



BALANCE
green and stable

GREEN PRACTICES INTEGRATED IN BUSINESS OPERATIONS

NATIONAL REPORT

GREECE



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CONTEXT

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About the Project

The need for climate action and sustainable resources management is more important than ever. The Green Deal presented by the European Commission on 11th of December 2019, sets the goal, Europe to be a climate-neutral continent by 2050. The Green Deal addresses the immediate need for specific actions that support Circular Economy, helping to reduce CO2 emissions, transform the energy industry, move the production to a more environmental-friendly stage and many more.

The way to becoming Climate-Neutral continent will put in front of us new types of challenges. One of them lay in front of small and mid-sized enterprises (SMEs) which have an essential role in achieving a greener economy as it is indicated by the Green Action Plan.

The upcoming regulations based on the Green Deal are extremely needed, but also they put many of the traditional business models in a transitional situation. The small business struggled in the past decay to recover from a financial crisis and now is facing new challenges operating in COVID-19 world. This business finds it hard to adapt quickly to the needed.

The most sensitive are the SMEs, where change management is challenged by the lack of present financial or human resources, sustainability and knowledge, especially for micro-SMEs.

BALANCE is a project that steps on the key learning points from the Green Action Plan for SMEs, to combine best practices around EU and back them up with financial knowledge in order to create a valuable and training program which curriculum is based on ECVET for the transformation of the small business into more greener without having to sacrifice the financial sustainability of the enterprises and allow them to keep their employees.



The Balance project aims to develop and provide SMEs decision makers with an innovative program that will help them transform into greener operations while improving their financial literacy and enhancing their environmental awareness. The project addresses a key priority of the EU related to environmental and climate goals. Supporting individuals in acquiring and developing basic skills and key competencies is the horizontal priority underpinning this project.



Objectives and Conduct of the research

The project IO1 A3 reports green policies and financial sustainability across European countries. The current research provides the present status of SMEs in Greece and the five analysed best practices operating nationally. The research was conducted by combining desk research and phone interviews with the associated companies. Face to face interviews were not feasible due to the Covid-19 situation and the implemented restrictions by the Greek government.

National Context for SMEs

Greek SMEs are one of the main drivers of the country's financial and non-financial business performance. They represent 99.9% of the total private sector and latest data show that the overall financial outcome of SMEs is positive with a percentage growth of 21.3% in value added and 13.1% in employment during 2018-2020. Numbers have changed since the first quarter of 2020 due to the Covid-19 situation and its implemented measures. Additionally, SMEs have been challenged over the past decade because of the financial crisis which had a profound impact on the Greek economy since 2010.

Based on the EU Environmental Implementation Review (EIR) 2017 Greece has not implemented sufficiently the EU environmental policy and has not managed to address waste management issues within the country, to improve nature protection by applying a protection system, raising citizens awareness, investing sustainably and completing the implementation of the Urban Waste Water Treatment. More specifically Greek SMEs are responsible for 15-20% out of the total carbon dioxide (CO₂) emitted by taking also into consideration their energy consumption. This mainly occurred due to the inadequate financial and educational support towards Greek SMEs. Furthermore, due to the continuous economic recession SMEs in Greece have faced a rapid decline in employment as a direct and visible result but also the "lack of liquidity" as the private sector is unable to support them financially. Other challenges faced by the SMEs are low adaptation capacity to business initiatives and EU initiatives exploitation because of no present strategic business choices to organize the production and marketing activities (lack of educational and financial investments on R&D and ICT) but also due to reduced competitiveness.

A proportion of SMEs benefit from public support measures for their resource-efficiency actions as recovering from the crisis and heading towards becoming more innovative in cooperation with the public sector and business associations. More specifically, 27% of the companies appreciate technical and financial consultancy among all Greek SMEs and find grants and subsidies supportive.

SMEs in Greece have altered their operating procedures over the years in taking advantage of resources based on national Laws and regulations that regulate companies to adapt to the Circular Economy package and SBA policies. According to the SBA fact sheet 2019 even though Greece has one of the highest shares of SMEs offering green products and services, the SMEs are still not provided with the appropriate support to improve their energy efficiency and use of renewables. As a result, Greece continues to score below the EU-28 average in the environmental aspects of the SBA.

Pireus Bank in association with the European Commission and more specifically with the General Directorate of Environment established the LIFE program. The LIFE program was initiated in order to establish green practices and initiatives which can be adopted by every enterprise that desires to

become greener. The program aims to promote this mentality to SMEs in order to help them decide and adopt environmental policies and enjoy multiple advantages from becoming greener. These advantages are:

- Reputation: Companies or enterprises that have a green mentality create a much more positive marketing image especially nowadays when consumers have a different perception, therefore for SMEs to turn greener gives them the opportunity to upgrade their reputation.
- Competitive advantage: By adopting green practices, SMEs do not only create a better reputation but become more competitive in the market. This is achieved by obtaining certifications and applying systematic environmental principles which result in cooperation opportunities with new customers.
- Saving money: Wise use of natural resources in accordance with a systematic approach for reducing environmental impacts results in significant financial benefits.

