

CASE STUDIES

GREENING INPUT



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Introduction

Green companies, also often referred to as *sustainable businesses*, seek to balance their profit objective with the need to protect the planet's health. These companies integrate sustainability principles into all their activities, adopting practices that reduce the negative environmental impact globally and locally. The main objective of green businesses is to minimise their environmental impact while contributing to economic and social well-being [\[1\]](#).

As the threat of climate change and its devastating effects on our ecosystem become more acute, green businesses are focusing on strategies that allow them to reduce greenhouse gas emissions, a significant cause of global warming. These companies adopt greener practices in their production processes and create products that promote sustainability, such as renewable technologies, low-impact products, and circular solutions. For many enterprises and workers today, the greening of workplaces can significantly reduce carbon emissions.

The SUFABU project focuses on strengthening the core competencies of family entrepreneurs who have brought a new generation into the company's management or are involved in a generational discussion on business management in introducing green technologies or practices. Due to their size, SMEs, and especially family businesses, have fewer opportunities to start implementing green transformation activities. The project creates a comprehensive training system based on various training materials that are publicly available and provides them with the missing know-how. The following case studies concern family businesses that have embarked on a green transition process. The case studies have been divided into three macro-categories:

- Greening process, methods, and practices
- Greening input
- Greening workplaces

Many of the companies in the case studies have adopted measures belonging to more than one macro category; the choice to include them in the input section is because the primary environmental sustainability measure adopted by the company falls into this category. This includes:

Renewable energy

It is energy derived from natural sources that are replenished more than consumed. Sunlight and wind, for example, are constantly replenished.

Sustainable raw materials

Raw materials sustainability is the term used to describe the environmental impact of our reliance on raw materials. It considers the depletion of natural resources, pollution, and other environmental damage caused by mining, processing, and transporting these materials.

CASE STUDIES | SUSTAINABLE RAW MATERIALS





1.1 Nuova Saca S.R.L.

Country: Italy	Greening processes: Resource intensity Greening Input: Sustainable raw materials Greening workplace: Sustainable consumption Greening output: offering green services
Company size headcount: Around 10	Company size turnover: < €2m
Interviewed: Successor (next generation) Partner (next generation)	Industry: Other Service Activities

Background



Nuova Sa. Ca was founded in 2009 following a split within the family business SACA, founded in 1971 by Giancarlo's father and a third person. Over time, Giancarlo's uncle (who already worked in the company) and cousin took over as partners. The latter started working in the company in 2006. The company operated mainly in two areas: one was the responsibility of Giancarlo and his father, related to pesticide treatments; the other was the responsibility of his uncle and Giancarlo's cousin, related to mowing rivers, streams, etc.

2007 represents a critical moment for the company's future: the third partner decides to leave and liquidate his shares. This decision inevitably leads to a change in the company structure, which ends with Giancarlo and his father leaving. Nuova. SaCa was founded with Giancarlo as its owner. Initially, the company focused on pesticide treatments in nurseries and projects in the infrastructure (motorways) and public administration sectors.

Nuova.SaCa was thus born in a challenging international context, characterized by the economic crisis of 2007. However, the company's history ensures that Giancarlo and his father have an essential and loyal customer portfolio and a specialization in an underdeveloped sector.

In 2013, Giancarlo's partner Giada also joined the company, taking care of the administrative side of the business and specializing in submitting proposals for tenders.

Thanks to targeted training, Giada and Giancarlo have become more aware of company management. As Giancarlo points out, in the artisan world today, bureaucratization and



understanding of business processes are two fundamental aspects of good business management compared to the past. The company has grown yearly to include seven employees, including Giada's brother, Giancarlo's father, and the owner. Today, it specializes in pest control, rodent control, green protection, the planning and management of green areas, bird removal, and insect removal from wood.



Sustainability transition

The family Giada joined the company in 2013 represents an essential point in Nuova Saca. As an ecologist, environmentalist, and animal activist, Giada sought to make the company greener when she started working there.



In 2013, Nuova Saca expanded its services in pest control at a time when legislative restrictions supporting environmental sustainability were beginning to be introduced in the sector. EU chemicals and pesticides legislation introduces rules governing the marketing and use of specific categories of chemicals, a series of harmonized restrictions on the marketing and use of hazardous substances, and protocols for managing significant accidents and the export of hazardous substances. The European Pesticides Directive of 2009 was implemented in Italy by the NAP (National Action Plan) in 2014, which regulates the entire plant protection sector where Nuova Saca operates.

