

 ICMA SARTORIAL PAPER DAL 1933	INITIAL ENVIRONMENTAL REVIEW		IER
	Ed. 01 – Rev. 02	Date 15/06/2020	



Via Risorgimento, 9
23826 Mandello del Lario (LC)

Initial Environmental Review and Contextual Analysis 2020

(Data from 31st December 2019)

Certified



This company meets the
highest standards of social
and environmental impact

Corporation

June 2020

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1 Introduction

The Initial Environmental Review (IER) and Context Analysis is a fundamental aspect for organizing and implementing an Environmental Management System (EMS) compliant with the UNI EN ISO 14001:2015 standard.

The context analysis should be considered an integral part to help evaluate the internal and external factors of the context defined for each risk assessed.

The Initial Environmental Review is a systematic diagnosis, in which all the relationships between the production activities carried out by ICMA s.r.l. and the environmental and territorial situation surrounding it are analyzed and assessed, according to the general constraints to which the Company is subject, and to the legislative, socioeconomic, and market framework.

The context is “populated” by stakeholders inside and outside the organization, who can vary depending on changes to the context in which the organization operates. In order to plan and implement the EMS, the organization must take these stakeholders into account, as they have relevant requirements and expectations of it.

With the Initial Environmental Review and Context Analysis, the Company is able to make an overall assessment of the environmental problems linked with its activities. Therefore, it is a starting point to identify the objectives and procedures that the Company has adopted.

The purpose of the Initial Environmental Review and Context Analysis is to identify:

- **Direct and indirect aspects** (environmental aspect: a facet of an activity, product or service of an organization that can interact with the environment);
- **The resulting environmental impacts** (environmental impact: any total or partial adverse or beneficial change to the environment resulting from the activities, products or services of an organization).

These aspects/impacts will then be reexamined and kept up-to-date in the face of changes to the company's Environmental Management System.

Familiarity with the context is essential for defining the field of application of the Environmental Management System. Only with the context can we:

- **Ascertain risks, meaning opportunities or threats**
- **Develop or strengthen the Environmental Policy**
- **Define environmental goals**
- **Ascertain** the organization's efficacy in remaining compliant with legislation.

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2 Company Data

This document is the Initial Environmental Review and Context Analysis of the Company ICMA s.r.l., which is located at no. 9 Via Risorgimento, in the Municipality of Mandello del Lario (LC).

The ICMA s.r.l. production site is situated in a central area of the town of Mandello del Lario. The factory consists of 3 floors (basement, ground floor, and first floor), with a covered surface area of about 9,500 m² and uncovered surface area of 5,800 m² (partly shared with the adjacent company CEMB srl). This amounts to a total surface area of 15,300 m².

COMPANY DATA	
Name	ICMA S.R.L.
Registered Office	Via Risorgimento, no. 9 - 23826 Mandello del Lario (LC)
Factory Address	Via Risorgimento, no. 9 - 23826 Mandello del Lario (LC)
Phone No.	0341/731205
Fax No.	0341/700493
Website	<i>www.icma.it</i>
E-mail address	<i>info@icma.it</i>
PEC (certified email address)	<i>icma@legalmail.it</i>
Manufacturing Sector	Metalized paper and the like
Sector	Industry
ATECO Code	17.29.00
VAT Number	00206490138

PRODUCTION SITE SURFACE AREA	
Covered Factory Area	9,500 m ²
Uncovered Area	5,800 m ²
Total	15,300 m ²

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3 History and Overview of the Business

The company ICMA s.r.l. was founded in 1933 by Matilde Carcano, the daughter of the famous entrepreneur from Lake Como Antonio Carcano. The company immediately enjoyed a considerable technological advantage that same year by purchasing its first coating machine from Leipzig. The company's production developed and, in the 1950s, the entry of Matilde's daughter Elena and her engineer husband Luigi Buzzi into the company brought further technological innovation, with the founding of the mechanical section of ICMA, which would later become CEMB. Towards the end of the 1960s, the Company introduced the manufacture of velvet paper and continued with the technological modernization of its production lines. Around the same time, Silvia, the founder's granddaughter, entered the company, continuing its development both by introducing a new production line and by addressing environmental sustainability. Further impetus was given to research with the expansion of the chemical laboratory. In the early 2000s, Elena, the fourth generation of the family, took over the Company, giving it new momentum in terms of marketing and investments, with the acquisition of historical competitors, structural expansion, and investments targeted at energy efficiency and at obtaining Forest Stewardship Council (FSC) certifications. In 2012, the Company received the Business and Social Responsibility Award for setting an example of good practice and social responsibility among Lombard companies.

