

A Work Project presented as part of the requirements for the Award of a Master's degree in Management from the Nova School of Business and Economics.

**SDG 6, WATER MANAGEMENT AND SUSTAINABLE PRACTICES:
INSIGHTS FROM THE CUSIO-VALSESIA TAPS AND VALVES
INDUSTRIAL DISTRICT IN ITALY**

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Abstract: Water is a vital resource, but there are only a few studies on how to integrate it into corporate sustainability management. This article analyses the relationship between business and sustainability practices with the aim of integrating the challenges posed by the water-related SDG 6 and all other interlinked Sustainable Development Goals (SDGs) of the 2030 Agenda. Throughout qualitative research, the tap and valve district of Cusio-Valsesia in Italy was investigated. Although participating firms showed little knowledge of the challenges posed by the United Nations, the insights from their practices, even if poorly formalised and structured, made it possible to identify "silent SDGs". Therefore, companies, if duly incentivised, are not far from understanding and engaging with the SDGs in a formalized manner.

Keywords: Corporate Sustainability Management, Sustainability, Sustainable Development Goals (SDGs), Water

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I. Introduction

The traditional economic and development system that has been relied upon for decades is unsustainable. The incompatibility between the scarcity of natural resources and their growing demand is evident. In 2020 the Earth Overshoot Day (EOD), known as the day on which the world consumes the resources produced by the Planet in the same year, occurred on August 22. This means that the resources produced by the Planet for the whole year were depleted in 8 months. Particular attention must be paid to water, considered as the fifth most important risk to society by the 2020 Global Risk Report. Water is a vital resource for humans, but it is also the basis of almost all production processes and is profoundly influenced and put under pressure by increasing industrialisation, urbanisation and related consumption behaviours of individuals.

Therefore, the choice of this study is to focus on the companies belonging to the Cusio-Valsesia tapware and valve district, an industrial sector which revolves around water both at the product and production level. Indeed, transformations towards a sustainable society require actions at different levels, from the international to the local one (Adger et al., 2011).

This research thesis will start with an analysis of the macro-level, for which, thanks to the United Nations Sustainable Development Goals (SDGs), a framework of action to address global challenges has been structured. Then, a focus on its interaction with the meso-level, where inter-firm networks are present and, especially, with the micro-level, where companies can implement their sustainability strategies and practices, will follow. According to Ferri and Pini (2019) there is a scarcity of studies in Italy that address both environmental and social aspects of sustainable corporate conduct. This study aims to investigate the state of the art regarding the relationship between business and the global challenges outlined by the Agenda 2030, with a particular focus on the relationship between water and business.

II. Literature review

2.1 Sustainable Development Goals and business: environmental and social interconnections

In the decade of the 2010's, the Paris Agreement and the 2030 Agenda for Sustainable Development, become focal points of a “new social contract” where businesses are called upon to play a major role in the global efforts in order to achieve the SDGs (Latapi Aguedo et al., 2019). The 2030 Agenda identifies 17 integrated and indivisible goals (that have an interrelated nature to address interlinked challenges: they are not designed for “cherry-picking” (Verboven and Vanherck, 2016)), and is broken down into 169 nonquantitative targets to be achieved by 2030. It is a decisive response to the need for integrated action to address the global sustainability challenge with a holistic approach to the two dimensions of environmental and social sustainability (Ferri and Pini, 2019). The objectives are ambitious, challenging all components of society: governments, businesses, institutions, universities, and individual citizens. A strategic role has been expressively given to the private sector. Sustainability in business operations must be interpreted in solutions or alleviations of social problems and reduction or reversal of negative externalities on the environment (Jacobsen et al., 2020). Companies are called to create value by proposing solutions for a smarter, greener economy and by paying particular attention to living conditions for the greater well-being of society (Gasbarro et al., 2016).

2.2 Water: a precious resource

Water is a fundamental resource, without which no living species can survive. However, water is becoming a scarce and increasingly strategic resource: 25% of the world's population is already in a condition of water stress. Water scarcity in some arid and semi-arid places around the world will force between 24 and 500 million people to move in the next future mainly in Mediterranean countries, starting from Italy (Water Aid, 2019). Water scarcity, its competitive use and the fact that water is closely linked to development and economic growth, lead to difficulties in determining its

proper allocation and management. Agriculture accounts for 71% of global water withdrawals, industrial withdrawals account for 16% of current global demand and domestic use accounts for 14% (McKinsey, 2009). What makes water unique is that it exists as a private, marketable good and as basic human right, as well as somewhere in between (see Figure A in the Appendix) (White, 2015).

2.2.1 Water interlinkages across the 2030 Agenda

Access to safe drinking water and sanitation has been declared a human right by the UN in 2010 through Resolution 64/292, which calls upon the international community to “*recognize the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights.*” The concept has been reinforced by the SDG 6¹ and its related targets. To expand its scope, the goal is comprehensive of the whole water cycle: water supply access, sanitation and health (6.1, 6.2); water resources management and water-use efficiency (6.4); wastewater management (6.4, 6.5); water quality and protecting freshwater ecosystems protection (6.3, 6.6). All targets must be treated collectively, to manage increasing competing demand for water resources and to protect the ecosystem from unsustainable water withdrawals. Achieving SDG 6 is essential for progress on all other SDGs and vice versa, as water runs as a common link through several of them (Bahduri et al., 2016). Indeed, water is a vital element and all goals, analysed as one indivisible system, impact – more or less directly- water (see Figure 1).

The UN-Water (2018) has identified the challenges posed by the Agenda 2030 and the main interlinkages on the social, economic and environmental dimensions of the SDGs from a water perspective. Sustainable water use, reliable water access, and rights to water and sanitation, impact

¹ Goal 6. Ensure availability and sustainable management of water and sanitation for all. 6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all. 6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations. 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally. 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity. 6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate. 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes (A/RES/70/1, UN 2015)

positively: 1. on the social level, reducing poverty (SDG 1), alleviating diseases and associated loss of productivity and healthcare costs (SDG 3), increasing access to education (SDGs 4-10) and gender equality supporting women and girls participation to the economic and public sphere (SDGs 5-10), reinforcing economic growth and employment so that cities and communities can thrive (SDGs 8-11); 2. on the economic level: supporting all economic activities and industries (SDG 11), building resilient economies (SDG 8), fostering the adoption of technologies and innovations that improve efficiency and minimize pollutions (SDGs 9-12); 3. on the environmental level: enhancing the conservation of aquatic and terrestrial ecosystems improving water quantity and quality (SDGs 13-14-15), increasing agricultural production in arid territories favouring reuse and recycling of wastewater (SDG 2), reinforcing sustainable consumption and production patterns raising awareness to impact consumer choices (SDG 12).

UN-Water's analysis made it clear that most of the linkages between SDG 6 and the other SDG targets are both positive and mutually reinforcing. In addition, failure to achieve water-related goals spreads the risk of failing to achieve other interlinked goals (Bahduri et al., 2016).