In addition, increased information, environmental awareness, and the growing focus of the labor market on environmental sustainability are pushing the company to adapt, even though it operates in an industry that heavily uses chemicals. Plant protection products and pest control activities are not *green* activities, but Giada decided to devise a strategy for the company to minimize its negative environmental impact. She desires to improve the company, making a small change reflecting her values. She proposes to Giancarlo that the company adopt less negative environmental practices, such as choosing more sustainable products. The main actions taken by the company were:

- use plant protection products that contain fewer toxic substances.
- Investing in machinery and techniques would ensure more efficient use of chemicals with less environmental impact.
- Acquiring environmental certifications that allow the company to monitor its environmental impact indexes.



Giancarlo was initially more afraid than Giada of starting a *green* transition process for fear of a negative impact on the services offered by the company (that the work would lose quality in the services offered to customers, that there would be a high increase in costs, that management time would become longer). But he changed his mind when he noticed how, thanks to the techniques used to use the products and the investments made in the purchase of machinery, the company is now much more efficient in terms of providing services to customers: if in one day the company was able to serve three customers, today it can handle 8. Giancarlo's father, Luigi, has total confidence in the choices and actions taken by his son.

These investments have pushed the company to adopt innovative techniques and use what nature offers: for example, ladybirds, natural antagonists of a type of aphid found in plants. However, Giada and Giancarlo note that this service is still too expensive compared to the traditional one.

The use of organic products is a way to ensure the safety of the operators carrying out the interventions, the customers and the surrounding environment by reducing the risk of exposure to toxic and polluting substances, protecting the health and safety of people and the environment. Furthermore, using organic products can improve the effectiveness of interventions and represent an opportunity for companies in the sector to differentiate themselves and offer more sustainable and environmentally friendly services. Using organic products can add value to a company's image, attract new customers and consolidate the trust of existing customers.

Finally, using BIO raw materials fits into a context of sustainable development and attention to environmental protection.

From this initiated green transition process, Giancarlo and Giada realized that measures to reduce environmental impact are possible in a purely chemical industry such as the company's. Turning what appeared to be a problem into an opportunity was crucial.



Learning points and actions to consider

In Giancarlo's and Giada's opinions, the green transition is a long and still developing process. Both note that the private market is still less receptive than the public sector.

For Giancarlo, a company must analyze the costs of a green transition process. The company should understand whether it can bear them and amortize them. However, Giancarlo emphasizes that embracing a more environmentally friendly corporate policy is not only an economic choice but also a societal and ethical one. In fact, in the case of his company, Giancarlo says,

“The organic product indeed costs more, but it provides greater peace of mind for my employees, who are less in contact with toxic substances, and for my customers because of the top-quality service we can provide.”

Understanding your target market's reaction, customers, and company's return image. You should also examine other companies operating in the same sector and learn from them.



Reflections

- Are we structured enough to deal with a green transition process?
 - How will my customers perceive this process?
 - What opportunities can I get from this process?
 - How will the services offered so far offer higher quality?
-



1.2 Essem Design

Country: Sweden	Greening processes: Green marketing/ labels Greening input: Renewable energy, Sustainable raw materials Greening output: offering green services
Company size headcount: >50	Company size turnover: < Around 10m
Interviewed: Incumbent (next generation) Sibling	Industry: Manufacturing

Background



Essem Design designs and manufactures different hallway interior products, such as hat racks, shoe racks, and hooks. The company was part of a foundry founded by Gunnar Bolin when he designed the first hat rack, Nostalg, in 1937, using melted-down scrap aluminum. Since then, the company has developed several classical designs, such as the Classic and Nostalg series, that are still the best-selling series today.

In 2002, the quality manager, Sten-Roger Bladh, took over the reins and acquired the product rights through a spin-off from the foundry business. Sten-Roger retained the traditional artisan production in Anderstorp, but he also aspired to develop new products under the name of Essem Design with consistent product functionality and durability. At approximately the same time, his daughter, Frida, also started helping with the business, such as assembling “Dekorativ” hangers and cleaning the office during her summer holidays.

When Frida finished her studies in 2013, Sten-Roger invited her to work on a new project to help the firm obtain ISO certification on environmental management and quality control because he wanted to develop formal documentation of their quality control. Meanwhile, customers also started requiring more sustainability elements from their products. Since then, the business has experienced a major sustainability transition.

The transition was further strengthened after Sten-Roger’s son and Frida’s brother, Robert, joined the family business in 2015 and adopted sales and marketing functions. When both children started working in the same family firm, Sten-Roger started the succession process by gradually transferring shares to them. In 2020, Sten-Roger transferred his CEO position to Robert, while Frida held the CFO



position. Today, their parents still remain on the board, along with a nonfamily chairperson and another non-family director.