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4 Permits and Certifications

ICMA s.r.l. has the following certifications:

- UNI EN ISO 9001:2015 CERTIFICATION (LAST UPDATED IN DECEMBER 2017)



CERTIFICATO n. 25044
CERTIFICATE No 25044

SI CERTIFICA CHE L'ORGANIZZAZIONE
 WE HEREBY CERTIFY THAT THE ORGANIZATION

I.C.M.A. SRL

IT - 23826 Mandello del Lario (LC) - Via Risorgimento, 9

NELLE SEGUENTI UNITA' OPERATIVE / IN THE FOLLOWING OPERATIVE UNITS
 IT - 23826 Mandello del Lario (LC) - Via Risorgimento, 9

HA ATTUATO E MANTIENE UN SISTEMA DI GESTIONE QUALITA' CHE E' CONFORME ALLA NORMA
 HAS IMPLEMENTED AND MAINTAINS A QUALITY MANAGEMENT SYSTEM WHICH COMPLIES WITH THE FOLLOWING STANDARD

UNI EN ISO 9001:2015

PER LE SEGUENTI ATTIVITA' / FOR THE FOLLOWING ACTIVITIES SETTORE / CODE **IAF 7**

Trasformazione e nobilitazione di carta, cartone e materie plastiche in foglia per la realizzazione di packaging e cartotecnica di alta gamma ed usi tecnici.
Processing and finishing of paper, cardboard and plastic sheet materials for high-end packaging, publications and for technical uses.

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 THE USE AND THE VALIDITY OF THE CERTIFICATE SHALL SATISFY THE REQUIREMENTS OF THE RULES FOR THE CERTIFICATION OF MANAGEMENT SYSTEMS

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FIRST ISSUE	05/12/2017	
DATA DELIBERA	05/12/2017	
DATA SCADENZA	04/12/2020	
EXPIRY DATE	04/12/2020	
EMISSIONE CORRENTE	05/12/2017	
ISSUE DATE	05/12/2017	

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The validity this certificate depends on annual audit and on a complete review every three years of the Management System.



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CERTIFICATE

CISQ/CERTIQUALITY S.r.l.
as an IQNet Partner hereby states that the organization:

I.C.M.A. SRL

IT - 23826 Mandello del Lario (LC) - Via Risorgimento, 9
for the following scope

Processing and finishing of paper, cardboard and plastic sheet materials for high-end packaging, publications and for technical uses.

has implemented and maintains a
Quality Management System
which fulfills the requirements of the following standard
ISO 9001:2015

Issued on: **2017-12-05**
Certified since: **2017-12-05**
for the validity date, please refer to the original Certificate* issued by CISQ/Certiquality s.r.l.

Registration number: **IT-108422**



Alex Stoichitoiu
Alex Stoichitoiu
President of IQNET



Ing. Claudio Provetti
Ing. Claudio Provetti
President of CISQ

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** The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com

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- FSC - CHAIN OF CUSTODY CERTIFICATION (LAST UPDATED IN JULY 2019)



FSC®- CHAIN OF CUSTODY

NUMERO DI CERTIFICATO / CERTIFICATE NUMBER

CQ-COC-000067

SI DICHIARA CHE L'ORGANIZZAZIONE / WE HEREBY STATE THAT THE ORGANIZATION

I.C.M.A. SRL

IT - 23826 Mandello del Lario (LC) - Via Risorgimento, 9

È CONFORME A / COMPLIES WITH

FSC-STD-40-004 (VERS.3-0)

OGGETTO DI CERTIFICAZIONE / SCOPE OF CERTIFICATION

Produzione di carte speciali per imballaggi di lusso e carte tecniche.

Manufacturing of special paper for luxury packaging and technical paper.