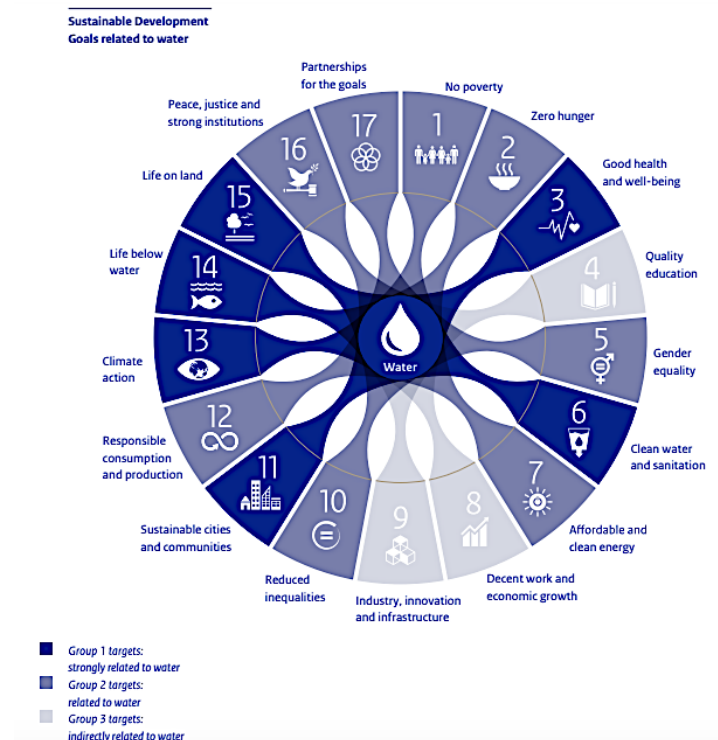


Figure 1. Sustainable Development Goals related to water. Source: Ligvoet W. et al., 2018

2.2.2 Business water consumption

Water is a necessary input in many industrial production processes. Without water, most of what we have could not be manufactured. In particular, targets 6.3, 6.4 and 6.5 of SDG 6 as well as SDGs 9-11-12-14 set ambitious challenges for companies, which are called to action to modify chemical processes to reduce pollution in wastewater streams, engage in water replenishments to communities and nature to compensate for the water extracted for their purposes, and to educate consumers. Hakansson and Snehota (1989) have stated that “no business is an island”. Businesses play a fundamental role in the establishment of sustainable development and much of the success of the sustainability challenge depends on them. However, many business activities have generated direct and indirect negative impacts including environmental damage and social inequality (Sullivan et al., 2018). Also, through their actions, companies can influence the setup of regulators measures and the behaviour of consumers, laying the foundations for a mutual influence to favour a sustainable water management. Several initiatives have been developed in this area such as the CEO Water Mandate under the UN Global Compact and the World Economic Forum Global Water Initiative. Water stewardship’s initiatives support intensive corporate water users to recognize their impact on water allocation, and to work collaboratively and in a transparent manner to achieve an efficient and sustainable water resource management. To be “good stewards”, water users need to realign from “*my water supply*” to “*our water basin*”, understanding that individuality does not resonate in water management, but it demands a greater recognition of the public good (UN-Water, 2021).

De Almeida et al. (2021), in their Research Note point out that as water is indispensable to business, there is an urgent need for prudent water management to be implemented in business strategies to address water-related risks. The authors have identified four risks: I. physical-economic risk, linked to the likely future difficulty in obtaining water and its associated price increase; II. reputational risk, due to a likely growing demand of sustainable water usage by society and consumers; III. regulations and licensing to operate risk, connected to the ability to comply with future more stringent laws; IV. investment markets pressure, which can lead to the loss of support and investments. Companies that

can address these risks before it is too late will gain competitive advantages and create long-lasting businesses that respect everyone's future. Also, de Almeida et al. (2021) propose a pathway that companies are invited to follow to implement water stewardship to align the correct use of water with the SDGs targets. There are three main steps to be pursued: 1. the implementation of efficient practices such as the measurement of the water footprint at all levels of the value chain. 2. the promotion of water reuse by investing in technologies to minimize waste and the environmental impact. 3. the application of awareness-raiser strategies addressing water scarcity.

However, there is still little awareness among the general public on water and its implications, therefore, water scarcity is not perceived as a problem. For this reason, there is a lack of demand and pressure for improving the quality standards of water and the adoption of water-saving processes (Darmendrail et al., 2019).

2.2.3 Domestic water consumption

Water is also a necessary input for human existence, it has been calculated that each person, daily, needs at least 50 litres to ensure all personal hygiene, cooking and drinking needs (Hunter et al. 2010). SDG 6 address these basic necessities, also, SDG 11 and SDG 12 call to action to reduce the environmental impact of cities and communities (11.6) and to ensure that people everywhere have relevant information and awareness for sustainable development and lifestyles in harmony with nature (12.8). In the literature trust has been identified as a key issue in the analysis of natural resource dilemmas and public good allocation (Jorgensen et al., 2009). Compliance with water restrictions is greater when a community responsibility prevails so that individuals recognize a shared interest that neighbours are saving water as well (Lee and Warren, 1981). Alongside trust, consumer behaviour is one of the other key elements impacting the environment (Jackson, 2005), as often bad habits lead to an over-use of resources, as a consequence of an automatic process of being effortless and unconscious (Hasher and Zacks, 1979). After the WC (toilet), the highest household water consumption is through taps (see Figure B in the Appendix) (Butler and Memon, 2006).

The UN-Water (2018) recognized that smart technologies can effectively improve water service delivery, as 10% of global diseases are provoked by the usage of dirty water for washing, drinking or preparing food. Several measures can be implemented in urban areas to achieve significant water-saving results. Grafton et al. (2011) suggested that water demand management policies that include campaigns to promote water-saving behaviours (such as taking a shower instead of a bath) and usage of water-saving devices are effective. Willis et al. (2010) and Englart and Jedlikowski (2019) stressed that households have great potential demonstrating affirming that depending on the faucet-type, 50% water savings can be measured. Accordingly, the contribution that companies in the taps and valves industry can give to the SDGs 6-11-12 and all other interlinked SDGs, is significant because taps and valves meet every day needs and usages, being present in every building and infrastructure. That is why it is important not only that they engage in continuous innovation for sustainable product design, but also that they are committed to ensuring that taps are appropriately used by end-users to build resilient infrastructures and communities. Indeed, Pinkse and Bohnsack (2021) in their sustainability affordances framework proved that a product technology firms' material agency alone is not enough to set off behavioural change. If consumers do not yet behave sustainably, firms should provide possibilities for an effective learning, necessary to bridge the gap between users' attitude and action. In fact, the benefits of sustainable products can only be significant when, in the usage phase, consumers behave appropriately and make the most of the product's sustainability affordances.

2.3 Drivers of Sustainable Development Goals at the local level

The theoretical basis for Italian firms' engagement in responsible practices is usually found in social capital theory (Perrini, 2006), it refers to an intangible asset of reciprocity, trust, reputation and legitimacy that companies develop in connection with the local community and their network of stakeholders (Adler and Kwon, 2002). Similarly, driven by the need for legitimacy, companies could bring positive externalities if they became more aware of the risks they could pose from changes in hydrology in their production sites and if they engaged in collective water stewardship activities.

Therefore, in a holistic perspective, given the interrelated nature of SDG 6 across the SDGs, to solve water challenges translate as well in an increase of the likelihood of generating social and environmental benefits at the local level.

Longoni et al. (2014) define social sustainability as divided into two dimensions: internal social sustainability, which defines the influence the company has on its workforce and the involvement of employees, and external social sustainability, based on the impact the company can have on local communities, to foster trust and legitimacy. Social sustainability is achieved when the organization actively promotes the retention and development of new skills, supports future generations and ensure a good quality of life both in the company and beyond (SDGs 3-4-8). The environmental performance is about undergoing continuous assessments of the firms' environmental impact (Coglianese and Nash, 2001), internally, creating resilient infrastructures (SDG 9), providing resources and training to workers (SDGs 4-8), and checking progress to makes sure that water stewardships goals are being met (SDGs 6-14). As for the external dimension, it revolves around greening the value chain and integrating environmental thinking into the whole supply-chain management from product design, to the delivery of the final product to the consumers, and end-of-life of the product (SDGs 11-12).