NSRF 2014 – 2020: National Approved Projects

Thematic Objectives	Budget (€)	Contracts (€)	Payments (€)
Research – Technology and Innovation	733,665,557	576,859,104	168,900,729
Information Communication Technology (ICT)	1,528,242,859	883,685,071	315,657,123
SMEs Competitiveness	7,033,377,229	6,778,312,749	3,739,848,199
Low Pollution Economy	5,109,899,937	2,890,926,680	1,509,556,027
Climate Change - Precautions	577,418,491	305,522,683	149,694,020
Environmental Protection	4,799,644,167	2,118,797,410	1,166,945,903
Sustainable Transport	4,263,222,204	2,354,286,992	1,304,189,908
Occupation	2,874,217,700	2,425,074,260	1,406,307,096
Social Integration	2,715,581,752	2,286,786,445	1,299,194,651
Lifelong Learning	3,244,086,564	2,930,568,401	1,032,568,403
Public Administration Reform	381,303,146	253,984,136	121,091,714
No Objective	727,336,967	652,740,626	404,536,600

According to the latest NSRF public results 13 multivariate and multisectoral Peripheral Projects apart from sectoral programs are co-funded by Greece and the EU for the period 2014-2020. Each and every one of the Greek regions is part of a Peripheral Project which includes regional projects and actions and takes advantage of the regional benefits and is funded by the European Regional Development Fund (ERDF) and the European Social Fund (ESF). Their common objective is the regional and local authorities' empowerment to act effectively according to the NSRF main priorities. Greek SMEs were funded by the thematic objective "SME's competitiveness" which also covers SMEs' actions towards protecting the environment. Furthermore, the Peripheral projects included the "Environmental Infrastructure" action with a total expenditure of 40 million euros. The action concerned financing investment plans by new and existing SMEs for the utilization of waste. This aimed at the re-introduction of waste into the production cycle and its reuse as raw materials in order to serve either their original use or different ones. 69 investment projects with a total budget of 88,523,545.70 euros were submitted with a total public expenditure reaching 40,265,989.03 euros.

National and other initiatives

Greek SMEs are invited to adapt to the emerging green direction since Greece embodies many advantages. Greece is a geographically gifted country as it contains a variety of natural resources that businesses ought to manage sustainably (solar energy, biofuels etc.). There are available financial possibilities that allow the internal environment to develop in long-term quality wise both in rural and urban areas of the country since local and functional systems can enhance the local production, demand of resources, and contribute into removing intra and interregional inequalities.

In 2017 the Greek government enacted a recycling law that adjusts existing laws and regulations to circular economy principles. This law states that from the 1st of January 2018 consumers are obliged to pay for the use of plastic bags. Through this new law Greek Municipalities are motivated to reduce residential fees and develop waste management since the waste management carriers will award the Municipalities according to the amount of waste collected and reduce the correspondent fees. Law 4496/2017 aims to firstly reduce waste production, secondly reuse, and recycle biodegradable materials. Additionally, other objectives are the optimization of the Alternative Management Systems (ALS) operation. These objectives aim to ground fundamentals for better control and cost rationalization of the respective services and promote economic and environmental investments.

Apart from the enactment of laws and regulations the Greek government supports equity financing. More specifically in 2016 a private equity fund was launched by the cooperation of the government and the European Investment Fund, which invests in high-value added and innovative early and growth stage companies. Furthermore in 2019 the Greek government in cooperation with the Central Bank of Greece and according to the law 4608/2019 established the Hellenic Development Bank (HDB). HDB intends to improve SMEs access to finance to become more innovative and facilitate investments in infrastructure by providing shared-risk loans, guarantee facilities and financial expertise to the public sector. HDB deploys a list of new products by using both public and private funds for the support of SMEs and targets projects that affect sustainable growth, regional development, and job creations.

The Athens Chamber of Commerce and Industry applies a project “Think Green” which aims to face environmental impacts such as pollution and enhance the environmental consciousness and ecological mentality of SMEs. The program “ Think Green” focuses on Greek SMEs applying good practices to minimize environmental impacts from their operations such as waste management. Good practices according to the EEA grants involve all instructions, techniques and methodologies that aim for sustainability, development, profitability and environmental protection. The idea of applying green practices in Greece especially during the period of economic crisis is followed by the idea of excessive cost for a small or medium enterprise. However most environmental practices do not always relate to excessive costs but to a change of mentality. Practices such as recycling, wise use of resources towards the environment, using lamps of high energy class have shown that reduce significantly the production costs of an enterprise. On the other hand, practices followed by high costs such as buying high tech equipment are considered to be investments for the long-term profit of the company. The Athens Chamber of Commerce and Industry provided some suggestions on:

- Sustainable Energy consumption
- Renewable Energy Resources Utilization
- Water Management
- Waste Management
- Green supplies

- Supply chain and transport
- Environmental actions

The Development Law 3908/2011 reinforces investments concerning the innovation and application of green practices such as studies on developing environmentally friendly technologies, know-how and certification plans on environmental management for the use of renewable sources, on biofuel production, etc.