(Transfer System)

P2.3 - P2.4.9 - P3.2 - P3.5 - P10

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04/08/2009

PRIMA EMISSIONE / FIRST ISSUE

30/07/2019

EMISSIONE CORRENTE / CURRENT ISSUE

29/07/2024

DATA DI SCADENZA / EXPIRY DATE



CESARE PUCCIONI - PRESIDENT CERTIQUALITY SRL



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5 Assessment of Compliance with Applicable Environmental Legislation

The prerequisite to ensure the effective updating of the applicable environmental legislation is a good general updating system on local, national, and international/European legislative innovations.

This general updating occurs by means of the following channels:

- Subscriptions to specific magazines or specialized websites;
- Qualified consulting firms;
- Information searches on the internet and using other paper and digital-based tools.

The Environmental Manager (in Italian, RGA) works to identify which new regulations are applicable, with the support of a qualified consultant when required, using a “Compliance Obligations Register”.

The applicability assessment contains the regulations that are actually relevant to the work site, including:

- EC regulations
- National legislative decrees
- Regional and provincial resolutions
- Municipal regulations
- Any voluntary agreements signed by the organization

The Environmental Manager, in collaboration with the Health and Safety Officer where necessary, verifies compliance with applicable laws upon the introduction of or changes to production processes, material storage methods, and/or new services/activities.

In relation to legislative obligations in the environmental sector, the Environmental Manager ensures their application by activating the relevant people and ensuring adherence to the scheduled adjustment deadlines. The deadlines imposed by legislation or inherent in the company’s authorization measures are kept under control with digital support.

5.1 Permits

The company is in possession of Permit No. 303 of 07/07/2014, issued by the Provincial Administration of Lecco, to release four types of emissions into the atmosphere:

- E1 (COLOR MIXER)
- E2 (STED)
- E3 (LAMINATING MACHINE)
- E4 (FLOCKING MACHINE – 23)

6 Site Description

6.1 Geographical Location

The municipality of Mandello del Lario is situated to the north of the town of Lecco. It borders with the Lierna, Esino Lario, Pasturo, Ballabio, and Abbazia Lariana areas in the eastern part of the lake, and with Valbrona and Valmadrera in the western part of the Lecco branch (Moregallo district).

The municipal territory covers 42,439 km², including its territorial extension on the lake surface. Its altitude ranges from 200 meters above sea level (the lake area) to 2,409 meters on the Northern Grigna. Part of the administrative border falls within the Northern Grigna Regional Park.

The territory in which the town lies was formed throughout the millennia by the Meria (or Neria) stream, whose water brought huge quantities of boulders, pebbles, stones, and gravel as it made its way down from the Grigne mountains. Stretching towards the lake, these formed the alluvial fan on which the town was built. The hilly districts, on the other hand, rest on morainic layers formed by the Abduano Glacier, whose height was 1200 m. Evidence of this is given by the numerous erratic boulders scattered along the extremities of the Grigna and on the north side of the Zucco di Sileggio mountain above Somana.

The Municipality of Mandello del Lario is about 60 km north-east of Milan and can be easily reached via State Road no. 36, known as “Del Lago di Como e dello Spluga”, and Provincial Road no. 72. These roads allow easy connection with the main motorway networks in Northern Italy.