According to Bossle et al. (2016) the external drivers have an effect on the internal ones and together push companies towards the adoption and maintenance of sustainable practices. The main external drivers (customers, suppliers, competitors and the industrial cluster) can be reconducted at SDGs 6-8-9-12: fostering product quality, safety, transparency and responsible consumption patterns and upgrading towards resilient infrastructures and sustainable industrialization. On the other hand, internal drivers (organizational culture and strategy and employees) can be linked to SDGs 3-4-8-10-11: fostering health, wellbeing, social equity, skills and education of workers and citizens.

Finally, according to Sartori and Fattibene (2018), one of the main challenges for firms when approaching the SDGs can be identified in the fact that Italy has imposed stricter regulations only on

listed companies. SMEs, instead, have not been given enough incentives to change their business models to contribute to the 2030 Agenda. This results in some misconceptions about the benefits of SDGs which are generally seen as a liability rather than an opportunity.

III. Methodology

3.1 Research Context

The Cusio-Valsesia tap and valves industrial district is located in the north-eastern part of Piedmont in a strip of land around Lake Orta (see Figure C and D in the Appendix). The Italian tap industry has responded to the challenges of globalisation by raising the quality of its products and innovating in the direction of the green economy and Italy has become one of the leading countries in the tap and valve industry (Fortis and Crenna, 2010). Indeed, Italian firms have a positive attitude towards exporting abroad (see Figure E in the Appendix), with the main markets being Northern Europe, the United States, and the Middle East. A peculiar feature of this area is the presence of numerous small companies alongside a few medium-sized and large ones, creating a widespread network of companies that generate wealth for the territory. What differentiates small and medium organizations is the higher specialization of smaller firms in just one or two processes, while larger organisations encompass a more diverse range of activities. (Pigni et al., 2015). A total of about 180 tap and valves manufacturing companies operate in the district, and more than 20 out of every 100 inhabitants work in a taps company.

3.2 Research questions

Zollo et al. (2013) state that there is one key question that needs to be tackled when addressing an empirical study on sustainability-related issues, that is: “Why do certain firms implement initiatives that are of a “higher,” “deeper,” or “more engaged” quality than others when facing the same type of external or internal pressures to innovate and change toward sustainable enterprise models?”

Therefore, this research thesis addresses companies located within the same industrial district, engaged in the same product activity, and being all located within a circumscribed geographical area, and engaged with similar external and internal pressures and stakeholders. A common industrial context also facilitates the control of relevant external influences such as the degree of environmental regulation, the degree of control by the media and interest groups, and common industry standards and practices (Sharma and Vredenburg, 1998).

The first objective of this study is to determine the firms' level of understanding on sustainability topics and on the UN SDGs. Then, I want to grasp the impact of firms' sustainable practices, either intentional or non-intentional, on the SDGs and analyse whether companies in the taps and valves industry present a particular sensitivity on water sustainable management. The second objective is to identify which are the main internal and external factors driving sustainability practices within the industrial cluster. Finally, the main challenges and difficulties that refrain firms from adopting sustainable practices and becoming involved with the Sustainable Development Agenda are investigated.

3.3 Research design

Both reliability and validity are necessary characteristics when aiming to conduct rigorous qualitative research (Eldh et al., 2020). Indeed, it is the researcher that is responsible for checking and adjusting the research processes of the study and to make sure that the results are robust (Spiers et al., 2018). To address the research question, inductive research process has been adopted given the exploratory and qualitative nature of the study (Sekaran and Bougie, 2016). This research approach allows getting closer to companies and their thinking to explore the objectives of the research. For the same reasons, data collection has been carried out with semi-structured interviews, considered to be the most suitable option to allow the natural development of the conversation, but also to make sure that all topics were covered with each interviewee. Interviews were conducted following a set of open questions, while the interview guide has been divided into four main categories: firm understanding

of sustainability and SDGs, engagement with sustainable practices, being part of an industrial district, and challenges when engaging with sustainability (see interview guide in the Appendix, Table 2).

3.4 Sampling and data collection

Regarding the sampling criterion, the participating firms had to be located in the Cusio-Valsesia and fall into the category of taps and valves manufacturer. No limitation was placed in terms of size or prior knowledge that the company was practising sustainable actions. Then, through an online research an initial list of 67 companies was generated and the web pages of these firms were further examined based on three criteria: I. coverage of the whole district area; II. representation of all sizes of firms; III. coverage of the entire valve and tap manufacturing sector, excluding sole retailers.

A total of 34 participants firms have been selected and 5 of them have been reached through the help and intermediation of Confindustria, the General Confederation of Italian Industry, which provided direct contact with each company's representative. The other 28 companies have been first telephonically contacted, so that they could be introduced to the purpose of the study. Out of the selected companies, 9 immediately responded that they were not interested, while the remaining 19 expressed their curiosity about the project and provided email contacts for more information. However, most of them either did not further respond or reported that they could not carry out the interview because they were busy due to the lockdown situation caused by the ongoing pandemic which had halved the staff in their companies. Thus, only 6 additional companies were willing to participate, for a total of 11 firms.

The sample of the participating firms is heterogeneous and represents rather faithfully the typical structure of the district, 6 firms are small with up to 50 employees, 3 are medium sized with less than 250 employees, and finally, 2 are industry leaders with about 800 employees (see Table 1 in the Appendix). Given the extraordinary times of the Covid-19 during the execution of the research, it has not been possible to execute face-to-face interviews. Interviews have been carried out in Italian and were conducted with online platforms that ensured a communication experience similar to the

traditional face-to-face interview (Sullivan, 2012). Before starting, each interviewee has been presented with the purpose of the study and asked for approval for recording the conversation. Interviews lasted from a minimum of 25 minutes to a maximum of 75 minutes.

3.5 Data analysis

Thereafter, each company has been labelled with a different letter from A to M to ensure anonymity and each interview has been transcribed manually and subsequently translated from Italian into English. To facilitate the data analysis in a systematic and rigorous way, the set of procedures proposed by Saunders et al. (2019) have been followed: 1. categorisation; 2. ‘unitising’ data; 3. recognising relationships and developing the categories; 4. developing and/or testing theories to reach conclusions. To get a deeper understanding and to ease to sort through, the data were analysed and categorized through constant comparison (Lindlof et al., 2002). First, a data sets template comprehensive of 206 significant quotes was created. Furthermore, a second-level coding of the data sets aided in aggregating the relevant themes, such as SDGs comprehension, connection with the territory, drivers and challenges - which appeared to be similar and more recurrent – and in identifying broader descriptive and meaningful categories to reach conclusions (see Table 3 and Table 4 in the Appendix). Moreover, the most relevant “power” quotes have been included to illustrate the findings and analysis process. According to Pratt (2007) quotes in qualitative research have two purposes: power and proof. Power quotes are those where the words of the participant are so insightful, that the author could not express the point in a better way. Proof quotes instead show the prevalence of a point to supports a particular recurrent pattern.

3.6 Reflection on methods and limitation

First of all, it is important to clarify that this study has limitations since the sample of companies considered is small. One of the main reasons is the exceptional circumstances of lockdown caused by Covid-19 in Italy during the months in which the study was carried out. Another limitation can be

attributed to the difference in the size of the companies. It must also be pointed out that the context of the research (Italy) might limit findings generalisations. Finally, a further limitation generates from the use of qualitative data based on self-reported descriptions of sustainable practices, so that it may be difficult to discern between intentions and the impact generated. The literature on methodology indicates threats to validity and reliability (Saunders et al., 2019). For this study, reliability might have been influenced on the one hand, by participants' bias and error (as the interviewees might have replied in ways prompted by the way the question was posed or might not have had the ability to articulate thoroughly on certain topics), and on the other hand, by researcher's bias and error during the interpretation stage.

IV. Findings

The data collected was rich and insightful with information from leading voices within the companies that allowed for an examination of the key trends of water-saving practices, sustainability drivers and obstacles. The data showed that almost all the respondents had no knowledge nor familiarity with the topic when asked about their understanding of SDGs. Certainly, all of them were clear about the main obstacles and barriers towards a more radical and structured change.

