# Deliverable A1.2

Case Study Report

# Sammontana S.p.A.





#### 1. Introduction

As part of the preliminary research conducted for the LIFE EFFIGE project, Sant'Anna School and ENEA collected a list of good practices on life cycle assessment (LCA) implementation in our target industries, namely agrifood, catering services, foundry, and furniture. This list, or 'observatory' is made of fifty companies that had conducted an LCA for at least one of their products and used it thereafter to change either their products, their processes, or strategy. The fifty companies were then ordered according to the extent of the changes implemented. As a result, five companies were selected as they introduced substantial changes at the organizational level after conducting LCAs.

Sammontana S.p.A. (Sammontana hereafter) was selected for being the first Italian company to conduct an LCA in the ice cream industry. At first, they had decided to use the LCA studies to assess the state-of-art of their products in terms of environmental impacts. Once they obtained the results of the LCAs, they capitalized on them in order to understand what needed to be changed to reduce their product environmental impacts. Furthermore, the LCA studies triggered a trickle-down effect with new ideas and green initiatives being initiated at the organizational level. LCA implementation is now part of their broader and long term 'Green Mission'.

In March 2017, Sammontana conducted a Carbon Footprint study in line with the guidelines of ISO/TS 14067:2013 for the following products: *Barattolino, Fruttiamo, Amando,* and *Prima Ricetta*. *Barattolino* and *Prima Ricetta* are exclusively sold in the mass retail channel, while *Fruttiamo* and *Amando* can be bought in multipacks in the mass retail channel, or in single units in bars, restaurants, beach resorts, etc. In this assessment, Sammontana applied the logic 'from cradle to grave', thus leaving no phase out of their study.

We collected information on Sammontana by means of desk and field research. Desk research started prior to contacting the company by having access to their website, the Orbis database, and other online websites resulted from an online search. We then contacted the company to set up the interviews and, in that occasion, we also asked for additional material relevant to the scope of our case study. Two interviewers were then in charge of conducting semi-structured interviews with key managerial figures relevant for our purposes. The protocols for these are available on request. Based on our interviews, we asked for additional documents that either could not be found online or emerged from the interviews. Table 1 displays the timeline of our research procedure, while more information on the structure of our information collection can be found in our 'Case Study Framework'.

| April<br>2018  |
|----------------|
| May<br>2018    |
| 05-06-<br>2018 |
| June<br>2018   |

| Desk     | Online     | Sammontana website                             |
|----------|------------|--|
| Research |            | Orbis: Sammontana profile                      |
|          |            | Various websites                               |
| Contacts |            | Email exchange and calls                       |
| Desk     | Off-line   | Carbon footprint report                        |
| Research |            |  |
| Field    | Interviews | - CEO, 20 min;                                 |
| Research |            | - Supply chain and operations manager, 35 min; |
|          |            | - Marketing manager, 45 min;                   |
| Desk     | Additional | Organizational structure                       |
| Research | Documents  |  |

 Table 1. Sammontana Information Collection Timeline

One researcher was tasked with the compilation of a file with key information on the company, before visiting the company to conduct interviews. This file was shared between the two interviewers and other members of Sant'Anna School involved in the project. This had two fundamental aims: one to guarantee that the two interviewers shared the same notions regarding the company, and also to check whether information they deemed necessary was already available or to be requested in situ. Table 2 reports key information on Sammontana.

| Name of the organization and location of the headquarters | Sammontana, Empoli (Florence)               |
|---|---|
| Foundation  | 1946 by Renzo Bagnoli                       |
| Type of company   | Family owned                                |
| Number of employees (last available year)                 | 1,172 (2016), including seasonal workers    |
| Net income (last available year)                          | €12,769,339 (2016)                          |
| Main markets  | Ice cream and frozen desserts manufacturing |
| Brands  | Sammontana S.p.A, GranMilano S.p.A. (Tre    |
|   | Marie, Sanson, Mongelo)                     |
| Relevant brand/product for this report                    | Sammontana – ice cream                      |

Table 2. Sammontana key figures. Source: Orbis database

#### 1.1 Case Study Takeaways

The main takeaways from the Sammontana case involve the role played by the key managerial figures inside the organization and their enthusiasm towards the LCA. In particular, the family entrepreneur was fundamental to coordinate efforts and direct employees in the right direction, while the two managers, or the LCA sponsors, were crucial to translate the LCA in the daily activities of employees and its implementation. In Sammontana the main benefits that the LCA has brought include quantifying the environmental impact on the main products, to justify why some actions were

required. As a results, at first changes to product were introduced, then the organization started to reconsider some of its own procedures, such as energy and water consumption, but also the introduction of an environmental criterion in its choice of suppliers. Finally, Sammontana now looks beyond its organizational boundaries to engage other stakeholders in its sustainability initiatives in the public but also in the private sectors. Finally, the LCA matched with the values of the founding family. Also, as it emerged from our interviews, the changes introduced by the LCA allow the company to differentiate in the market for ice creams and to address stakeholder pressures.