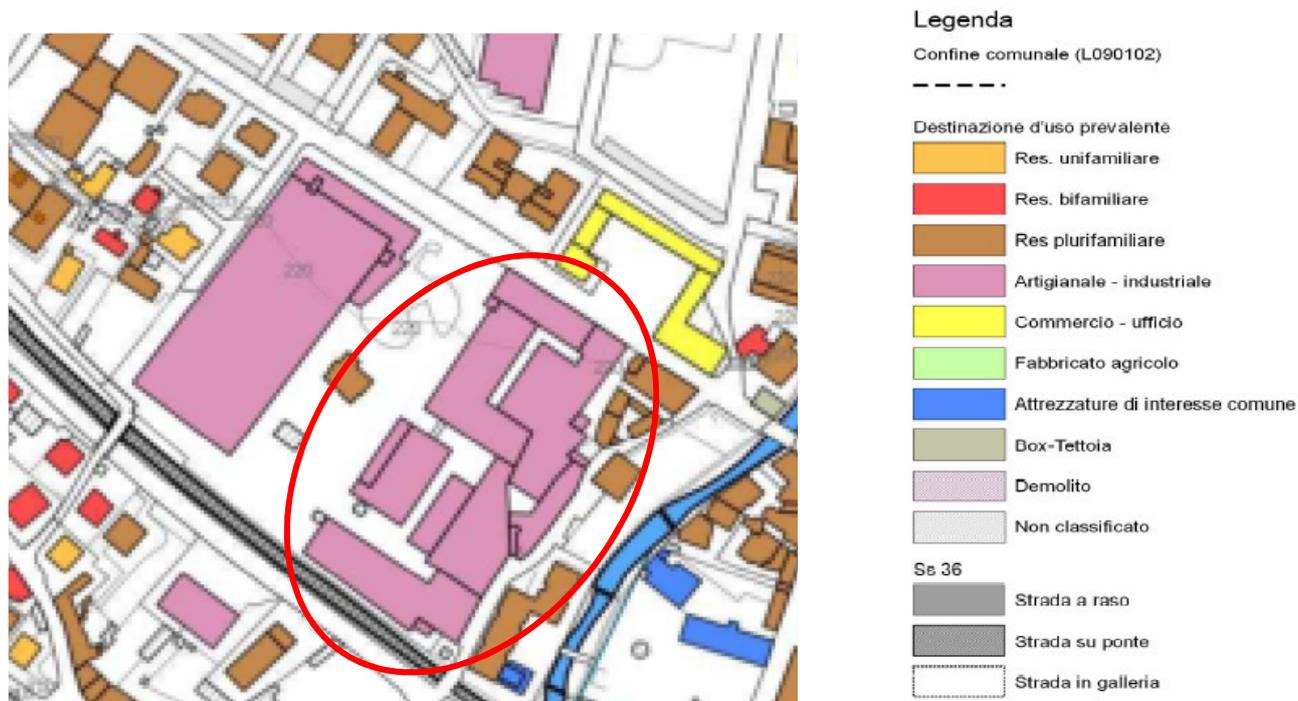


6.2 Territorial Framework (PGT, Constraints)

The Municipality of Mandello definitively approved the Territory Governance Plan (hereinafter PGT) with Municipal Council Resolution no. 58 on 20th December 2012. The following excerpts of urban planning charts were taken from the municipal PGT.

The area in which the factory in question is located is classified as “Artisan – Industrial”, as shown in the excerpt of the Settlement Area Map – Uses and Relative Legend (chart DP 1.2.5) from the PGT.

The Company is bordered to the south-west by the Lecco-Tirano railway line, to the north-east by the company CEMB spa, which specializes in the manufacture of balancing machines, to the north-west by Via Risorgimento, where the entrance is located, and to the south-west by private homes and Via Cavour.



Translation of the Legend Shown Above

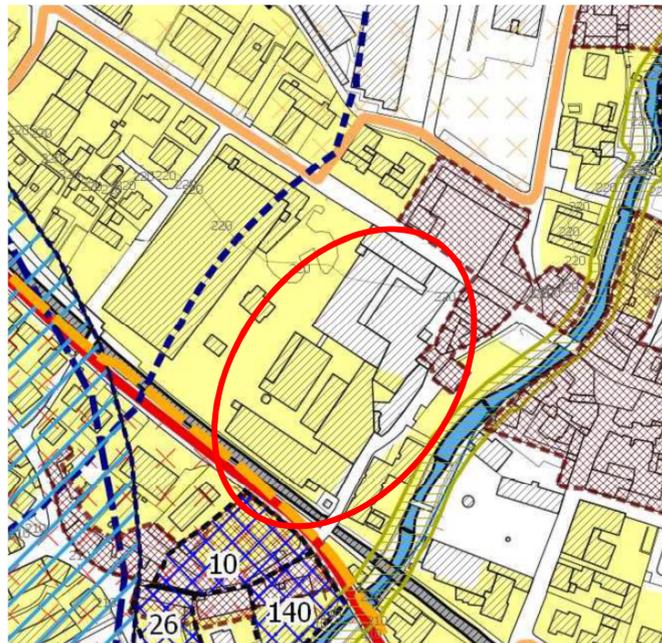
Legenda	Legend
Confine comunale	Municipal boundary
Destinazione d'uso prevalente	Main use
Res. unifamiliare	Single-family residence
Res. bifamiliare	Two-family residence
Res plurifamiliare	Multi-family residence
Artigianale - industriale	Artisan - industrial
Commercio - ufficio	Business - office
Fabbricato agricolo	Agricultural building
Attrezzature di interesse comune	Equipment of common interest
Box-Tettoia	Garage-Carport
Demolito	Demolished