Although several participants said they were unfamiliar with the topics covered, they were able to articulate and underline the corporate journey towards sustainability. Only the Sustainability Manager of Company B was aware of the 2030 Agenda and reported that in the near future they have the intention to address corporate action within that framework. However, several firms' actions showed implicit behavioural patterns that can be directly connected to some Goals of the 2030 Agenda for Sustainable Development. Thus, they are working in the areas of SDGs with some sustainable practices, yet their work is not linked to the goals or articulated as such.

4.1 What drives sustainable practices?

4.1.1 External drivers

The need to satisfy customers' demands has emerged as one of the driving forces for the execution of participating firms' sustainable practices. *"It is usually external pressure that leads us to pay more attention. When the market demands a certain type of product, we start a study in that direction"* (Owner, Company D). Companies E, M, C and H identified as a stronger lever the production of products with an export vocation. If Italy was their main target market, the pressure towards the introduction of eco-products into their collection portfolio would be reduced. As affirmed by HR Manager of Company C: *"there are many markets, especially Northern Europe, and the UAE that are much more sensitive to environmental issues"* and *"the foreign market has always been attentive to ecology. Unfortunately, Italy has lagged behind on these issues"* (General Manager, Company G). Moreover, certifications compliance push to a greater attention. Certifications are necessary for being competitive on the foreign market *"in the global market they are a vital necessity: without them, you cannot compete"* (Marketing Manager, company I) and also strength relations with suppliers and outperform competitors, as explained by HR manager of Company L: *"we look for suppliers who have certain certifications. Similarly, we are also chosen because we have certifications that competitors don't have."*

Finally, smaller firms recognized as a driver the peer group influence of best practices among the district: *"belonging to a district makes it easier to work, and even small companies like us manage to do well"* (Owner of Company B) and *"proximity to other companies stimulates us to the use of new materials and eco-innovations"* (Owner of Company M). From larger companies the advantages of being part of the district are less perceived, *"we're the biggest in the area. Therefore, we are not influenced by other companies, rather they are influenced by us"* (HR Manager of Company G).

4.1.2 Internal drivers

When asked what was one of the main reasons for approaching sustainability, the owner-manager vision of the company always came up as a necessary premise. The sustainability manager of Company B referred to “*a strong personal desire on the part of the owners*”, the owners of Companies D, E and M mentioned their personal “*vision*”, “*vocation*” and “*values*”. HR Manager of company F stated that there is a sensitivity “*in the company DNA*” deriving from the owners. Employees are a mild driver, mainly helpful in the maintenance of sustainable practices, especially at the internal environmental level. Also, in terms of attractiveness, none recognized sustainability as an opportunity to engage and retain potential good candidates. However, several companies indicated benefits and strategic market positioning behind the adoption of sustainable innovations.

4.2 The challenge towards water stewardship

Water is a resource that has an important role within the analysed companies of the taps and valves industrial district for several reasons. First, because the core of their products revolves around water. Second water is highly present and necessary at the production level, and third, for the close presence within the district of Lake Orta. “*Water is an absolute integral part of our business, our activities and our products*” (HR Manager, Company F) and “*our product uses water, but above all we use a lot of liquids in production as well*” (Marketing Manager, Company I).

For what concerns SDGs 6-11-12, companies demonstrated an attention to producing taps and components that are designed for an efficient use at the final-user level, fostering health and making cities and human settlements inclusive, safe, resilient and sustainable. Companies B, I, and C reported a long tradition in patenting and implementing systems that enable high-efficiency taps and showers to increase water savings. “*With our internal valves and aerators, the end users reduce waste. This doesn't mean that when you turn on the tap you can perceive less water, what you have is the right water for daily uses. With a small addition we save up to 50% of water consumption*” (Marketing Manager, Company I). In addition, it emerged a desire to encourage the use of tap water in order

increase safety and health and to discourage the purchase of plastic bottles to reduce pollution in water basins (SDG 14): *“We have implemented a system which provides filtered water eliminating all harmful substances that might be present in ordinary water that flows from the taps or derives from contact with plastic.”* (General manager, Company H). Finally, Companies C and I stated that Covid-19 has influenced customers to ask for products that can be activated by infrared, which is useful because it avoids direct contact and because it can be set with specific timings after which the water flow stops. *“Several companies and public infrastructures made changes in their bathrooms, we are happy because it has been an opportunity to modernise and increase water-saving measures and reduce irresponsible uses”* (HR Manager, Company C).

At the product level companies are all rather aligned towards the creation of products designed with a sustainable approach. Instead, at the production level, water stewardship measures, in terms of efficiency and reuse (SDGs 6-9) and water-related risks are not homogeneously addressed. Companies F, H and G already have implemented a closed-loop cycle to lower the consumption of water in the plant, *“we have a proprietary water supply, we draw from our own reservoir which we look after with extreme care. In the plant we keep the water completely enclosed inside, so, certainly, a low consumption of water is an element of differentiation for our products”* (HR Manager, Company F). Companies B and M affirmed that it is a goal they wish to reach soon, *“we take several cubic meters a year from an aquifer near the company, the closed cycle would significantly reduce the withdrawals”* (Sustainability Manager, Company B). Companies I, C, L, H and M stressed their efforts on treated water purification to make sure that the water is returned as pure as possible not to damage the ecosystem (SDGs 14-15): *“we are very careful about purifying the water we use especially because we have witnessed bad episodes on Lake Orta, it was fairly 'disregarded', many companies discharged into its water to the point of killing it completely”* (HR Manager, Company L) and *“we have invested in purification systems to reduce our impact on the surroundings. In our plant where there are the wastewater tanks, there are carps. If an animal can live in that water, it shows how clean and filtered it is once it reaches the end of its cycle”* (Marketing Manager, Company I).

4.3 Participating firms 'practices and the UN SDGs

With regards to the internal social sustainability dimension, all participating firms recognized to respect all regulations for employment and in some cases of going beyond, creating a better working place for their employees (SDG 8). Company F, for instance, with an introduction of a kindergarten not only improved the workplace but also impacted the private sphere of the workers as well (SDG 10). As for the external dimension, companies' practices show contributions at the local level and a deep attachment to the local communities to which they belong by sponsoring local sports teams, local associations and collaborating with educational institutions. Companies L, D, G, H showed a high degree of sensitivity and care for the health and well-being of the local community and of their employees (SDG 3). *"We have donated 1 million euros to local hospitals to make an impact on the territory during the Covid-19 crisis with the goal of creating a virtuous circle for other companies to do the same"* (HR Manager of Company G) and *"we have made our spaces available for facilitating and encouraging vaccination for all workers and employees"* (HR Manager, Company L). Furthermore, the owner-manager of Company D affirmed that *"internal psychological support is provided if there is any problem both at personal and professional level. In addition, in the case of the pandemic, courses have been held to inform and reassure, because working in this period is not easy, it can be a source of concern. We take great care of the well-being of our employees"*.