The Guarantee Fund for small and very small businesses provides guarantees on long-term and short-term loans or finances small and very small enterprises that not only show lack of finance access but also a higher risk than middle businesses.

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Green Practise 1 – Recycling of olive pits

Company name: KLIMIS (VAS. & EK. KOTTARIDI GP)

Size: 10-12 people

Industry: Manufacturing (Producer of lime products and products made from olive pips)

Years of Existence: 53 years, since 1977

Description of the green practices involved:

- Goals

The company deploys its services to create eco-innovative products as sustainable sources of energy. Using these 100% sustainable products, many households have efficient cooking and heating with 30% less carbon monoxide emissions in comparison to wood charcoal. The company aims to use natural resources without interfering to the life cycle of olive trees. The company's main activity is to produce lime products which are separated in two categories. Quicklime is used in a form of powder in the agriculture sector as a fertilizer and Putty lime is used as a building material in the construction sector. However, they also create heating and an innovative product, the barbecue briquettes. Every year the olive trees provide olive fruits and by using the olive pips they create the olive barbecue briquettes. They do not cut down and burn trees or use remnants of chopping down trees to make charcoal because barbecue briquettes grow on olive trees. This is a way to tackle deforestation and greenhouse gas emissions, as combustion of biomass is carbon neutral.

- Procedures, Activities, Phases

Klimis's main activity is to produce Quicklime and Putty lime. To do that, in simply words, they bake limestones in a kiln. The process is called "Calcination." Through this process a thermal decomposition of the limestone in a temperature of about 1,000 °C is achieved. Once the decomposition is completed quicklime is created. The chemical name for quicklime is calcium oxide (CaO) used as a fertilizer in powder form. However to bake the limestones a fuel is needed. This fuel is a by-product created from the olive oil production called pomace commonly and it is a sustainable biomass fuel. The extracted olive pomace is a remnant from pomace factories produced during the process of collecting olive oil. Furthermore, in the kiln the fuel combustion that takes place is incomplete so, a black powder is created during the heating process of the limestones. This black powder is not wasted but it is compressed in oval shape to create the barbecue briquettes.

The olive pips are also utilized as logs for heating. It is described as a green fuel more specifically as a 100% natural product free of chemicals with a heating power of 4520kcal/kg.

Description of the implementation:

- Investments and running costs

It is a family company that own their own facilities; therefore, their financing source is private (company's investments) and have not received any investments neither from the public nor the private

sector due to lack of financing from the banks and because of high interest rates. In 2006 and in 2010 they received financial support from PA (Partnership Agreement for the Development Framework) to improve the equipment and facilities and to improve the production processes. This improved production capabilities and the quality of the produced products. Additionally, 50% of the company's revenue originates from the produced waste.

- Challenges

In 1992, after 15 years (1977-1992) of experiments, the company managed to produce and put the olive barbecue briquettes in the Greek market. The main difficulties that were faced during those years was the lack of the appropriate machines and to find out the natural raw material for gluing the black powder "waste" for making the final product as up to today there is insufficient information available for innovative products and as around 70% of the wood charcoal used annually in Europe is imported. So, they designed and made from scratch, new machines (mixers, press machines, dryers) and tested to produce the new by-product. Additionally, since the company managed to expand their market network by more than 50% internally and abroad there was a high demand of the olive briquettes and due to the lack of financing the company had more costs to deal with. Furthermore, KLIMISCOAL aims in creating new partnerships to increase production capabilities and raise people's awareness on using natural resources because EU (European Union) Ecolabel certification for such kind of products does not exist.

- Role of digital technologies

The company uses digital technologies to participate in online events, workshops and virtual events and present their products and processes efficiently and in more detail but also to enhance customer management and customer relations. Additionally, they use digital marketing tools for the e-shop and their website.

- Results of implementation

The company ensures the quality of the production by implementing standards ISO 9001:2015 and ISO 14001:2015. Through these standards KLIMISCOAL assures both the company management and employees as well as external stakeholders for the validity of their projects. Technically the company creates a new "green" product from waste which leads to protect the environment as there is no waste disposal in the environment and financially, their income is raised by 50%. The last years they managed to export the product abroad mainly in Germany, Sweden, Romania and in Canada and Australia.

Description of the communication:

- Internally (towards the employees)

The company forms their processes on environmentally sustainable projects and employees are experts in the field. All employees are encouraged to express their ideas, report any non-conformities they have observed and propose corrective actions. New employees are trained daily for each process implementation and are being informed for every preventive process maintenance and inspection of production equipment separately.

