customer satisfaction. The process approach is the most effective method to meet this purpose.





The first step of the process approach method is to determine the required inputs and the expected outputs of the process. Then, one should determine the sequence and interaction of the processes and apply criteria and methods to ensure effective operations and control. It is important to identify the resources and ensure their availability. Finally, you address risk and opportunities regarding the applied methods and processes (maybe perform a SWOT analysis), you evaluate them in terms of effectiveness and success and implement changes for improvement according to your findings.



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Figure 1:Connection of Processes

The process approach becomes easily applied to the environmental managing systems, because most of what you are implementing when carrying out this method relates to the processes that your organisation has already in place to do business.

To apply the process approach, it is important to first understand the Plan, Do, Check, Act (PDCA) cycle, which helps identify processes and the different ways in which they interact and how it encourages problem-solving.

The PDCA cycle consists of four steps, namely Plan, Do, Check, and Act.

- 1. Plan: Identify the main players and members involved in the process and identify the inputs and outputs of the process.
- 2. Do: Execute the plan.
- 3. Check: Ensure that the process is achieving the desired outcomes in the most effective manner.
- 4. Act: Modify or upgrade the plan to improve efficiency and effectiveness.



Defining their processes using the process approach allows organizations to better define ownership, dependencies, risks, and opportunities for growth or improvement in an easy and efficient manner. This is essential information for the continuous improvement of any organization's quality management system.





Benefits Of Process Approach



Beneficial Applications Of The Principle Include Www.company.com

Figure 3: Benefits of Process Approach

Environmental Business practices



Figure 4:Developing a corporate sustainability plan

A business practice that is economically viable, socially responsible and environmentally friendly is usually regarded as sustainable. Corporations that include socially responsible and environmentally sound policies as core elements in their growth strategy very often create sustainable economic values.







The environmental business practices derive from the Environmental Management System that the company chooses to apply. In order to implement an EMS and apply Environmental Business Practices there are some main requirements for the company.

First of all, it is vital to determine and recognize the company's environmental aspects which means the ways a company interacts with the environment. In order to determine the environmental aspects that are applicable to your business, you will need to look at each process individually within your business and see how that process interacts with the environment and how that aspect may impact the environment. If you don't approach each process at a time, you risk overlooking some of your environmental aspects.

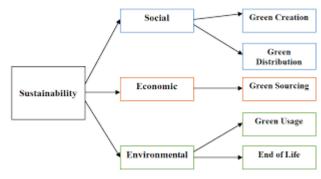


Figure 5: Sustainability Aspects

Furthermore, you will have to determine your environmental competence needs and then pair these with the competence needs of your processes. If you need certain employee competences to operate a process that will produce conforming products and services, these employees will also need to meet the competences required to operate these processes so as to avoid environmental harm.

For the purpose of improving your environmental performance it is important to identify the environmental controls necessary for your operations and this is where the process approach proves valuable. It is best to include the environmental requirements for control into your process control practices if you want the process to run well.

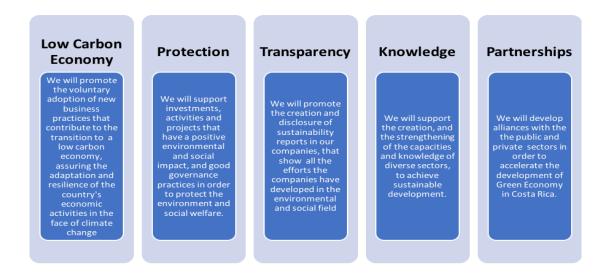


Figure 6: Environmental objectives and controls

When it is necessary to monitor and measure the environmental controls for your processes, a support measure is to include all monitoring and measurement together for each process –





environmental and quality. You may even find that when monitoring a process, you can reduce the amount of monitoring you do when you do all monitoring together.

One more action that proves really helpful when trying to monitor and assess your practices is the process of auditing as it involves reviewing the outputs of a process and comparing them with the plans for the process to see if what is occurring is what was planned. In order to do this it is important to explore a process in more detail, therefore understanding the process approach is an inherent part of the audit process.