Companies A, B, C, D and G demonstrated to prioritise education and lifelong learning opportunities (SDG 4) by collaborating with schools and universities upgrading their education facilities. The owner of Company A affirmed *"we implement and carry out several training courses. We have also purchased an innovative new machine in cooperation with a local school"* and HR Manager of Company C *"we have set up agreements that provide for off-the-job training such as English courses, computer courses and even a guitar course, based on their interests"*. Also, it appeared a clear desire to contribute to the development and flourishing of the area by offering good employment opportunities (SDG 8). Each company tries to contribute according to its own capabilities and size, the larger companies demonstrate more advanced corporate welfare systems. The HR Manager of

Company F recognizes that *“our greatest impact is that of generating wealth for those who live in the area by creating valuable job opportunities here”*. When it comes to the environmental practices at the plant level, not all companies have reached a mature level. Company H, I and D affirmed that one of their priority is to make sure that their supply chains are greener with an attentive choice of suppliers. Company B is at a very mature stage, clarifying that it has started already in 2001 to have a rational resource usage. Others, instead, have started more recently to reduce their environmental footprint due to new general sensitivity and regulations that can no longer be ignored: *“there is a progressive awareness of the importance of these issues, and alongside this there is an increasing regulatory intervention that directly or indirectly leads to the need to pay attention”* (HR Manager, Company F). Companies C and F are committed to use only energy from renewable resources in the next future (SDG 7), *“on our plant there are already some photovoltaic panels covering the entire roof that allow partial use of the self-generated energy”* (HR Manager, Company C). Company H is an excellent example of a so-called resilient infrastructure (SDG 9), planned in its functionality with a focus on the environment: *“the company was recently completely rebuilt in a sustainable and fully domotic way. We work at a very low level of environmental impact, in terms of emissions this company can be seen as a large house, the only emissions released are those of heating. We really try to aim for zero impact”* (General Manager, Company H). Finally, some companies showed attention to the culture of recycling (SDG 12) both internally and externally with regard to product packaging.

4.4 Difficulties addressing sustainable development

Among all 11 participating firms it emerges a similar pattern in terms of difficulties approaching sustainability. HR Manager, Marketing Manager and Owner of companies C I and E reported that the 2020 Covid-19 pandemic circumstances, surprisingly, had a positive impact to them. Firstly, because it brought to light the need for more radical change and secondly, because of a forced slowdown, they came to the conclusion that they needed to collaborate with external figures to bridge their gap.

The main barrier that emerged from companies with stronger strategic market orientation and focus on customer satisfaction (Companies A, C, D, E, G, L and M) is the fact that acquiring knowledge on a new topic, as SDGs are perceived, requires a high number of resources, both in terms of costs and time: *“The amount of work that we have to deal daily does not allow to become more familiar with these issues, or to deal with them we would have to incur in extra costs, these are the biggest difficulties we face”* (Owner-Manager, Company E). Instead, firms with a more entrepreneurial orientation and with a greater innovative and proactive attitude, expressed problems in entering the market by offering only totally green collections of product portfolios. Indeed, the market, especially the domestic one, is still not ready yet and price competition prevents formalized organizational changes and plants re-organizations: *“solutions that guarantee greater sustainability in the product life cycle through the whole supply-chain, are solutions that have an impact on its cost, the difficulty is in reconciling them with the market positioning. Having ambitious products in terms of sustainability but that the market does not accept is an exercise that does not work”* (HR Manager, Company F). Overall, the findings are summarised in Figure 2, showing a comprehensive overview of participants firms’ corporate water and sustainability management practices and challenges within the Cusio-Valsesia district.

Sustainable water stewardship	Efficiency		Reuse	Awareness
	Plant and production level: Implementation of purification systems	Product supply: Water saving taps with efficient valves and aerators	Efforts towards closed loop cycles	Awareness-raiser agents’ role is not seen as relevant or related to business
Drivers of sustainable practices	Internal		External	
	<ul style="list-style-type: none"> ○ Organizational culture ○ Attachment to the local community ○ Strategic positioning & competitive advantage 		<ul style="list-style-type: none"> ○ Customer expectations ○ Foreign market pressure ○ Competitors pressure & industrial cluster 	
Obstacles preventing formalized & systematic implementation	<ul style="list-style-type: none"> ○ Lack of incentives from the Italian context ○ Lack of knowledge and information 	Market oriented companies		Entrepreneurial oriented companies
		<ul style="list-style-type: none"> ○ Cost constraints (HR and R&D) ○ Time constraints 		<ul style="list-style-type: none"> ○ Competition on price

Figure 2. Water stewardship, drivers and challenges of corporate water and sustainability management practices for firms within Cusio Valsesia industrial district

V. Analysis

5.1 Water savings products and consumer behaviours concerns

Starting from what has been theorized by Englart and Jedlikowski (2019) the findings suggest that companies effectively produce water-saving devices for domestic consumption. But, also similarly to what Pinkse and Bohnsack (2021) defined into their sustainability affordances framework, participants perceive that more than continuing to produce taps with water savings technical features, there is not much else they can do, because the wise and correct use of taps in is up to the final consumer. As the words of the Owner-Manager of Company M depict: *“there is not much attention from consumers in certain markets. I think that we as Italians are not culturally ready. We have not yet understood that water is precious and the importance of wasting it. We have always been accustomed to having water in the house, to turning on the taps without paying attention. Since we have never had problems with shortages, we cannot understand the importance of it. In other countries, such the UAE, there is a great deal of attention, probably due to their territorial characteristics.”* However, no company reported taking part in or carrying out educational or awareness-raising campaigns on this topic to ensure that people everywhere have relevant information on sustainable consumption patterns, which has been proven to be effective and beneficial (Roccaro et al., 2011) and supported by SDG 12.

As already demonstrated by Conte et al. (2012) and also proved in this research, in Italy water is not a “trendy” issue, water-saving, and sustainable water management systems have only low interest amongst the general public and the businesses sector. Among the participants firms, the role of awareness-raiser agents is not seen as relevant or related to their business. Therefore, there is certainly a lot of room for improvement that can be filled, companies could do more and get involved as active agents in the path towards water stewardship (de Almeida et al., 2021).

5.2 Lack of attention to the water crisis

The availability of freshwater is highly affected by the location and the seasonality, and for this reason, the water challenge must be addressed both locally and globally (Hundertmark et al., 2020). The HR Manager of Company L reported that the firm is part of an association for the protection and conservation of Lake Orta, demonstrating that there is attention for life below water and the ecosystem (SDG 14), but it is mainly focused on the local surroundings. It must also be acknowledged that one of the main factors that over time have led to the development of the industrial district in the Cusio Valsesia region has been the abundant presence in the area of water, fundamental for such industry sector, with intensive water usage (Torre, 1978). The HR Manager of Company G affirmed: *“We have the good fortune to be in an area with a rich and easily accessible water table, and in our production processes we use this water which comes directly from here.”* Hence, with regards to the broader targets posed by SDGs 6 and 14, none of the companies made any reference to water as a common good or to wanting to undertake initiatives that go beyond the area in which they operate, either at the national or international level. Somehow, companies’ managements behave in a way that can be compared to consumers, since they do not perceive the threat of shortages, the need to protect water resources is not a priority issue. It did not emerge a clear future vision to assess if the supply is sufficient to meet the demand or if any risks need to be addressed. In fact, in Italy, water scarcity is already occurring, originated by the deglaciation of Alpine glaciers, affecting northern Italian regions as well (Carrera et al, 2013). Yet, participating firms appeared poorly aware about the fact that not having enough clean and affordable water can pose several threats that can lead to substantial losses for businesses.