The Bladh family, including Sten-Roger and his wife (left), Robert (middle), and Frida (right)



Sustainability transition

Sustainability in the Firm DNA

Since its founding, the company has already incorporated the concept of sustainability in developing its first product. Robert described:

“From history, we have always had this kind of product. Our most common selling product is from 1937, and the product is made of recycled aluminum and wood. It is very easy to take apart and change spare parts. It is in our DNA.”

The family continues this sustainability tradition by taking more initiatives that customers demand. In addition, governments such as the European Union (EU) have provided additional financial support to companies following the European Green Deal. Importantly, family members have a concerted dedication to developing new sustainability practices. Specifically, Frida, Robert, and Magdalena, the nonfamily production manager, make the annual plan together and propose it to the board. Once the board approves, their father fully supports the implementation, focusing on the products, local communities, and energy.



Product sustainability and transparency

The family has been careful in selecting the right materials since the start of their production process. In addition, certification requires them to track the materials each product contains and keep such information transparent. They have obtained not only ISO certification but also national certification, such as Byggsvarubedömningen, Environmental Product Declarations, and RISE tests for non-toxic and sustainable building materials in Sweden. These certifications enable them to better show their sustainable products to their customers.

Moreover, the family has innovated product design so that they can pack products compactly without leaving much empty space. In addition, they have tried to reduce their environmental footprint by creating new products from waste and selling spare parts. By doing so, the family can improve the effectiveness of transportation and waste management.

The family has faced some challenges while making their products and production more sustainable. One main challenge lies in the variance of certifications. Specifically, different industries and customers have their preferred certification systems that may not follow the same tracking procedures. For instance, Byggsvarubedömningen is mainly for the construction industry, while the furniture industry prefers another certification system, Möbelfakta. The family currently prioritizes construction certification since their largest customers are in that industry.

Another main challenge is the heavy administrative workload, such as collecting relevant data to accurately calculate Scope 1–3 emission and material contents of each product. As the family firm has limited resources available, collecting various types of data from different suppliers tends to be both costly and time-consuming.

Close collaboration with the local community

The family has emphasized collaboration with the local community where the firm is located. Such collaboration entails having local designers design their products, working with local suppliers using local resources, and relying on local transportation to deliver the products. Such collaboration enables the family to reduce the carbon footprint of their production by relying less on imported materials, to better develop the local community by using local resources, and to build a strong Swedish brand that can benefit their image on the market.



Increasingly reliance on renewable energy



Another main sustainability practice focuses on transforming the family firm's energy portfolio. Since 2013, the family has updated the heating system at the site by replacing oil pan with geothermal heating and buying only green electricity. In addition, in 2018, one-third of their electricity already came from solar energy. In 2024, after building a larger factory with additional solar panels, all their electricity now comes from solar energy.



Learning points and actions to consider

Looking back at these experiences, the family identifies some key learnings. The first important thing is to pay attention to what the customers demand and whether the family considers it the right thing to do. If there is a demand and the idea is in line with the family's value, the family suggests direct action on the idea, including collecting related data and implementing the project early rather than implementing many postponed projects all in once in a short period of time, which would otherwise be overwhelming. They highlight that sustainability projects take time to have impacts. As Frida described:

“We are not environmental heroes, but we try to make an impact where we can. The most important thing is to take action and go forward in small steps towards your sustainability goals.”

Another important learning is to have functional teams where family members of different generations and nonfamily members can effectively collaborate. For instance, involving both Frida and Robert in the firm gives their father confidence that they can share tasks and steer the business in the right direction. In addition, Robert highlighted the value of engaging nonfamily members in making sustainability decisions because they *“have experience outside the family and can also get a better talking and discussions in the board.”* Nonfamily directors', managers', and employees' input helps ensure the connection between the planned project and the real needs of the market.

Frida and Robert are now fully in charge of the family business. Even though their sustainability practices have worked well thus far, new activities require resources, including financial investment,



field knowledge, and human resources, that the family may not necessarily have. Therefore, they wonder how they could develop more sustainable products based on their existing product portfolio and network with local business partners. Another question lies in their communication. Many of their sustainability practices, such as product design, factory infrastructure, and transportation, remain in the background, but customers may not be fully aware of their sustainability efforts. Hence, they wonder how they could better communicate about their sustainability practices, such as the scope of greenhouse gas emissions associated with their products.