Last but not least, while you may be addressing a problem that was identified in your EMS, you will invariably need to update or change a process in order to correct the problem and stop it from reoccurring, more specifically to update and correct a process, it is required to apply the process approach method.

There are many different ways a business can turn into a sustainable one. These ways could be by reducing waste, preventing pollution, adopting clean energy, conserving water, greening the planet by planting trees, using sustainable materials, making their products sustainable, and adopting sustainable business travel policies.



Figure 7:Environmentally sustainable business practices such as cleaner production, carbon finance, use of renewable resources, green technology and sustainable supply chain.

Sustainable business practices are enactments that allow companies to reduce their negative impacts towards environment while still allowing the businesses to become more profitable. Sustainable business practices of a system can be either internal or external.

Internal practices aim to transform a workplace into a green workplace by implementing an inoffice recycling program, by reducing energy use at an office or factory, by switching to natural gas or electric fleet vehicles, or by switching generally and giving preference to "green" options.

External environmental practices of a system involve actions like switching materials that are used to create products that cause less damage to the environment e.g. non-toxic paints, less





plastic or single-use material. In addition choosing green vendors and suppliers who have green products and services, companies can award production contracts to businesses that do not just comply with standard requirements but also implement green internal business practices.

2. Setting Green Objectives



Figure 8: Green Objectives

What is a green objective? It is an initiative that promotes healthy, active, environmentally and conscious lifestyles that help the environment in many ways. The main focus of a green objective is improving the local environment and raising environmental awareness.

One objective can have several environmental targets, one target could be to reduce the amount of waste produced from a workplace system going to landfill by 10% even from the

first year. Environmental targets provide short-term goals on the way to achieving your overall environmental performance objectives.

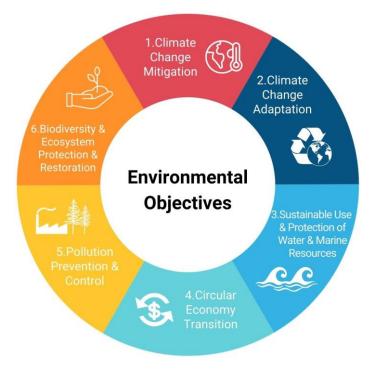


Figure 9: Environmental Objectives

Environmental objectives and targets should be based on your environmental policy, on legislation requirements and on the internal review of management. These objectives should aim in addressing any significant environmental aspect and should incorporate specific legal requirements contained in regulations and consents.





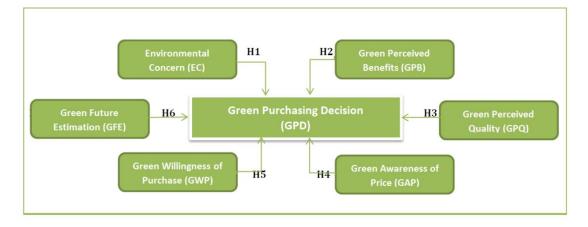


Figure 10:Scheme of Green Purchasing Decision

Goal-setting is one of the most important processes of the business and is linked to the sustainability of the business itself. It clarifies the observable and measurable results that have to be achieved within a specific timeframe and helps everyone understand the direction of the business and the role they implement in achieving them. Sustainability has become the standard concept used to move towards system-wide innovation. Failure of organizations to pursue sustainable business practices will have severe consequences in a time of imminent climate change. Ultimately, sustainability means survival for organizations. When aligned with the missions of improving quality and productivity, reducing costs, improving efficiency and enhancing reputation, sustainability can be applied as a force impacting the way organizations think, act, manage and compete. It is totally essential to set clear, achievable and measurable goals in order to achieve your desired results in sustainability.

Here are the main directions that you should follow in order to set valuable and reachable green objectives.

- 1. Set big and daring goals. Big goals require big changes. Through this course of action the business is encouraged to think and operate in a radical and innovative way, thus improve their business model.
- 2. One step at a time. Support your big goals by setting smaller ones to be achieved within a specific period of time according to assigned categories e.g. supplies, sales, packaging etc.
- 3. Educate yourself. Green objectives can cover a large area of issues not just managing plastic waste and reducing carbon emissions but it can also cover other aspects such as green education, awareness and assessment. Take the time to educate yourself and decide where you can contribute. A very helpful tool for this process is the UN seventeen Sustainable Development Goals (SDGs) as shown below.