- Externally

In the ongoing process to make the environmental and innovative aspects of the barbecue briquettes known to the public, the company very often participated in social events and exhibitions, where eco – friendly products and innovative environmental processes were presented, and the participants had the chance to get involved in an open dialogue with the public. Also, the company participated as speakers in many conferences in Greece and abroad that were organized by private companies, organizations, and universities. Through those conferences, they had the chance to present their experience in environmental development and circular economy implementation. By participating also at the EMAS (Eco-Management & Audit Scheme), the winning European EMAS Awards back in 2009 & 2014. In 2018-2019 as the winner of Runner-up in the European Business Awards for the- Environment, in the category “The Management Award for Micro and Small Companies the company became “visible” and promoted the by-product in the European market. New potential customers are thoroughly informed by the trained personnel, and an advertising brochure is distributed to them, explaining all the ecological aspects of the product as well as all its characteristics that make it an eco-innovative.

- Possible alignment with the company’s CSR

The company follows a pattern towards a sustainable economic recovery for Europe, well aligned with the priorities of the European Green Deal and with a profound respect for the environment at the very core of their business principles.

Lessons Learnt

By cascading the olive materials through a sequence of value extracting processes the company has created multiple revenue streams from olive by-products. In global terms recovering energy from the by-products of locally grown food crops, offers a carbon-neutral fuel alternative for industrial processes as well as a certified way for citizens to avoid inadvertently contributing to deforestation.

- Recommendations

The company advises other SME’s in the Greek market to persist and pursue any possible way to develop and promote their eco-innovative green practice by either participating in Green award competitions, programs and projects on environmental and economic sustainability and keep up with the trends and conditions promoted by other EU countries.

Visual materials and links



Image 1: Company logo



Image 2: Barbeque briquettes



Image 3: Olive pips to bbq briquettes

<https://klimiscoal.gr/en/>

<https://klimiscoal.gr/en/products>

<https://circulareconomy.europa.eu/platform/en/good-practices/production-agricultural-lime-summer-barbecues-olive-pits-make-perfect-circular-fuel>

<http://www.circularity.eu/project/klimis/>

https://ec.europa.eu/environment/emas/emas_for_you/news/news3_en.htm

Green Practise 2 – Packaging from recycled fishing nets

Company name: NILO D.PAPAMICHAIL & CO L.P.

Size: 59 people

Industry: CHEMICAL PRODUCTS, DETERGENTS, DISINFECTANTS & COSMETICS MANUFACTURER

Years of Existence: 46 years, since 1974

Description of the green practices involved:

- Goals

NILO is a company that produces and disposes detergents since 1974 and aims to serve all human activity needs in everyday hygiene and further extending and developing their activities and innovating products on personal hygiene, aesthetics and the food industry. The company's goals and responsibility are closely aligned to the UN's sustainable development goals. NILO's green practices target the replacement of 100% virgin plastic material of their filled bottles into a percentage % of recycled material and aim to reduce their environmental impact and positively affect their ecological footprint on the planet.

- Procedures, Activities, Phases

The company contributes to the environmental protection via two components: one internal and one external. The internal component refers to the company's efforts to reduce the environmental impact of its operation. In order to meet this goal they are actively involved in the recycling of plastic, paper and wood by the Collective Alternative Management System of the Hellenic Recycling Company (E.E.A.A.) and ensure that all plastic materials will be either reusable and recyclable in packaging selection. Due to this fact NILO in collaboration with a danish company PLASTIX is exploring the development of packages made by 100% recycled fishing nets, fibbers and rigid plastic waste i.e. "Green Plastic". The use of "Green Plastic" causes an up to 95% reduction of CO2 emissions compared to virgin plastic. In more detail, by using "Green plastics" the company reduces CO2 emissions up to 82% compared to virgin plastics and they also reduce the marine pollution. Furthermore, by using Vegan certified formulas, 200 animals, 6.000.000lt water and 1.5ton CO2 emissions are annually saved. Finally, NILO uses palm oil, palm kernel and palm oil derivatives, which are exclusively derived from sustainable palm oil this means that they come from fully traceable, non-traceable crops, do not contribute to deforestation and meet the principles and criteria of the Roundtable for Sustainable Palm Oil (RSPO). The external component refers to the company's efforts to raise customers and suppliers environmental awareness and to actively support non-company actions related to the overall preservation of the natural environment for future generations. To achieve this goal, the company encourages clients to adopt an ecological philosophy by offering them eco-friendly formulas and packaging solutions (recycled PET and PE) as it is indicated by the European Parliament and Council directive on reducing the impact on the environment of specific plastic product for green economy and sustainability.