Reflections

- How can they develop more sustainable products based on their existing product portfolio and network of local business partners?
 - How can they better communicate sustainability practices, such as the extent of greenhouse gas emissions associated with their products?
-

CASE STUDIES | RENEWABLE EFFICIENCY





2.1 Elektrofink

Country: Germany	Greening processes: Greening methods, procedures Greening inputs: - Renewable Energy - Energy Efficiency - Sustainable Business Models Greening output: Offering Greening Products and Services
Company size headcount: Around < 250	Company size turnover: Around € 10 m
Interviewed: Successor	Industry: Manufacturing

Background

In 1994, a family business was founded by its patriarch, starting with just three employees to build electrical switchgear and energy distribution systems. Entrepreneurial thinking was instilled in the founder's children from an early age, as he frequently discussed business matters at home. When the founder's sons took over the company, the transition was made smoother by the fact that the employees were already familiar with them. This familiarity facilitated a quicker acceptance of their decisions compared to what might have occurred with an external manager.

The new leadership believed it was important to maintain an "outside perspective" during the transition, ensuring they did not assume that everything should continue as it had. They emphasized the need for the older generation to accept the decisions of their successors, even when those decisions differed from their own, a process that inevitably led to tensions and challenges within the family.



Key to the successful transition were the advisors they consulted, particularly their notary, who played a central role in providing valuable ideas and asking the right questions. However, they were somewhat disappointed with their tax advisor, who lacked sufficient knowledge of the complexities involved in a company takeover. Another significant issue the family faced was navigating the relationships among siblings, especially when not all were directly involved in the business. After careful consideration and sound advice, they chose the route of early inheritance, which helped clarify roles and responsibilities.



Before officially taking over the business, both brothers gained valuable experience in other companies and industries. One worked at Daimler and the University of Rostock, while the other joined a major network operator. These experiences allowed them to carve their own path when they eventually assumed leadership of the family business. The takeover process began in 2016.

By 2018, the business transitioned from a sole proprietorship to a GmbH (limited liability company), and by 2020, the brothers had completed the formal succession process. During this period, their father gradually stepped back from daily operations, though he continued to offer occasional support. Under the new leadership, the company underwent significant changes, particularly in its communication culture. Weekly meetings with key employees were introduced to foster greater involvement in decision-making processes. Admitting their own mistakes was also seen as crucial to building a collaborative work environment.

The brothers introduced distinct departments within the company, each with responsibility for specific areas, a marked departure from the founder's management style, where even minor procurement decisions required his approval.

Sustainability transition

The major change was the implementation of an ERP system, which initially met with resistance but was eventually accepted by all. This system helped streamline operations and improve efficiency across the company. Today, the company employs more than 50 people and has built a new production facility. Sustainability has become a central focus, with the installation of a large photovoltaic system on the roof of the new building. The system, with a capacity of 160 KW, not only supplies the company's energy needs but also feeds electricity back into the public grid. Several electric vehicle charging stations have been installed in the company's parking lot, powered by solar energy when available, and the company plans to make these stations available for employees as well.

The new building is heated by a heat pump, and the family business has worked with suppliers to minimize packaging, further contributing to its sustainability efforts. The company also invests heavily in employee retention, recognizing the importance of loyal employees.





To this end, it offers a company pension plan, more vacation days than the industry average, and flexible working hours.

A focus on nurturing young talent has also been a priority. As the largest training company in the region, the business offers school tours and internships for students, contributing to the development of the next generation of skilled workers. The company believes that providing safe, fairly paid jobs is a crucial element of sustainability, especially in their structurally weak region. They value long-term, stable customer relationships, even at the expense of short-term gains. This sustainable approach has been appreciated by their clients, and in 2023, the company was recognized by a business association with an award for their efforts.

With a diverse customer base across Germany, the company is not reliant on the economic fluctuations of any single industry. Their work in photovoltaics and charging infrastructure aligns them with two of the most dynamic sectors of the economy. Looking back on the business transition, the family views it as a textbook example of successful succession planning and sustainable growth.



Reflections

- How well-prepared is the company to implement new sustainable practices, such as integrating renewable energy solutions like photovoltaics, and what challenges might arise?
 - Will this improve client relations and satisfaction?
 - How does the balance between tradition and innovation shape the company's growth strategy?
-



2.2 Dolfi Franco S.R.L.

Country: Italy	Greening Processes: Energy Efficiency Greening input: Renewable energy Greening workplace: Sustainable consumption
Company size headcount: Around <10	Company size: Around < 2 m
Interviewed: Incumbent (senior generation) Successor (next generation)	Industry: Manufacturing



Background



Dolfi S.R.L. is a third-generation company with a long history. Founded in the post-war period by Michele's grandfather, it initially specialized in producing wooden heels before transitioning to plastic ones. In the 1980s, under the management of Franco, Michele's father, it converted to producing plastic pots for the nursery sector.