5.3 From *silent CSR* to *silent SDGs*

Not only from the UN but from both academia and practice, there is a push for businesses to act as SDGs agents (Mio et al., 2020). However, as the PwC “SDG Challenge report” 2019 shows, “there is still not enough understanding of what companies’ concrete actions should

be or is taking place”. Among participants firms a still unstructured approach was found, linked to a limited propensity to enhance sustainability externally. The transition toward formalized practices is commonly difficult due to a lack of human, technical and organizational resources and it is influenced by the perceived costs and complexity of operations required (Battaglia et al., 2010). In particular, from this study it emerges that firms are more sustainable in their concrete behaviour than they recognise. This can be traced back the social capital theory and to what Del Baldo and Demartini (2012) have defined the Italian model of territorial social responsibility where constitutive elements of logic of social responsibility and territorial sustainability are “genetically” present. Furthermore, Coppa and Sriramesh (2013) affirmed that many characteristics of the Italian cultural traits (i.e., crony society, the centrality of the family) influence the way sustainability is perceived, practiced, and communicated. Firms unfrequently use a formalized and common language to describe their activities (Russo and Tencati, 2009) along with a scarce propensity to externally communicate their practices (Jenkins, 2006). In this perspective, Perrini (2006) affirmed that many of the activities carried out by the Italian companies, have low visibility. This approach has been defined as “sunken CSR” (Perrini, 2006) but is also referred to as “silent CSR” (Jenkins, 2006) or “implicit CSR” and it is motivated by the societal consensus on the legitimate expectations of the roles and contributions of all major groups in society, including companies (Matten and Moon, 2008). Matten and Moon specify that when the action is explicit, it is the result of a deliberate and strategic decision and it is well communicated to the stakeholders. At the same time, many elements of the implicit behavioural patterns are conducted similarly, but the action derives from a reaction to the institutional and external environment and customary behaviours and ethics. Accordingly, similarly to what Perrini (2006) and Jenkins (2006) found related to “silent CSR”, this study finds, in a more contemporary definition, the presence of some “silent SDGs” in the way participating firms’ practices are addressing sustainability. Therefore, within the challenges posed by the 2030 Agenda some goals – even if on the level of unintentionality (only 1 interviewee was fully aware of the SDGs) – are more explicitly addressed and deliberately well communicated. Others, instead, are approached in a more implicit and silent manner, with a

reduced maturity and centrality within the organizations. One of the greatest influences of participating firms has emerged to be a strong connection with the territory. The local community is a strong lever that tends to influence external communication and greater formalisation and strategic implementation of actions. This is true for SDG 8 and SDG 3. With regard to the former, companies have proven commitment and well-formalized practices to enhance productive employment and decent work for all and reduce the proportion of youth not in employment. They are all involved in providing and ensuring wellbeing in the workplace and contributing to the continued economic growth of the area. For the latter, Cusio-Valsesia companies of all sizes have proved to be internally very well organised and attentive to the mental and physical health of all their employees. The Covid-19 induced them to be more attentive internally and to communicate externally acting for the good of the whole community, by raising awareness and offering spaces to facilitate the vaccination process.

Silent SDGs, which have lower external visibility and formality processes, driven by customary practices, can be found in the SDGs 4-6-14-9-11-12. In fact, findings revealed that several firms appeared poorly aware of their direct impact on society and the environment on this issue, lacking in solutions to monitor and communicate their sustainable business practices and to highlight them with appropriate tools and related indicators. Hence, participants firms' actions showed implicit behavioural patterns that can be directly connected to certain Goals and Targets of the 2030 Agenda for Sustainable Development: SDG 4 with investments in education and development of technical and vocational skills; SDGs 6, 14, and 9 with water stewardship actions to increase the resource use efficiency and fostering a greater adoption of environmentally sound industrial processes; SDG 11 contributing with their taps to reduce the adverse per capita environmental impact of cities and SDG 12 reducing waste generation through internal recycling and packaging concerns. To this extent, firms, if duly incentivised, are not far from understanding and committing their sustainable practices to the 2030 Agenda in a formalized and explicit manner to enhance their visibility.

VI. Conclusion

The study found that companies of the Cusio-Valsesia industrial district implement sustainable practices mainly in an informal and unformalized way. The evidence points to the presence of some “silent SDGs”. However, measurement tools and transparency are a vital part of a sustainable management system. Without these, ambitious goals such as those developed by the 2030 Agenda can hardly be achieved in an effective and explicit way. It is crucial for firms to bridge this gap by referring to precise indicators and measurement systems that allow to departure from current business-as-usual practices. In this way it would be easier to trigger virtuous circles of best practices with other firms within the cluster. Above all, there is a clear deficit in terms of human capital with the skills needed to tackle major challenges. As mentioned by Sartori and Fattibene (2018), the Italian government didn’t find a way to duly incentivize non-listed companies to contribute to the 2030 Agenda. A good starting point for participating firms to incorporate SDGs within their business models could be the usage of the *B Impact Assessment*, an easy and comprehensive tool to measure the performance of any type of company (Shields and Shelleman, 2017).

Finally, given the limitations of this study, it can be detected the need to develop further empirical research with more selective parameters, addressing only micro and small enterprises, which are the majority in Italy. This can contribute to the understanding of which are the more convenient and attractive solutions to assist and facilitate the transition towards sustainability-oriented management. Moreover, the paper revealed insights of traditional businesses, a future research agenda might take into account a sample of conscious organizations, which are already at a more mature stage and committed contributing to SDG 6 and interlinked challenges, improving their own sustainability performances and addressing water stewardship measures. Future research is essential, to reduce a literature gap and to understand how to clearly communicate those actions, and to provide best practices to inspire and encourage other businesses.

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VIII. Appendix

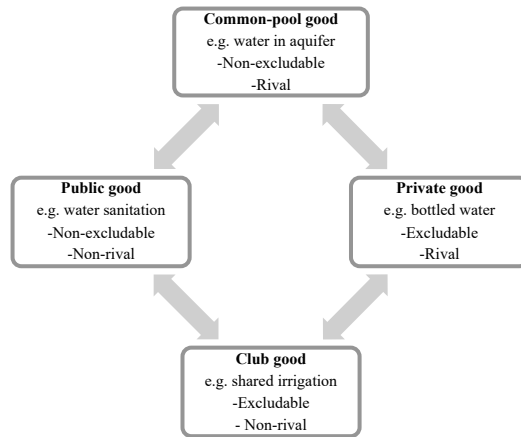


Figure A. Water as a public and private good. Source: White, 2015.

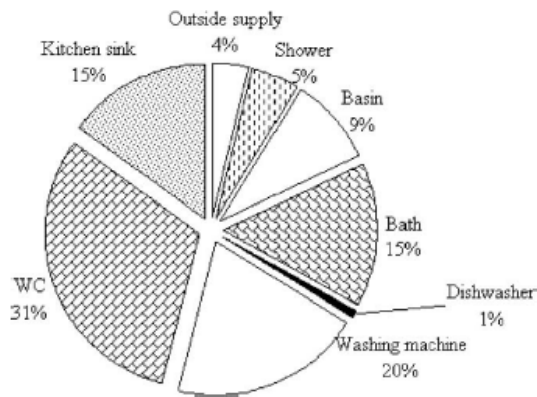


Figure B. Water consumption share of different micro components. Source: Butler and Memon, 2006