## 2. Company Overview

Founded in 1946 by Renzo Bagnoli with the transformation of the family dairy in a bar-ice-cream shop in Empoli. The name of the company derives from the nearby "Sammontana" farm located in the neighboring town of Montelupo Fiorentino, from which the Bagnoli family bought fresh milk. In 1948, the bar-dairy was transformed into an artisanal ice cream manufacturing facility with the integration of automated production. This allowed the Bagnoli family to sell outside Empoli.

In 1955, Sammontana started selling its ice cream to third parties. At that time the ice cream was delivered to bars and dairy stores in a metal jar designed by Sammontana, containing six liters of ice cream; during those years of economic growth, the fridge was spreading in the Italian households and, with the jar, the ice cream could be eaten at home. The product became a cult object and guaranteed the company the economic resources to start the production of single-serve packaged ice-creams.

In 1958 a new plant was built in Empoli, which is its current location. After a decade, the slogan 'Gelati all'Italiana' (Italian ice cream) was born. In the 1970, Sammontana undertook some actions that determined the future direction of the company. Some of these actions included: lending the refrigerated counters for the sale of loose ice-cream to the merchants; the six-liter can with which the bars were initially supplied was replaced by a cardboard bowl; Barattolino, Sammontana's classic product was born (1970) and consisted of a plastic pack with the capacity of one liter of ice cream. At the end of the 1970s Sammontana ice creams were distributed in bars throughout most of Italy and, in a few years, even in large retail outlets. More recently, Sammontana consolidated its position in the industrial ice cream sector by acquiring GranMilano S.p.A., which includes other brands such as Sanson, Ringo, and Togo. With this acquisition, it also entered the market for frozen desserts with brands such as Tre Marie and Mongelo. The consolidated company produces and sells ice cream and frozen croissanteries: every year it generates a turnover of €350 million and over 1.1 billion portions in its 4 production plants.

The company is extremely customer-centered and puts innovation at the center of its strategy. This is done in order to guarantee and constantly improve the quality of its offering, by engaging 'with the entire value chain, both upstream – with suppliers, and downstream – with dealers' 1. Sustainability

<sup>&</sup>lt;sup>1</sup> https://www.sammontana.it/chi-siamo.html

is another key value, incorporated in the logic of the company and in its initiatives with schools and other stakeholders.

#### 3. Environmental Focus

With the acknowledgement that businesses have a duty towards the environment in which they operate, Sammontana has places sustainability at the center of its mission. In the word of the CEO of the company and pertaining to the founding family:

"We started because we are a family business. As such, we have as our ultimate goal to pass on the company from father to son. How should this company be left to our children, grandchildren, and all generations to come? It must be better than what we have today. At a certain point we wondered what it meant better? Because 'better' is usually meant from an economic point of view for a company, which is fine, it is logical. But the question that came after was: 'If we leave a better company from an economic point of view in an increasingly polluted world [...] and less livable, do we give them everything they want? Maybe not. Perhaps it is better to pass them on a company that is [...] a little less good from an economic viewpoint, but inserted in a better environmental context than today. This is the logic behind all this".

As a result, over the years, Sammontana set as a pivotal objective to adopt a sustainable management approach based on the analysis of the environmental performance of its products and has undertaken a path in line with the provisions of the Kyoto Protocol and international standards on climate and energy. In order to give greater importance to its commitment to the environment, in 2016 the company signed a voluntary agreement with the Ministry of the Environment and the Protection of the Territory and the Sea on the promotion of common projects aimed at the analysis and reduction of the environmental footprint related to the ice cream production sector.

Sammontana is engaged with some initiatives linked to Sustainability, such as 'Puliamo le Spiagge' and 'Scuola Missione Green'.

### 4. From a Life Cycle Assessment to a Life Cycle Logic

Sammontana conducted its first LCA studies in 2017 on four of its products, more specifically *Barattolino*, *Amando*, *Fruttiamo*, and *Prima Ricetta*. The study is the Carbon Footprint based on the guidelines of ISO/TS 14067:2013. The reasons that lead the company to pursue LCA studies are both internal and external, as the head of the marketing unit revealed:

"[...] [I]n order to differentiate against competitors, an element like this\* (\*life cycle studies) is a fundamental element. [...] the family in primis, [...], and we as managers, embraced it. It gave us the opportunity, first of all to do something good. Especially in a company like this and you will see the size, the family dimension. [...] The fact that as a company has always grown under the same family [...] makes the difference. And the entrepreneur realizing that this topic

was **interesting for the business and also for the people who work here** contributed to kick off the project".