The Dolfi company is located in Montagnana Pistoiese, on the outskirts of Pistoia. In this Tuscan city, nursery gardening is the main economic activity. This sector is one of the most important centers in Italy, with about 10% of the province's territory dedicated to it. Today, Franco S.R.L. is an established player in the plastic injection press field in Pistoia. The company covers a total area of 2,800 square metres, occupied by three communicating warehouses. The company's production department comprises 22 injection press machines with a tonnage ranging from 135 to 1150. All are automated, from feeding the raw material to removing the press product. The company supports the customer throughout the entire press design and construction phase.





In 2012, Franco's son, Michele, joined the company as an employee partner, contributing to its further growth. Michele's father, on the other hand, is the managing director, while his mother handles administration and customer management.

Dolfi works with regenerated plastic from separate waste collection unlike many other companies. Michele points out that using regenerated plastic has always been the case since the company

operates in a poor market with intense competition. This approach allows Dolfi to remain competitive."



Sustainability transition

The company's actions concerned energy efficiency and production processes. All family members always discussed all decisions related to the green transition in a spirit of confrontation and collaboration.

The company's green transition process was initiated with a series of actions. In fact, the company has intervened in the production lines, making them more efficient by replacing machinery. This has ensured increased production, reduced consumption, and optimized processes from an energy and ecological point of view.

The most recent intervention involved installing a photovoltaic system on the company's roof, which is linked to several requirements: respecting the environment and optimizing energy costs, which have always been considerable for the company's type of production.

This operation reduced costs and environmental impact. However, landscape constraints in the area have limited the number of photovoltaic panels that can be installed on the farm. Being located in a green area, the company has to comply with the landscape constraints, which require a very long time for any changes.

The family notes that there has always been harmony among all members regarding energy efficiency. The high energy consumption and, therefore, the high costs of the family business prompted the company to adopt *green* measures that would reduce costs and environmental impact. Michele notes that, compared to his father, he undoubtedly has a greater focus on the company's management, both on the bureaucratic and digital side.



Learning points and actions to consider

Michele and his family are considering acquiring safety and environmental sustainability certifications. Regarding the latter, they are interested in acquiring UNI EN ISO 14001 certification for environmental management systems. The family, however, emphasizes the company's difficulty in guaranteeing that the annual indices required by the certification can be raised for logistical and structural reasons.

According to Michele, the company has done much in recent years regarding process optimization. However, there is still work to be done, especially on improving production, such as the use of digital technology for waste control and other activities carried out by the company.

For both Michele and his father, a company must assess the benefits of going green for their company against the costs involved. It is necessary to assess whether the company is structured enough to cope with such operations, which often require significant investments and costs, and to understand market trends before starting a *green* transition process.



Reflections

- Is the company structured enough to start a green transition process?
-



1.3 Salvadori Arte S.R.L.

Country: Italy	Greening Processes: Energy Efficiency Greening input: Renewable energy Greening workplace: Sustainable consumption
Company size headcount: Around <10	Company size: Around < 2 m
Interviewed: Incumbent (senior generation) Successor (next generation)	Industry: Manufacturing

Background



The Salvadori Arte Artistic Foundry was founded in 1964 in Pistoia, Tuscany, by Enrico, his brother, and his brother-in-law. In 1964, the company was overtaken by a foundry established in the 19th century. The company transferred its customer portfolio, equipment, plants, and know-how to the new owners through a one-year handover process.

Subsequently, Enrico, his brother, and his brother-in-law parted ways, and Enrico continued to run the

business with his wife. His son Giacomo and his brother Gianluca joined the company in 1991 and 1992, respectively, and became partners alongside their father and mother in 1996.

The Salvadori Arte artistic foundry produces works of art in bronze, brass, aluminum, stainless steel, and other alloys. It uses the traditional, age-old method of 'lost wax' casting.





The Salvadori family has run the business since the mid-1960s. Their techniques and knowledge have been passed down from the ancient metal works of Pistoia.