Description of the implementation:

- Investments and running costs

In collaboration with the danish company PLASTIX which supplies plastic fishing nets, fibbers and other waste to the shipping industry and converts them into high quality plastic raw materials. New Household Cleaning Products & New Liquid Hand soap launched in Greek market with Vegan formulation, packed in bottles made of the recycled plastic material sourced from the recycled fishing nets, trawls and ropes that was supplied from PLASTIX. For the R&D of these innovative products investments made, came up to 20.000€ which included the conduction of the migration and compatibility tests. Research has been made for plastic packaging manufacturers and showed that they would incorporate this type of recycled plastic raw material into their production process & equipment

- Challenges

The really difficult conditions stemming both from the sharp competition in the sector and the overall economic performance of the country in recent years, challenged NILO despite the steady upward trend in its economic data. However, challenges emerged by the difficulty of using the recycled material into plastic packaging production. Repeated Sampling process was carried out by the plastic packaging supplier.

- Role of digital technologies

With regard to services, always aiming at the most direct and effective customer service, NILO takes a further step and implements a dynamic and integrated ERP system that is fully suited to the needs of the company to process and monitor all of the information required for the continuous and efficient operation of business processes. The implementation of the system will enable it to monitor and verify its customers' needs in a timely manner, organize their stocks and group their missions, electronically take orders and promote them directly for execution. Additionally, the company promotes the vegan products VELVET-love for nature using digital marketing.

- Results of implementation

- 1st company in Greece to supply Green Household & Personal care products with Vegan formulas packed in Green recycled plastic packaging sourced from maritime industry.
- Carbon footprint reduction
- Green manufacturing approach
- Reduce the impact that our packaging proposals has on the environment.
- Influence daily employee habits that revolve around single-use products, in order to reduce their waste production and environmental footprint simultaneously.

Description of the communication:

- Internally (towards the employees)

NILO promotes environmental awareness to all colleagues and calls for personal advice and ideas that contribute to the implementation of green practices. Therefore developed Sustainability Work Policies:

- Energy saving setting to equipment used by employees.
- Strive to reduce paper use & printing.
- Training employees on the importance of sustaining the environment and share what the organization is doing to help conserve resources.

- Externally

In line with the innovative action and products, NILO attended a meeting of business representatives of new technologies, extraversion and innovation, invited by University of Volos, regarding the innovative products of the new range of “VELVET Love for Nature” natural cosmetics, developed at R&D. In addition, some company executives have participated as lecturers in seminar programs organized by the University of Thessaly in fields of innovation and development, presenting products and innovative actions of the company. NILO also participated as a mentor in student groups at Innovation and Entrepreneurship Unit of University of Thessaly aiming at mentoring in the business world. Communication strategy:

- Via site, social media, letters to vendors and customers
- Participation in Green Awards

- Possible alignment with the company's CSR

The company follows a pattern towards a sustainable economic recovery for Europe.

Lessons Learnt

Responsibility & Sustainability and the importance of collaborations & partnerships.

Visual materials and links



Image 1: Company logo

<https://www.nilo.gr/www.nilo.gr/detergents/contact.html>

<https://www.nilo.gr/www.nilo.gr/detergents/contact.html>

Green Practise 3 – Green resorts

Company name: IDEALES GROUP- Ideales resort

Size: 6 people

Industry: Hotel Industry

Years of Existence: 16 years, since 2005

Description of the green practices involved:

- Goals

IDEALES group is a construction company that became part of the hotel industry by building a complex of villas to a resort, more specifically the “GREEN” resort in Kefalonia-Greece. The company’s goal is to build and offer ecological products such as the “Eco pool”, an environmentally friendly pool that reduces water and energy consumption due to its construction.

- Procedures, Activities, Phases

IDEALES Resort is a complex of 12 villas in Kefalonia. IDEALES RESORT is part of the IDEALES group that have been awarded nationally and internationally for their sustainable development and for the green practices applied in everyday operations. All villas power their electrical appliances apart from the refrigerator with a card that is given at the visitor’s arrival. This card is placed in a special slot next to the main entrance for power supply. Upon leaving the villa, the visitor removes the card from the slot and all appliances switch off to avoid wasting energy. Air conditioners only work when the front doors and windows of a room are closed so that there is no loss of cooling or heating from the room. All electrical appliances are selected mainly on the basis of their energy class and all are of the highest possible energy class. The windows are energy efficient with thermal breaks and double glazing reducing the consumption of cooling and heating.

For the lighting of the Resort only LED lamps are used. These lights are recycled after their expiration and at the main entrance of each villa there are lights with photocell.

To save water but at the same time ensure hot water to the customers, the villas are equipped with solar water heaters. Additionally, pressure reducers, blowers are emplaced in each tap and double flow cisterns in all villas.

Bed linen, towels and pool towels are changed twice a week, thus reducing unnecessary laundry services and their consequent environmental impact (waste of water, detergent and energy).

All villas have ecological pools built in. These pools are maintained according to the hygiene and safety regulations. The pools due to their construction operate with water and energy reduction and the minimum usage of disinfectants making them more environmentally friendly.