Figure 11: Sustainable Development Goals

- 4. Identify your company's most direct impact. Take the time to thoroughly think through your main activities and map them out so that you can clarify if the greatest environmental impact of your company occurs through an upstream process or through a downstream one. This means that you should examine if the negative impact originates from processes that involve raw materials, manufacturing processes, packaging or from the product's life end e.g. production of waste (solid, liquid)
- 5. Measure. Select your measurement methods and tools and develop them in a way that is understandable and helpful to you. This way you can achieve noticeable progress and stay fully aware of the situation.
- 6. Be in accordance with local, national and international regulations. Following suggested regulations can help set your limits and boundaries and set quantitative indicators to your goals.
- 7. Think positive. Approach your goals not only from the negative perspective assessing what you are doing wrong but also from the positive one assessing how you are contributing positively towards the planet. This innovative way of planning and operating can lead to a truly sustainable business.

Green objectives can vary depending on the business but here are some examples:

- **Carbon intensity**: For energy supply carbon intensity stands for the amount of carbon emitted per unit of energy consumed (CO2 emissions/energy). The established goal here could be to achieve an amount X of carbon emissions per product sold (or 90% reduction in carbon emissions per product sold). A twist on this could be achieved by being carbon neutral or being carbon negative (i.e. with every product sold, carbon generated is actually absorbed, making it a carbon negative purchase.)
- Chemicals use: Eliminate all unprocessed chemicals used in all products that affect the health and environment of your workplace.
- Pollutants and discharge: Eliminate all pollutants produced and the discharge upstream from the production and manufacturing processes of your system.
- **100% certified organic**: Source only 100% organic and sustainably grown inputs and eliminate all nitrogen and phosphorus runoff that is typically associated with inputs.





- <u>100% recycled</u>: 100% of non-food products should be utilized by company / building (including products, warehouse supplies, office supplies, packaging, etc) is recycled with 50% post-consumer waste
- <u>Green commute</u>: A method in reducing the emissions released through employees transportation. The majority of employees are carpooling, meaning that they are using public transportation, telecommuting, or biking / walking to work.
- <u>Green freight / shipping</u>: Emissions associated with freight and shipping products are cut by 90%.
- <u>Reducing Fresh water use</u>: Fresh water as a raw material that is provided externally to a company's system, handled internally, is necessary to produce products and run operation should be cut by 90% when monitoring the consumption on an annual basis.
- <u>Zero Waste</u>: This goal is based on a set of principles that focus on the amount of Waste generated across the supply chain (upstream and downstream) per product sold. It encourages to reduce the amount of waste produced through a process within a system and should be cut by 90% or/and have a 99% landfill diversion
- <u>Eliminate plastic and other pollutants</u>: Eliminate the use of all materials and substances that have a chance of becoming or being released to the environment. This includes any type of plastic or bioplastic that is not capable of biodegradation in the open environment as well as materials such as silicone and heavy metals. Donate to causes that actively remove these particles and pollutants from the environment.

Unit 2 - Environmental Business Practices

Internal Adjustments

Sustainable business practices can be both internal and external.

Internal efforts might include beginning an in-office recycling program, reducing energy use within the operations of an office or a factory, switching to natural gas or electric fleet vehicles, or mandating that purchases give preference to "green" options such as recycled paper and electric cars.

Even small businesses can make significant strides to become more sustainable. Invite your gas and electric utility providers to visit your place of business and conduct an energy audit. Adding energy-efficient light bulbs, ceiling fans, low-flow toilets and programmable thermostats can help you reduce your energy use.

Reviewing your regular purchases can identify products you can buy that offer green options. Starting a recycling plan is simple, low- or no-cost helps employees feel they are engaged. Environmentally friendly organizations often offer to pay all or part of commuter passes to encourage employees to reduce their commuting impact on the environment.





Corporate Social Responsibility

In the past, many organizations considered sustainability outside the wheelhouse of business and yet, there is an important business case to be made for sustainability. More and more companies are embracing the **concept of the triple bottom line**, recognizing that there is room to realize profit and social and environmental benefits—and that doing so can sometimes bring unexpected business advantages.