In this case, the type of business, i.e. family owned, influenced the uptake of LCA adoption for two reasons. First, the LCA was in line with the values of the entrepreneur of the business, the Bagnoli family, which are also reflected in the core values of the company, and vice versa. Second, it also made sense from an economic viewpoint, to get a competitive advantage in the market for ice cream.

The results of the LCA were then integrated inside the company. At first, they were immediately used for communication purposes: to educate Sammontana external stakeholders; and to convince both external and internal stakeholders of the logic behind the LCA. In a more cautious and long term process, Sammontana took the LCA results and identified some hotspots where it could modify its current modus operandi, in order to reduce their product environment impact. The following are respectively the quotations from the head of marketing, and the head of the operations and the environment:

"The first form of integration was made in the product offer, that is the marketing mix at 360 degrees. We started working more specifically on Barattolino and when we had the first results and, above all the first comparisons, between year zero and year one, we have made it an **integral part of the product story with customers**. Then from there, we started working on the product, because things are significant when you bring them into products. We started to work, for example, on vegetable milks. We have seen that the **number one killer** is **cow's milk**. Well, what do you do? **You do something that does not have it**. We did it for two reasons: the environment and for people with food intolerances. But where you can put more things together, you obviously have a greater chance of success.

On one hand, we started working on **projects** produced **with a shorter supply chain and with lower impact ingredients**. On the other hand, we **worked to eliminate milk**. Now we also have a set of **tools** for the experimentation phase that provide us with calculations. Then also the purchasing unit became more aware, so those who buy raw materials, to ensure that the element of sustainability becomes an element of evaluation of the supplier".

"Our new ice cream products are seen with an eye of **Eco-design** and therefore we try to always see how much the recipe and the packaging impact, and if we can make **targeted interventions**. We are now working to change the packaging of some of our products. On Barattolino we did some experiments putting **paper** jars **instead of plastic**. We look into all activities that we do with an 'environmental eye'. Being appointed as environmental manager while I was following these LCA studies with my collaborators contributed to give us some **enthusiasm** toward the environmental activities. This is because before things were done because we had to. Now having also LCA studies behind it, we **understand more about the impact** of a loss of cooling gas or any other activity that impacts on the environment. In factories we have a whole series of aspects, on which we are working harder. It is clear that we also have many inputs. There is also greater pressure from the state".

At the top managerial level, they started to recognize that environmental benefits also meant economic benefits. In this respect, the LCA served as a tool to quantify this concept, providing the numbers to prove it. In the words of the head of Operations and the Environment:

"I understood better with my collaborators, and we did not have much idea before, how the various parts of the whole life cycle can impact and therefore what levers we have to make improvements. We can also understand how certain projects we wanted to do impact. So [the LCA serves] both to do new things and to enhance more what you are doing, because you understand better the environmental impact. You see the impact of taking away one thing. Maybe it is even small numbers sometimes, but you see that you make an improvement. By giving numbers to everything you do within your study, the LCA as a methodology is very positive and powerful".

The LCA studies triggered changes that involved the products for which the LCA had been carried out. The enthusiasm at the managerial level and the crucial support by the family entrepreneur all contributed to pervade the organization with a life cycle logic. In fact, the LCA and the changes it brought contributed to set in motion other projects and initiatives at the organizational level, as the head of operations highlighted:

"Surely we are looking more over energy consumption, which has always been our craze because we spend so much. Having to put the whole chain at minus 25 minus 30 degrees, we are 'energivores'. We are also focusing on water consumption more than in the past, trying to see where we are wasting, where we can close the circuit, where we can recover water, because we have also started to calculate the water scarcity footprint. So **let's start to have some data on this** and see the various phases also on these energy aspects".

However, Sammontana in its mission to become more sustainable is now looking at its entire supply chain. For example, it collaborated with its main supplier of plastic packaging to create an ice cream jar with less plastic. Another example can be observed in the word of the head of operations:

"We would like to create partnerships with suppliers and make chain projects. Surely we have started to include in our 'Vendor Rating', that is the supplier evaluation, as **well as quality and service criteria**, also an environmental criterion".

In Sammontana, a key role was played by the CEO of the company and descendent of the founding family, who acted as the institutional entrepreneur who allocated time and resources for the LCA adoption and implementation. By institutionalizing the LCA results and sustainability as an important value for the company, this gave employees a sense of direction and purpose.

"Our employees are good because they are always giving us more inputs. 'We could do this, work on this aspect, we could work on this aspect'. Because it is clear that we must know every step well, every activity that is done, to be able to say what can be done to improve the environmental impact. After the top level put [the life cycle logic] into its philosophy, it comes down all over the company base and all of us Sammontana, that is how we call each other, suggest at upper levels all the things that can be done to be implemented".

Unit managers, such as the head of marketing, and the head of operations were also crucial for the uptake of the LCA initiative on a daily basis and acted as organizational sponsors, i.e. they were in charge of managing the operational aspects and implications of the LCA, and motivate organizational members with the new practice.