To recycle and reduce waste, all visitors are encouraged to throw away everything made of paper, glass, aluminium or plastic in special recycling bins located in each kitchen. All contents of the bins are

transferred to the blue recycling bins. The resort is also equipped with organic waste compost bins located on the premises of Ideales Resort.

To protect the Environment and the health of the Visitors only ecological cleaning products and detergents are used and the packaging of which is always promoted to be recycled.

Other Initiatives

Selected plants are placed in each villa as they can preserve against any weather condition Their need for water is very small and also provide shade outside the villas. With the rich tree planting that has been done in the large area of Ideales Resort, adding plants and trees in harmony with the natural landscape, the wider area has also been upgraded.

Description of the implementation:

- Investments and running costs

Investments were made by the company itself mainly at the beginning of the Resort's construction. The resort was built according to the environmental regulations applied to all buildings in earthquake zones during the period 2005-2009 such as Kefalonia. All initial investments were made based on the long-term plan in order not to affect the running costs of the company.

- Challenges

Due to the measures against Covid-19 the resort announced that the Cleaning Service would not be provided during a visitor's stay, causing excess use of bed linens and towels. All visitors would be provided with extra sets of bed linens and towels during their stay at the resort. This influenced the excess water and energy consumption. Additionally, due to the Covid-19 situation the resort was not able to distribute informative leaflets on recycling and other green activities to visitors.

- Role of digital technologies

The resort aims to exceed expectations for their sustainable development and green practices since 2005 in order to reduce operating costs and at the same time increase guest satisfaction. These practices use digital technologies such as:

- Ideales blog: A blog through which the company raises awareness and encourages people to recycle.
- Ideales booklet: A booklet which informs visitors on the flora and fauna of the island.
- Website: Available on computer and mobile devices, the website provides a full description of all green practices of the resort including nominated awards from different organizations.
- Navigator Pro: A pool cleaning robot that operates with water pressure instead of electricity. Its hydrodynamic design helps to achieve a very fast cleaning of the bottom of the pool, offering a beautiful pool with healthy water. Its biggest advantage is the advanced SmartDrive system that achieves a complete coverage of the pool.

- Results of implementation

The resort is constructed by advanced systems and ecological products that allow the Visitor to enjoy the pool with respect towards the environment and without wasting water and energy, but also in a completely healthy and safe way. This allows the resort to be cost-effective and environmentally, economically and socially sustainable.

Description of the communication:

- Internally (towards the employees)

The company invests in the dissemination of knowledge in the workplace and in the education of their employees. The professional staff receives constant training on innovative systems in Greece and abroad. All changes regarding recycling procedures are communicated via formal emails or in direct contact by the owners. Furthermore, the company also encourages employees to provide innovative ideas on green practices.

- Externally

The company very often participated in social events and exhibitions, where eco –friendly products and innovative environmental processes were presented, and the participants had the chance to get involved in an open dialogue with the public. Ideales resort participated in many events through which was awarded the Green Key eco-label award. Green Key is an eco-label for tourism and leisure establishments and is awarded to establishments that fulfil a list of environmental requirements. Obtaining Green Key demonstrates the responsibility of the establishment for its surroundings and society. Additionally, another important award added to the numerous distinctions for Ideales Resorts' Green Practices was the recent Silver Distinctions in the Greek Hospitality Awards 2018 as a Best Greek Green Resort, the Silver Distinctions in Tourism Awards 2016 and 2017 and the gold award in the Green leader's program by Trip advisor.

- Possible alignment with the company's CSR

All the practises are aligned with the company's CSR policy.

Visual materials and links



Image 1: Company logo

https://www.idealesresort.gr/eng/faqs/ideales_resort_green_practices

<https://www.ideales.gr/en/ideales-resort/demanding-travelers>

<https://www.ideales.gr/en/responsibility/enviroment>

<https://blog.ideales.gr/en/>

Green Practise 4 – Recycling manufacturing materials

Company name: TOLIS DISPLAY HELLAS S.A

Size: 85 employees

Industry: Manufacturing

Years of Existence: 61 years, since 1960

Description of the green practices involved:

- Goals

Tolis Display Hellas S.A is a manufacturing family company which produces and trades products in wire, tube and plate with several surface treatments as high gloss chromated zinc, zinc with baked on protective lacquer and plastic colour coating for shops, supermarkets, logistics and business commerce since 1960. The company's perception towards applying green practices started in 2012 by recycling most of their spare materials (paper, plastic, metal). This concept was initiated from the family itself and expanded over the years to the company in a way to become more organized, more efficient and more productive but also comply with laws and regulations that were established nationally at that time.