Some works produced by Salvadori Arte are housed in the most famous museums and art collections and in countless squares and gardens in cities and metropolises worldwide. On commission, the foundry has the skills and techniques necessary to create customized works of art. The company operates in efficient workshops on the ground floor of a single industrial hall, which has 700 square meters of indoor and 600 square meters of outdoor space. The facility can execute large-scale works, as the shed has suitable lifting equipment to create sculptures up to 6 meters high. In its outdoor areas, it is possible to go beyond this height.



Sustainability transition

The Salvadori family started thinking about starting a green transition process about fifteen years ago. At that time, many suppliers of photovoltaic systems were proposing to the company owners to make their business more efficient in terms of costs and use of resources. At the time, they gave a good incentive for each KW produced, but the company did not feel like starting this transition due to the lack of financing; the initial costs were too high to make this type of investment. Over time, there were other proposals, but they were not as convenient as the previous one.



The company has reached a sound economic and financial stabilization level, so it is now possible to install a photovoltaic system. This will reduce costs and allow the company to produce electricity itself. The company also plans to introduce a new lighting system, replacing all neon lamps with LED ones. Due to its foundry operations, gas costs more than electricity for the company. However, despite technological

advancements, there are still no concrete benefits that would justify changing its traditional processes and machinery. In adopting these measures, the decision within the family was unanimous, given the benefits the company would gain from this type of investment in terms of:

- Lower costs.
- Less environmental impact and, consequently, better benefits for the community.
- Image return for the company.



Learning points and actions to consider

It's essential to rely on professionals who know how to calculate the costs and benefits well, even if, Giacomo emphasizes, *"right now the benefits are obvious compared to the very competitive costs, the costs of photovoltaic panels are greatly reduced by almost 80%. Suffice it to say that about fifteen years ago, 130,000 euros was required to install a photovoltaic panel now it is 23,000 euros"*. It is obviously essential, therefore, that the company assesses its situation and whether it has the necessary investment to cope with the process.

The benefits of acquiring a photovoltaic system are now obvious for a company in terms of cost reduction. It benefits the company, the community, and the area it operates. Given the deep connection with its territory, it is a give/take relationship that is very important for the company.

The company would also like to adopt other more sustainable measures, especially on the gas plant, which is the substance most used for the type of activity and entails high costs and more significant environmental impact. However, in this field, despite the new technologies, there are still no concrete advantages for the company, such as inducing it to change its traditional processes and machinery. Giacomo notes that, although the company has an electric induction melting plant for melting metal, it is a 'limiting factor' in production. A gas-melting furnace can melt 500 kg of bronze, whereas the induction furnace can only melt 50 kg.



A future investment could be adopting an induction plant for melting stainless steel (this type of steel needs induction; gas cannot melt it). However, Giacomo and Enrico felt that, as with photovoltaics fifteen years ago, the initial investment costs required for this process are still too high.

Regarding the company's future, Giacomo sees the possibility of investing in printing bronze parts using a 3D printer. The company has already printed models through the 3D printer for a few years and then cast the bronze. According to Giacomo, the next step will be to print the bronze directly. There is undoubtedly a need

to improve the quality, which is still poor, and the costs, which are still too high, but technological innovation is leading in this direction.



Reflections

- Do I have the necessary resources to start this process?



2.4 Aveflor

Country: Czech Republic	Greening input: Renewable energy Greening workplace: Sustainable consumption Greening output: Offering green services
Company size headcount: >250	Company size turnover: < Around 10m
Interviewed: Incumbent (senior generation) Successor (next generation)	Industry: Production



Background

Aveflor is a family-owned company located on the border of Bohemian Paradise, celebrating its 30th anniversary next year (2025). The company focuses on the sale and manufacture of medical devices, pharmaceuticals (veterinary), cosmetics and, to a limited extent, technical products. It is mainly the manufacture and filling of aerosol preparations (sprays), emulsions, and gels, all in non-sterile form. The company's portfolio includes more than 400 items and the company currently has a total of 110 employees.



The company was founded by Mr. Jiří Zubatý 30 years ago (1995). His vision was to establish a company that could produce aerosol products without using environmentally harmful propellants. Although initially Aveflor produced only aerosol products, the company's production range expanded over time, adding medical devices and veterinary medicinal products. Aveflor is a predominantly export-oriented company, with about 75 to 78% of all production going to export, mainly to the EU, but also outside it. The company is now managed by Mr. Jan Zubatý, the son of the company's founder Mr. Jiří Zubatý, who worked in the sales department of the company before becoming a director. He is already involving the next generation in the running of the company.