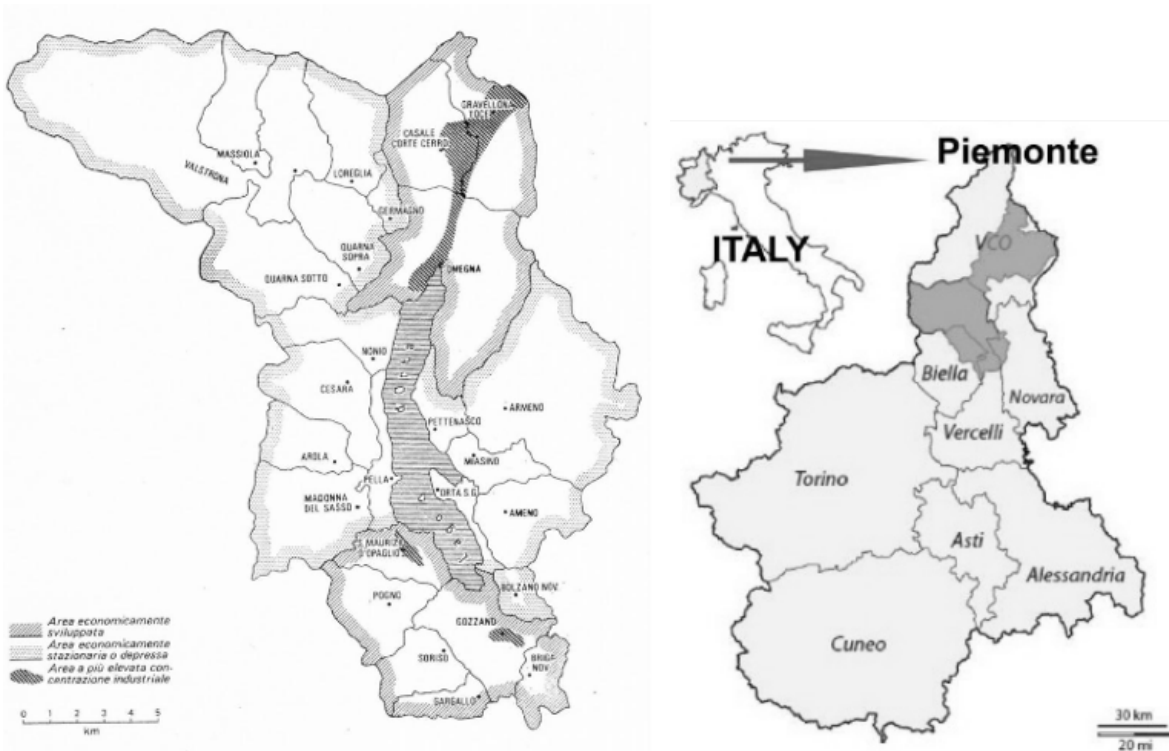


Figure C and D. Geographical location of the district. Source: Beretta, 1974

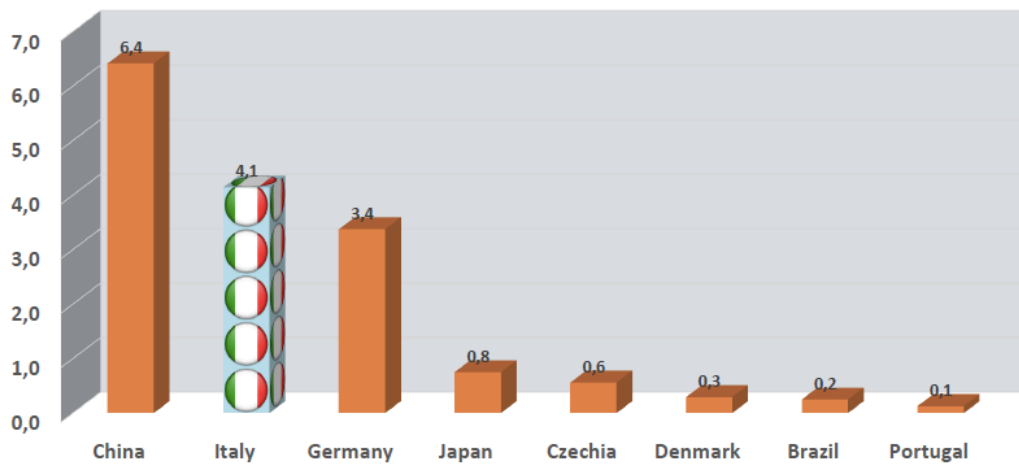


Figure E. Taps and valves trade balance with foreign countries in 2017 (billion dollars). Source Fondazione Edison

<i>Company</i>	<i>Date of the interview</i>	<i>Interviewee</i>	<i>Number of Employees</i>	<i>Product category</i>	<i>Markets</i>
A	11 March 2021	Owner-Manager	16	Valves	Domestic
B	12 March 2021	Sustainability Manager	26	Taps	Domestic and international in the EU
C	12 March 2021	HR Manager	150	Taps	Domestic and international EU and non-EU
D	12 March 2021	Owner-Manager	15	Taps	Domestic and international in the EU
E	15 March 2021	Owner-Manager	32	Taps	Domestic, Northern EU
F	18 March 2021	HR Manager	700	Valves	Domestic and International EU and non-EU
G	18 March 2021	HR Manager	800	Valves	Domestic and international EU and non-EU
H	31 March 2021	General Manager	50	Taps	Domestic and international in the EU
I	2 April 2021	Marketing Manager	150	Taps	Domestic and international in the EU
L	6 April 2021	HR Manager	245	Taps	Domestic and international in the EU and non-EU
M	8 April 2021	Owner-Manager	42	Taps	Domestic and international EU and non-EU

Table 1. Information about the participating firms.

0. To start with, I would like to ask you if you could describe your company and your role in it.
1. Firms understanding of sustainability
 - *What is your firm understanding of sustainability?*
 - *What is your understanding of the UN Sustainable Development Goals? Are you familiar with them? If yes, how do you know about SDGs? If no, would you be interested to know more?*
 - *Why and when have you started working with sustainability? Does it play a role in your strategic choices?*
2. Engagement with sustainable practices and examples related to sustainability - investigating the level of formality, intentionality and stakeholder engagement
 - *What types of sustainable practice do you perform? Can you talk about the activities done in the past and currently going on?*
 - *Do you feel particularly attached to the territory in which you are located?*
 - *The history of the industrial district in which you are located is inevitably linked to water, do you take any measure to protect this resource?*
 - *How do you manage your production cycle?*
 - *Do you perform any special activities regarding the relationship with your employees? e.g., with regard to their training and education or well-being*
 - *Do you educate and sensitise employees on these issues?*
 - *Do you fund or participate in R&D projects to support innovation and sustainability?*
 - *Do you take measures to encourage consumers to adopt a responsible behaviour?*
3. Being part of an industrial cluster
 - *Do you think that being in an industrial cluster play a significant role on your actions?*
 - *Do you think that the proximity of other companies stimulates an innovative and positive effect?*
4. Benefits and challenges when engaging with sustainability
 - *Do you have plans to further strength your action towards sustainability in the future? Do you see opportunities in engaging more with sustainable practices?*
 - *Which are the main challenges and problems faced when addressing sustainability?*
 - *What impact had the Covid-19 crisis on your actions? Do you think it changed your approach towards sustainability?*

Table 2. Interview guide.

<i>Investigated theme</i>	<i>Second order theme</i>
<i>Activities</i>	
<i>SDGs comprehension</i>	Zero knowledge Superficial knowledge
<i>Drivers</i>	Internal External
<i>Outcomes</i>	Internal External Stakeholders engagement
<i>Organisational</i>	Leadership Strategy Certifications
<i>Connection with the territory – industrial cluster</i>	Network Ecosystem
<i>Water</i>	Plant Product Ecosystem
<i>Covid-19 impact</i>	Willingness to change Network
<i>Challenges</i>	Internal Market Lack of tools