- Procedures, Activities, Phases

The company holds the international Quality Certification EN ISO 9001:2000 and is considered a guaranteed approved supplier of large Greek and multinational groups as well as of multiple smaller companies. Due to the company's cooperation range, its green practices occur internally and externally. Internally the company as mentioned manufactures and produces professional store and logistic equipment such as shopping carts, transport, warehouse-logistic trolleys, recycle bins wire and metal merchandising materials. Trolleys or in general carts are manufactured in a facilitating way by metal or a combination of metal and plastic for collecting and moving items, therefore during the cart production high volumes of metal and plastic waste is created. TOLIS applied an effective recycling solution to create a seamless process from waste creation to the correct collection, disposal and recycling of it in order to avoid directing it to landfill. More specifically the company took into consideration the approximate volume of metal and plastic waste created from their premises and determined their appropriate container sizes for each type of waste, then by setting a collection schedule the waste created was effectively collected, separated, stored within their containers and then sent off for recycling. Within the company's factory premises there are also the municipal blue recycling bins for cardboard and paper waste and the municipal green bins to dispose domestic waste. Within the company's office the recycling occurs by using the metallic bins they produce, these metallic bins with DCP 1.25mm contain stands for degradable plastic bag inside the bin surface treatment with each colour representing a material

- Blue bins for plastic
- Yellow bins for paper
- Red bins for metal
- Green bins for other waste

Additionally, plastic and metal materials used for different products need to be colour coated. The powder applied for coating is certified as environmentally friendly due to their low carbon footprint with a 99% usage. This powder once used is then specially filtered in order to be reused on other products, the powder residue is then sent to external premises for further processing. Furthermore, soap oil is added in the paint used for metal coating, this prevents metals used for carts, trolleys and other merchandising materials to rust. The soap oil residue is also sent off to a certified private company to further process and reuse.

Finally, the company aims to cooperate with companies certified for the environmental practices innovative products.

Description of the implementation:

- Investments and running costs

It is a family company that own their own facilities; therefore, their financing source is private (company's investments). All investments provided for implementing paper, metal and plastic recycling paid off within a year of operation of the factories whereas metal recycling reduced costs around 50%.

- Challenges

Supervising that the recycling process is carried out correctly and that all produced waste is categorized into the container bins according to the material.

- Role of digital technologies

The company uses digital technologies to participate in online events, workshops and virtual events and present their products and processes efficiently and in more detail but also to enhance customer management and customer relations. Additionally, they use digital marketing tools for their website through which they offer support, in product design and after sales service. The website is available on computer and mobile .

- Results of implementation

The recycling process of the manufacturing waste provided the company with the opportunity to become more organized, more productive and hence cost-effective, environmentally, economically and socially sustainable.

Description of the communication:

- Internally (towards the employees)

The company invests in the dissemination of knowledge in the workplace and in the education of their employees. The professional staff receives constant training on innovative systems in Greece and abroad. All changes regarding recycling procedures are communicated via formal emails or in direct contact by the owners. Furthermore, the company also encourages employees to recycle by setting up markings both at the factory and office premises of the company. Finally, TOLIS encourages the staff to provide ideas on innovative green practices.

- Externally

The company initiated all green practices during the production in 2012. These practices were communicated outside of the company by:

- Placing milestones in all three factories
- Face-to-face meetings with suppliers and clients
- Participating in social events and awards
- Sending out certified letters to vendors and customers

- Possible alignment with the company's CSR

All practices are aligned with the company' CSR policy.

Lessons Learnt

- Recommendations

Responsibility and sustainability.

Visual materials and links

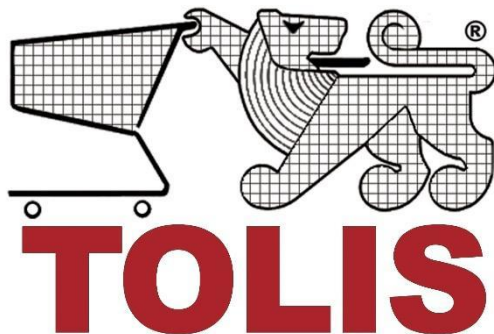


Image 1: Company logo

<https://tolis.gr/en/home/>

<https://tolis.gr/about-gr/>

<https://tolis.gr/en/product-catalogs/>

Green Practise 5 – Papastratos- Sustainable Development

Company name: PAPASTRATOS - PHILIP MORRIS

Size: 833 employees

Industry: Tobacco company

Years of Existence: 85 years, since 1926

Description of the green practices involved:

- Goals

PAPASTRATOS has as a main goal to align businesses' activities with the Sustainable Development Goals (SBA-SDGs) of the UN. Additionally, the company aims to improve the products' life cycle effects, starting from the environmental effects of tobacco cultivation and reaching the implementation of effective programs production with low carbon dioxide emissions as well as waste management and recycling.