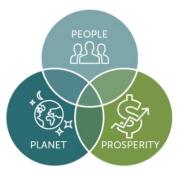


Figure 12:Triple Bottom Line

This realization has led to the development of a whole new business model known as corporate social responsibility (CSR) and the development of the renewed international standards for Environmental Management (ISO 14001:2015) leading to even for-profit businesses working to achieve social and environmental goals in addition to their organizational objectives.





With this in mind, businesses seeking to embrace sustainability internally, can pursue several different strategies.

Corporate Social Responsibility (CSR) is a concept of conducting business activities. In one area that this concept focuses is how enterprises behave towards the environment while still making profit. It enhances the motivations for SMEs to voluntarily take into consideration the impacts of their operations towards the environment in their business decisions. Such an approach contributes to improving the quality of life. Socially responsible entities take responsibility for ecological ramifications of their activities, strive to eliminate pollutions and emissions of harmful substances, and attempt to increase the efficiency of using natural resources; thus, alleviating their ecological footprints. One should remember that fast economic growth connected with intense exploitation of natural resources is in overt contradiction with the need to preserve these resources for future generations. In fact, every nation can use available resources for the benefit of its people; however, nations are also responsible for their protection and preservation of these resources and their sustainable development.





According to the World Business Council for Sustainable Development, CSR is crucial to sustainable economic development and the well-being of societies. This is the reason why there is a need for in-depth studies on the profitability of socially responsible activities towards the silent stakeholder, the environment. Eco-management aims at reducing negative impacts the businesses create and affect the environment. Increasing social and internal staff awareness is forcing businesses to reduce their environmental impact.

Environmental management can yield numerous benefits for enterprises, including costs and resources savings, increased satisfaction and loyalty of customers and morale of employees. In addition to research on the relationship between socially responsible activity and financial results, particularly important are studies that indicate the relationship between corporate responsibility and its impact on financial results that have been achieved through effective management of the company's intangible resources, such as innovation, human capital, goodwill, and culture, value for stakeholders, including consumers, and measurement of consumer perception of the company's socially responsible activity in different areas.

Some additional examples for internal adjustments towards environmental business practices are:

- Switch All Lighting to LEDs
- Implement a Comprehensive Recycling Program
- Use of nonvolatile organic Interior Paints because VOCs (volatile compounds) are compounds of carbon which participate in 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 or conferences
- Install Motion-Sensors in office space areas to initiate Lighting
- Encourage Employees to choose greener commute options and make them aware of all the possible options
- Eliminate Phantom Power with Programmable Power Strips
- Buy Remanufactured Ink and Toner Cartridges
- Apply Window Film to Block-Out Heat in the Summer
- Use Non-Toxic Cleaning Products
- Introduce Plants Into Your Office Space





• Buy Second-Hand Office Equipment When Possible

The Green Teams

Possibly one of the most under-utilized strategies for embedding sustainability in your business is encouraging all employees to participate in these strategies and establish a green team.

A green team increases employee engagement and as a result it actually involves more minds on tackling tough problems and coming up with creative solutions and creating a stronger culture of sustainability. A green team consists of a group of employees who are engaged in advancing sustainability within an organization and focus on two broad areas. One focus is on the company's own operations, on examining the sustainability opportunities within the organization. The second is on educating employees on sustainability and engaging them in actions that can also be implemented in other areas.

Establishing a green team has many benefits either than engaging employees is that an enterprise gets a greater diversity of ideas and support for sustainability initiatives. Rank and engage employees with insights into what is happening on the front lines of customer service, production, and other key areas can identify opportunities that might go unnoticed.

Lastly, while having an internal champion is important, sustainability efforts may fall apart when that individual leaves. Having a green team will ensure that any work that is done will be maintained – in short, it will help to embed sustainability within your organization.