Table 3. Overview of the aggregated relevant themes

Topic	Insights from participants	Second order theme	Emerging themes
SDGs comprehension	<p><i>Yes, we have seen some webinars and we are studying ways to match them with our environmental objectives. (B)</i></p> <p><i>I have never heard of them. (C)</i></p> <p><i>In a superficial way. (F)</i></p> <p><i>Not at first glance. (D)</i></p> <p><i>To be honest I don't 'know them. (G)</i></p>	Most of the companies are not aware of the SDGs	Italian companies of all sizes are not duly incentivized on the adoption of SDGs tools in their communication and strategies.
	<p><i>There is a strong personal desire on the part of the owners to address these issues. It is a real interest for them, but by now, I dare to say, you can't miss it. In any case, we have always been in the vanguard, in 2001 we were the only company in the district with ISO 9001 and 14001 certifications. I really see that the owners, maybe because they are young, are more sensitive, this affects them a lot, they want a future for their children. (B)</i></p> <p><i>There is certainly a great deal of attention. Not only because there are regulations, but because there is a corporate will, a commitment of conscience that starts from our corporate culture that tries to do everything possible, not only because it is nice to say so or to advertise, but we try to make it real. At the end of the day, I think you can always, for better or worse, say or write what you want, but what counts is what you do, what people see, and whether you are sincere or not. We don't do flashy things; we do what we can with maximum transparency. (G)</i></p>	Corporate will and personal vision of owner-manager	Internal drivers are what leads firms into challenging their business models and take the initiative to move beyond regulations compliance. The organizational culture emerges as a necessary premise to emphasize internally and externally what is being done.
Drivers	<p><i>There are many markets, especially in northern Europe and North America, that are much more sensitive to environmental issues. (C)</i></p> <p><i>All the know-how we have learnt in the foreign market we have also started to bring to Italy, so we don't end up with an A or B range product. We always try to offer the best by using our knowledge of the quality of materials and ecology on the Italian market too, focusing on quality and not playing down the price. (H)</i></p> <p><i>There are countries like those in northern Europe, such as Finland and Sweden, where they are certainly more careful. Another example is the United Arab Emirates, where there is great attention to water consumption, probably because of their territorial characteristics. From these countries we have requests for special filters to limit the flow rate. In Italy these issues are not at all common, there is still little attention. (M)</i></p>	Foreign market influence	Externally, global market competition is what drives Italian companies to comply and to increasingly communicate about the sustainable performances of their products.
	<p><i>We are a company that was founded on the territory of lake Orta and has a deep bond with the territory because most of the company's population works here in the area that overlooks the lake. We are</i></p>	Connection with the territory	The engagement with citizens within the local community, suppliers and

	<p><i>strong supporters of made in Italy products and we are very attached to our roots, so we have never been tempted to relocate abroad because the company's roots are here, and we do everything we can to keep them here. Clearly this must be combined with the profitability of the business, but in terms of strategic choices we have always chosen to keep the industrial plant in the Cusio area. (F)</i></p> <p><i>We have a focus on young people. For example, we now have two young people, a boy and a girl, who at a time like this, which is more difficult than usual, are trying and seeing if it could be their future to work with us. It's obvious that this involves commitments and costs on the part of the company, but we have a special eye on young people, because they must have a future. (D)</i></p> <p><i>Certainly, the proximity to other companies stimulates us to do more and more and not stand still, also because there is innovation. In addition to our strategy, looking around us can lead to new investments and the use of new materials that we might not have known about on our own. The relationship and the comparison bring a continuous improvement. (I)</i></p> <p><i>The company favours the use of local suppliers, which also has an impact on the environment, being all close by. (B)</i></p> <p><i>Taps were born here in the Cusio-Valsesia area, here is the home of taps. So, we're here because the production is here. It's a great logistical convenience, If the world is looking for taps and fittings, they come here. We could have moved, but that's why we're here. (E)</i></p> <p><i>Our suppliers can't produce in an unsustainable way if we then go on to offer sustainable solutions. We are not interested in first-price suppliers but in quality suppliers that we can find here around us. (H)</i></p>		<p>competitors is what pushes firms to create added value externally also, being part of an industrial cluster is significant to foster a contamination of practices within the whole value chains.</p>
<p>Water</p>	<p><i>Our goal is to have a closed cycle, so this would mean no more water withdrawals. We take several cubic metres of water a year from an aquifer near the company and the closed cycle would reduce the amount of water taken. (B)</i></p> <p><i>We have our own production, so it is important that the concept of sustainability starts there, as the impact on the ecosystem is not zero. through specific advice and support and also, above all, through investment in special machinery and purification plants we try to improve our efficiency. (I)</i></p> <p><i>We are very careful about purifying the water we use. We have also witnessed in the past, but also recently, bad episodes on Lake Orta, of firms spilling harmful substances into the lake. (C)</i></p>	<p>Industrial consumption</p>	<p>Firms recognize the centrality of water into their businesses. At the product level there is a high level of maturity, but a scarce commitment to educate on an efficient usage. At the plant level, firms are beginning to implement systems to limit the negative externalities on the hydrological cycle.</p>

<p><i>Water is absolutely an integral part of our business, our activities and products aim to manage water in its applications related to heating and, water distribution. For us, water is a vital element at the business level, it is a very important element within the production sites, we have a proprietary water supply so we draw from our own reservoir which we look after with extreme care and which guarantees us and also guarantees the use of quality water within the company, both for industrial processes but also, quite simply, the staff can draw from fountains or dispensers that provide water from the company's own sources. So, yes, water is important.. (M)</i></p>		
<p><i>On the product side, the aerators, the pressure dosage, promote less water waste. This is significant, we were the first company to patent cartridges that mix hot and cold water. This allows less water to be wasted. (C)</i></p> <p><i>Ten years ago, we launched a collection that was green in every way: from the packaging to the movement of the handle that opens directly on cold water, for example. On some kitchen mixers we have implemented a mechanism that opens directly on cold water instead of hot water. These are small improvements, but in the long run they can make a difference. We also have products that can be activated by infrared controls and you can set a specific time after which the water stops to avoid waste or careless use, especially in public bathrooms used by many people. (I)</i></p> <p><i>We have a product line that focuses on saving water and reducing plastic consumption. With this type of tap we encourage the user not to use plastic bottles, a beneficial and important factor for all our seas and basins which are deeply polluted. We do this by putting on the international market a product capable of delivering natural, filtered cold or hot water. We invite people to avoid going to the supermarket to buy bottles of water to save plastic and have zero impact on pollution. (H)</i></p> <p><i>For us, sustainability means being projected into the study of increasingly ecological products. In fact, we continue to study shapes, accessories and details that respect the environment. In our field, for example, we focus on avoiding substances that can be toxic to the body. Focusing on health. The raw materials of the products are sought out with certain characteristics. In fact, our product delivers water, which is used for cooking and for people. It is our responsibility to ensure that the water flowing through our taps is not loaded with hazardous or harmful substances. (D)</i></p>	<p>Domestic consumption</p>	

Challenges	<p><i>Obviously, the main issue is the economic aspect. Sometimes even getting customers to accept certain issues. For example, switching to chromium 3, which is not carcinogenic, has been tried in the past but one of the main clashes was with the customers because there is a difference in colour between chromium 3 and chromium 6. It has a different shade. Plus, in this case, the real risk is not perceived by the customer because the worker has it. The customer does not see the risk in electroplating. Perhaps some advertising on these topics would be useful. (B)</i></p> <p><i>Sometimes the information is not sufficient and clear. In addition, the economic aspect. (D)</i></p> <p><i>The amount of work that we have to deal with on a daily basis unfortunately does not allow us to go so fast in what we have in mind for the future or to deal with them we would have to incur extra costs, these are the biggest difficulties we face. Because on the one hand, fortunately, the company is growing so we have to find a balance between so much work, keeping costs down and dealing with other things. (E)</i></p> <p><i>A total lack of attention. In other words, if I offer a product that does not pollute compared to another product, the first question I am asked is does it cost more or does it cost less? This is the main discriminating element for the product to be taken into consideration, otherwise there is no other incentive, from the customer's point of view, the only thing that is looked at is cost savings. Unfortunately, when it comes to sustainability, today it is still essentially a matter of goodwill, there are too many opportunities that are not taken up. (A)</i></p> <p><i>It's a topic we will have to address in the future because it's becoming more and more popular, you can't stand behind. Even if the aspiration is to become a fully sustainable company, you have to do it also because the public opinion, rather than the market, demands it. At the moment, honestly, we don't even have time to think about it properly because of the amount of work we have. (M)</i></p>	<p>Cost and resources constraints</p> <p>&</p> <p>Lack of awareness</p>	<p>Firms perceive the need to engage more with sustainability, but but they struggle to put into practice a structured framework and address it in a duly formalized manner.</p>
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Table 4. Overview of the thematic analysis and “proof quotes” of the collected data