Sustainability transition

Since its inception, Aveflor has been committed to the idea of protecting the environment; therefore the production of its products takes place in so-called clean rooms, i.e., in air-treated spaces. Since 2024, Aveflor has been part of the Green Company project. Mr. Jiří, the founder of the company says:

“Despite the fact that we work with chemicals, we have always tried to choose raw materials and substances that are not harmful to the environment “

The first step the family took towards greener production was to switch from the now-banned halogen hydrocarbons to environmentally friendly propellants. For aerosols, Aveflor largely uses the BOV method, i.e. "bag on valve", where compressed



air or nitrogen is used as the propellant. No chemicals are used in the production process. Such chemicals, which cannot be avoided in the manufacture of health and cosmetic products, are then disposed of as hazardous waste by a specialized external company as part of an organized collection process.

Another ecological solution that Mr. Jiří has introduced in the company is a photovoltaic power plant. The family commissioned it at the beginning of 2023, it has an output of 150 kWp and its production will cover 30% of the company's total electricity consumption. This will significantly save the company the energy consumption necessary for its operations, both in industrial production and for the operation of the office building lighting, heating, and so on. Mr. Jan, the son of the company's founder and the current director of the company, adds that when purchasing the photovoltaic power plant, they considered not only the ecological but also the economic benefits. The latter gradually increased as electricity prices rose. In the future, the company would like to place photovoltaic panels on other buildings, but the investment options are currently focused on other priorities.

Since the company was founded, it has also owned a wastewater treatment plant. Initially, a small-scale treatment plant was built, but over time and with the increase in the number of employees, it was replaced by a larger biological treatment plant that monitors and controls wastewater,



especially from toilets, cleaning products, etc. For the wastewater treatment plant, the main advantage is the use of its own water resources. Water is already less available globally and its prices are getting more expensive. Mr. Jiří points out that it is a good idea to prepare for the future in this respect, and ideally to have its own water sources that the company can use. At the moment, Aveflor uses water from its own wells for technological purposes, but soon it plans to introduce a system that will purify this water and allow it to be used as drinking water within the company.



Aveflor's ecological mindset is also reflected in its fleet. Currently, the company owns 3 electric cars and charging stations that can charge up to 6 electric cars simultaneously. Although the company's employees were initially apprehensive about electric cars, they gradually got used to this type of car. A big advantage is the ease of recharging using the charging station on the company's property. In the future, Mr. Jan is planning further development in the field of

electromobility and is also considering setting up a charging station for the general public.

Aveflor emphasises ecology in the choice of packaging materials and tries to find materials that are harmless or minimally burdensome to the environment. They have introduced the ISO 14 001 standard into their integrated quality management system, the application of which helps employees adopt an environmentally friendly approach in all company processes. The company is also currently working on an ESG policy within the company, on which they are cooperating with ČSOB Bank. The latter provides consulting services to family businesses on this topic. Mr. Jiří also mentions the positive feedback from employees:

“Today's society is used to much greater working comfort, which means greater demands on electricity consumption, whether we are talking about heating in winter or air conditioning in summer. The introduction of photovoltaics has certainly contributed to the use of air conditioning units, for example.”

Mr. Jiří also received positive reactions from other family members and has never encountered any resistance when making decisions. Mr. Jan confirms that even though the family members sometimes have different opinions, they clearly agree on all ecological solutions. He also admits



that, for example, the state subsidy of CZK 200,000 per car played a big role in the decision to purchase electric cars.



Learning points and actions to consider

Both the photovoltaic power plant and the wastewater treatment plant were implemented as subsidized projects. From the point of view of Mr. Jan, the initial phase - the preparation of the application for subsidy - was the most challenging when acquiring the power plant. The tendering procedure was very price-oriented and, thus, the selection of the supplier of the photovoltaic power plant was therefore adapted to this, which later proved to be not entirely reliable and delayed the completion of the building considerably. However, once completed, the photovoltaic power plant operates smoothly and achieves the planned parameters.

Mr. Jan adds the experience of a not entirely precise definition that they wrote in the application: *'Just yesterday, for example, we were dealing with a power cut and we had written wrongly in the tender that the backup batteries should always start up at the moment of a power cut, i.e. that they should work as a backup automatically. But it's not automatic in reality, and we can see now in hindsight that it would have been useful.'* He also recommends preparing because the path from applying for a subsidy to starting up a PV plant is quite long. It is worth focusing on the choice of supplier, the quality of the workmanship, and the quality of the material the supplier uses. Aveflor points out that safety is also important in this respect, i.e. regular inspections and regular annual checks of the PV plant using a thermal imaging camera.