Some green team activities include:

- Organizing brown bag lunches on topics related on waste management & recycling, climate change, water conservation, etc.
- Identifying and organizing volunteering programs for employees and clients
- Aiming to be certified according to well know Environmental standards
- Organizing campaigns such as Bike to Work Day, Earth Day, Switch it off
- Setting up green purchasing policies and evaluating the company's goals by involving additional initiatives
- Providing training on Waste Management (landfill, recycling, and compost)





Eight Ways to Engage Employees in the Company's Sustainability Journey

- Define the company's long-term purpose
- Spell out the economic case for sustainability
- Create sustainability knowledge and competence
- Make every employee a sustainability champion
- Cocreate sustainable practices with employees
- Encourage healthy competition among employees
- Make sustainability visible inside and outside the company
- Showcase higher purpose by creating transformational change

Figure 14: 8 ways to engage employees in the company's sustainability journey

Utilization and enhancement of resources

Resource efficiency is essential for sustained economic growth. Sustainable utilization of natural resources is the correct management of natural resources. The main aim of sustainable development, is to provide resources for present generations without compromising the needs of future generations, more specifically raw material extraction and processing always had an impact on the environment resulting in soil degradation, water shortages, biodiversity loss and hence causing damage to the ecosystem functions and global warming exacerbation.

Resource utilization is the measure of how much of your available resources are being used. It can help you plan ways in utilizing your resources more effectively to ensure that your organization is being as productive as possible. Effective utilization of resources is essential to both employees and employers as it ensures that specific resources are not over or under utilized. This can be achieved by maintaining the long-term use of resources while maximizing social benefits and minimizing environmental impacts simultaneously.

Conserving resources and reducing pollution aim in minimizing your environmental impact as a business. It is essential to evaluate your operations across a range of areas, from energy efficiency to cleaning chemicals.

Resource efficiency is one of the main drivers of companies' competitiveness since, reportedly, European manufacturing firms spend, on average, 40% of their costs on raw materials, with energy and water pushing this to 50% of the total manufacturing costs. Therefore, improving the resource efficiency of SMEs offers enormous potential for reducing production cost and increasing productivity while, at the same time, making a significant contribution to addressing environmental challenges.

Resource efficiency can be carried out through circular economy. Circular economy enhances resource and cost savings by maximising the time that resources, products and components are used.





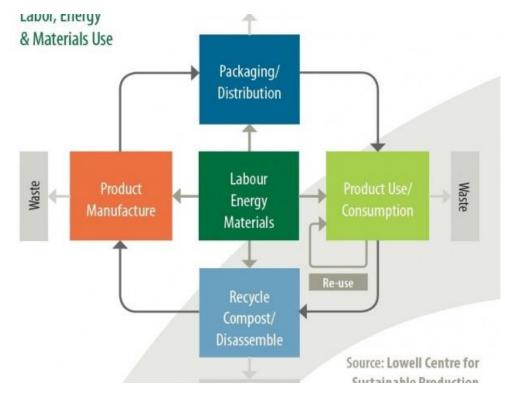


Figure 15: Labor, Energy & Materials Use

The main principles of circular economy for resource efficiency are:

- More sustainable management of natural resources or creating higher value with less materials;
- Involving companies and consumers in the process of becoming more environmentally friendly;
- Imposition of sanctions to polluters.
- Gradual elimination of subsidies that are harmful to the environment;
- Green and innovative public procurement;
- Eco-design and eco-innovation.

Energy efficient lighting.

As mentioned above, replace the lighting can be one of the easiest changes that can be implemented as it is a feasible and economically sustainable method. First of all, the company should evaluate the current used lighting and consider the options available. The classic screwin light bulbs can be replaced easily and quickly by two different types of lights. The Incandescent, the Compact Fluorescent lights and the Light Emitting Diodes. More specifically

- *Incandescent:* these are the traditional light bulbs that are used throughout the years. They are quite inefficient and need to be replaced.
- **Compact Fluorescent lights (CFLs)**: These kind of lighting bulbs are more efficient and have being commonly used in recent years. On the down side, these bulbs contain small amounts of mercury that harm the environment and the people.







• *Light Emitting Diodes (LEDs):* 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.



fluorescent lights) emitting diodes)

Figure 16. Types of lighting bulbs

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

Reducing the waste.

There are three terms commonly used in waste management. These are: reduce, reuse, recycle.