- Procedures, Activities, Phases

In 2019 by renovating the administrative building (Administrative Building Renovation), the natural light was enhanced throughout the building and it was achieved by replacing opaque partitions with glass inner partitions. The new layout of the building led to its optimized air conditioning, utilizing the eastern and west orientation of the respective offices, while saving energy. In 2018 by converting the factory into an exclusive production centre of heated rods tobacco and the initiation of commercial production, there has been a greater focus of the company on environmental issues. Additionally, due to the fact that the factory emits gaseous pollutants, the company monitors and controls the particles emitted in order to meet all regulations. They also perform a chemical analysis of the processed water composition from the plant by utilizing a biological treatment. Furthermore, in order to maintain the quality of the water resources the company implements programs such as, that of Good Agricultural Practices -GAP. Sustainable water management in agriculture also includes access to safe water and sewerage for tobacco growing communities. In 2012 PAPASTRATOS initiates the program "Layout Of Future Technology", which aims to reduce the volume of produced and assigned to Specially Licensed External Management Body, hazardous liquids waste and with which they have managed to reduce these quantities by 40%. In 2017 the company starts a new project on wastewater management, called "Flocculation" (Physicochemical precipitation - flocculation). This method is simple, it is an automated process that separates solids from its liquid components waste, it occurs mainly in one reactor and requires a limited number of electromechanical equipment and consumables. Other actions to improve the company's environment performance:

- All the electricity supply comes from renewable sources, by obtaining the relevant certificates from the electricity supplier energy.
- In 2016, low consumption lighting was installed (LED) in the Print Unit.
- In 2018, the factory was connected to the Natural Gas Network This action helped the gradual decoupling of fuel oil usage and contributing significantly to the reduction of carbon dioxide (CO₂) emissions.

The relevant environmental indicators are constantly monitored (fuel consumption, electricity, water, CO2 emissions, waste generated, recycling / disposal).

Description of the implementation:

- Investments and running costs

In 2019 2.4 million euros were invested for the renovation of the administrative building (Administrative Building Renovation)

- Challenges

The water strategy includes many risks such as potential pollution and the lack of water resources and their effects respectively in the related hydrological basins (catchments). The water strategy is the compass to ensure sustainable water management.

- Role of digital technologies

Recognizing the needs of society, the company has transformed into a technology company, offering adult smokers not only alternative tobacco products but also digital solutions for every moment of their daily life related to their use.

- Results of implementation

Reduction by 70% in quantities of hazardous liquids waste in 2019.

Waste Management of 99.9% of produced waste with some recovery form (recycling, composting, energy recovery). For the productive activities of the company, it is necessary to use electricity and thermal energy, which correspond to 41% and 59% of the total respectively.

For 2019 it was observed that energy intensity (MJ / unit of product) decreased by 36% compared to 2018. Given that absolute energy consumption increased in 2019 compared to 2018, energy intensity for 2019 improves its operation in regards of the production volume, which showed an increase.

The indirect emissions of the greenhouse gas (market-based) for 2018 and 2019, are zero as the company obtained Guarantees of Origin from the company IRON THERMOELECTRIC SOCIETE ANONYME. By Using Guarantees of Origin, PAPASTRATOS promotes the use of Renewable Energy Sources (RES) in comparison to 2018, when the company received guarantees of origin for 71,280,000 MJ (19,800 MWh) of electricity produced by RES while in 2019 it received guarantees of origin for 90,741,600 MJ (25,206 MWh).

Description of the communication:

- Internally (towards the employees)

A total of 204 trainings were conducted on the Environment, Health and Security, lasting 2,000 working hours in 2019, against 149 duration trainings 1,000 working hours in 2018.

- Possible alignment with the company's CSR

All practices are aligned with the company' CSR policy.

Weblinks for additional information:

<https://papastratosmazi.gr/>,

https://papastratosmazi.gr/media/wyldxv2x/papastratos_final.pdf

<https://www.pmi.com/resources/docs/default-source/pmi-sustainability/pmi-sustainability-report-2018-low-res.pdf>

Conclusions & recommendations

Share your overall impression of the conducted research and gathering of practises. Be as analytical as possible.

Greek SMEs ought to adapt the concept of sustainable development which concerns the wise use of energy land stocks and integrate them within their daily business practice initially as a cost reduction strategy. As they represent 99.9% of the total private sector, SMEs should treat CSR as a new market opportunity, focus on environmental practices and at the same time strengthen their market image and increase the competitiveness with the big corporate companies. It is suggested that businesses ought to implement, monitor environmental programs and individual actions as using recyclable materials for their packaging products, forecasting CO2 emissions, defining environmental objectives (e.g. reducing carbon footprint by 10%). Additionally, they should increase internal environmental awareness by organising/ funding/ participating in training programs for staff education and informing employees on the environmental performance of the company. Finally, SMEs should plan and implement an Environmental Management System, that will allow them to put everything into a plan that will be monitored, audited and improved on a frequent basis.

Greek SMEs come across different obstacles when adopting circular economy and hence green practices basically due to their small size. In more detail such obstacles could be lack of interest by consumers, lack of national finance especially during the economic crisis period. Additionally, due to current legislations small business are only able to recycle instead of designing circular and greener operations. For this, financial incentives will develop SME's circular economy and enhance circular product creation which will be more profitable than recycled or remanufactured products.



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