Reflections

- The administration has become very demanding throughout Europe, and it is necessary to monitor and comply with all laws which sometimes contradict each other. Consider whether recruiting additional employees who specialize in such legislative issues is necessary.
- Be prepared for frequent visits by the inspection authorities and prevent any problems by complying with the established legislative requirements.

LEARNING POINTS AND ACTIONS TO CONSIDER





LEARNING POINTS AND ACTIONS TO CONSIDER FROM THE CASE STUDIES



Implementing eco-innovative solutions and green technologies

Learning points:

- SMEs can benefit economically and environmentally by implementing technologies that reduce environmental impact (e.g., energy efficiency, renewable energy, circular economy).
- Green solutions can reduce operating costs (e.g. energy saving, waste reduction) and improve corporate reputation.

Actions to consider:

- Invest in energy efficiency technologies (e.g. photovoltaic systems, LED lighting, automation).
- Implement a waste management system and recycle materials to optimise resources.
- Explore new opportunities in the circular economy, such as product reuse or 'closed loop' design.



Integrate sustainability into the customer value proposition

Learning points:

- SMEs can create competitive advantages by offering sustainable products or services that meet the growing demand of environmentally conscious consumers.
- Integrating sustainability into the value proposition can result in market differentiation and revenue growth.

Actions to consider:

- Develop new products or services that have a reduced environmental impact or are entirely based on circular economic principles.
- Communicate the environmental benefits of its products, e.g. through eco-labels or recognized environmental certifications.
- Offer customized solutions, such as sustainability consulting services, that help customers reduce their environmental impact.



Integrate sustainability into products and services

Learning points:

- The demand for green products and services is skyrocketing, and SMEs can differentiate themselves by offering green solutions that meet this demand.
- Innovating their products in a green perspective can create competitive advantages and increase customer satisfaction.

Actions to consider:

- Review the life cycle of products to improve their sustainability (from design to end of life).
- Create product lines or services that are environmentally certified or low carbon.



Monitor and report on environmental and social impacts

Learning points:

- Transparency is crucial to demonstrating SMEs' commitment to sustainability. Measuring and communicating environmental impact can enhance a company's reputation and build trust.
- Environmental certification, such as ISO 14001 or EMAS, can be a marketing and credibility opportunity.

Actions to consider:

- Implement a monitoring system to collect data on energy consumption, CO2 emissions, waste management, and other environmental variables.
- Publish annual sustainability reports detailing initiatives and achievements



Business needs assessment and investment capacity

Learning points:

- Every SME has different needs and resources, so there is no one-size-fits-all solution. The choice of green practices must reflect the company's structure, business sector and economic capacity.
- The initial investment may seem expensive, but many green practices generate long-term economic returns, such as energy savings and reduced operating costs.

Actions to consider:

- Before deciding which green practice to adopt, it is essential to understand the main areas of environmental inefficiency and the possible benefits for the business (e.g., energy savings, waste reduction, improved efficiency in production processes).



- Assess the return on investment (ROI): Evaluate the initial costs and long-term savings of different green practices, such as investing in energy-saving technologies, renewable energy, or waste management optimization.
- Start with low-cost solutions: To test the benefits of sustainability without seriously compromising liquidity, start with less costly interventions, such as energy efficiency improvements and optimized resource management.



Assessing the Long-term impact of Green Practices

Learning points:

- Adopting green practices may entail initial investment costs, but long-term benefits include reductions in operating costs, increased efficiency and savings on energy consumption. It is crucial to understand the economic returns of these practices in the long run, e.g. through cost-benefit analyses, also taking into account tax incentives or subsidies.

Actions to consider:

- Consider the environmental impact: Assess the extent to which the green practice will reduce the company's overall environmental impact (e.g., CO₂ emissions, water consumption, and waste).
- Consider long-term economic sustainability: Reflect on how the chosen green practice will ensure the company's long-term competitiveness and resilience, including in response to stricter environmental regulations or changes in consumer preferences.
- Check reputational risk: Adopting green practices can improve a company's image, but it is important to ensure that the solutions chosen are credible and sustainable over time. Avoid 'greenwashing' (practices that merely communicate a green commitment without concrete results).



Prepare for regulatory changes and consumer pressures

Learning points:

- Increasing environmental regulation and consumer preferences drive the market towards more sustainable solutions. SMEs need to adapt quickly to remain competitive.
- Environmental regulations constantly change, and SMEs must be prepared to comply with new laws and standards.

Actions to consider:

- Constantly monitor national and international environmental policies and regulations.
 - Implement business processes that ensure compliance with sustainability regulations, such as emission laws and waste management.
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