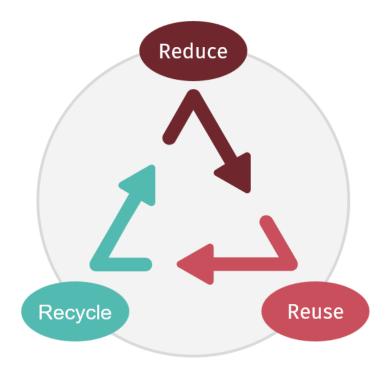


Figure 17. Reducing the waste.





The initial step is reducing the amount of waste produced. The best way to do this, is by conducting a waste management review. By checking the everyday waste produced and the materials used in all activities can assist in identifying the type of waste based on specific products. Then, these products can be evaluated to ensure they include minimum amount of waste in terms of packaging. Contacting suppliers in bulk can help address the problem for overpackaging and reducing 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 for the company because it will not need to keep purchasing them over and over again.

Moreover, after the first two steps of reducing and reusing, the final step is recycling before disposing a product. The initial 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



Figure 18. Recycle bins.

least, depending on the organization there might be waste produced that is not easily recyclable. For this matter, the company should consider communicating with organizations that might help dispose them in an environmental manner.

Usage of recycled paper products.

Another idea is introducing 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, however it can be recycled.
- **Processed chlorine-free/unbleached**: For this type of paper bleach was not used in order for the paper to take

its white color. This is why, the appearance of this type of paper is not pure white. Bleach is a hazardous chemical for the environment when tossed and certain recycling companies adopt a policy of chlorine-free recycled paper.

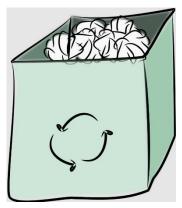


Figure 19. Acquire recycled paper.





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

Toilets are the primary source of water usage of an office building. For older buildings and facilities, toilets use very large amounts of water, that might reach up to 13 liters of water per flush. In recent years this amount of water has been reduced to 6 liters per flush, which is equivalent to half the amount used in the past.

Strategy Development

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

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

> Get professional advice on both individual and organizational level in terms of global warming.



Figure 20. Strategy development for sustainability.

- Commit to the sustainable practices: which cannot be postponed
- Calculate the carbon footprint: identifying the type of emissions and the quantity emitted
- **Develop a reduction strategy**: identify the actions needed to be implemented.
- Share results and practices: the environment is a matter of all regions and communities. Sharing the knowledge help to develop further the tools to fight climate change.

Europe as part of the industrialized world, is using an increasing amount of materials. The average annual use of material resources among the EU-27 (EU-27 means the remaining 27 member states of the European Union following the UK's withdrawal from the European Union) reached 16 tons per person. Demand for materials has long exceeded Europe's ability to independently generate what it needs. The continent imports over six times more resources than it exports, and its economy is now threatened by approaching shortages in primary materials.





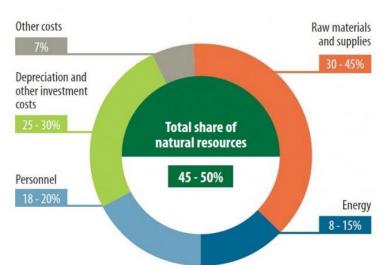


Figure 21: Example of share of natural resources

Using natural resources more efficiently has clear economic benefits for SMEs:

- It improves productivity
- Reduces costs
- Enhances competitiveness
- Creats employment opportunities.
- It provides a more attractive and healthier living environment for regions and municipalities. For example, an overall savings potential of €639bn per year in manufacturing can be translated into substantial gains for each manufacturing company.

European manufacturing firms spend on average 40% of their costs on raw materials, with energy and water pushing this to 50% of total manufacturing costs. This compares to a share of only 20% for labor costs. Resource-efficiency products and processes therefore positively impact the profitability of any company.

However higher profitability, resource efficiency can also unlock large potential for innovation and growth, encouraging the emergence of new technologies and provide more job openings. This relates to the optimization of value generation across the full life-cycle, design of eco-efficient products and recycling and reuse of waste streams.







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Figure 22: Key Facts about Global Materials Use
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