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Non classificato	Not classified
Strada a raso	Road
Strada su ponte	Bridge road
Strada in galleria	Tunnel road

6.3 Territorial Framework (PGT, Constraints)

The following image shows an excerpt of the Constraints and PGT Compliance Chart (chart PR 1.1.7) and the relative legend. The chart highlights that the Company falls within the 150 m buffer zone of rivers and banks due to the proximity of the Meria stream.



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Translation of the Legend Shown Above

Legenda	Legend
Confine comunale	Municipal boundary
Aree protette	Protected areas
Parco Grigna Settentrionale	Northern Grigna Regional Park
SIC Grigna Settentrionale	Northern Grigna SCI
SIC Grigna Meridionale	Southern Grigna SCI
ZPS Grigne	Grigne SPA
Tracciati guida paesaggistici (Art. 26)- SIT Regione Lombardia	Guided landscape trails (Article 26) - Lombardy Region GIS
Sentiere delle Orobie	Orobie Trail
Sentiero Italia	Grand Italian Trail
Servizi di navigazione dei laghi lombardi	Lombard lakes navigation services
Strade panoramiche (Art. 26) – SIT Regione Lombardia	Scenic roads (Article 26) – Lombardy Region GIS
SS36 del Lago di Como e Spluga	State road SS36 del Lago di Como e Spluga
SS583 Lariana	State road SS583 Lariana
Sentiero del Viandante	Wayfarer's Trail
Ambiti elevata naturalità – montagna (Art. 17) SIT Regione Lombardia	Areas of high naturalness – mountains (Article 17) Lombardy Region GIS
Ambito salvaguardia laghi insubrici (Art. 19 c5) SIT Regione Lombardia	Insubric lakes protection area (Article 19, paragraph 5) Lombardy Region GIS
Centri storici	Historic centers
Vincolo idrogeologico	Hydrogeological constraint
Comparti PRG vigente	PRG sections in force
Fascia di rispetto pozzi	Well buffer zone
Fascia di rispetto cimiteriale	Cemetery buffer zone
Classe di fattibilità geologica 4	Geological feasibility class 4
Beni culturali vincolati- SIT Regione Lombardia	Protected cultural heritage – Lombardy Region GIS
Art. 10 (beni culturali e del paesaggio – PTCP)	Article 10 (cultural and landscape heritage – PTCP)
Art. 142d (montagne oltre 1600 m.s.l.m – PTCP)	Article 142d (mountains over 1600 m.a.s.l.– PTCP)
Art. 142c (fiumi e sponde 150 m – PTCP)	Article 142c (rivers and banks 150 m – PTCP)
Art. 142b (laghi e sponde 300 m – PTCP)	Article 142b (lakes and shores 300 m – PTCP)
Art. 136 (immobili ed aree di notevole interesse pubblico – PTCP)	Article 136 (properties and areas of considerable public interest – PTCP)
Interesse pubblico	Public interest
Interesse pubblico della fascia costiera del Lago di Como	Public interest in the Lake Como shoreline
Interesse pubblico della zona a monte della strada costiera	Public interest in the area above the coastal road
Interesse pubblico della zona denominata Piano dei Resinelli	Public interest in the Piano dei Resinelli area
Interesse pubblico della zona detta Moregallo	Public interest in the Moregallo area
Interesse pubblico dell'ambito pedemontano collinare tra Olcio e Somana	Public interest in the foothill area between Olcio and Somana
Aree oggetto di dissesto	Instable areas
Fa – FRANE: Area di frana attiva	Fa – LANDSLIDES: Active landslide area
Ambiti agricoli strategici (PTCP)	Strategic agricultural areas (PTCP)
Ambiti agricoli di accessibilità sostenibile (PTCP)	Agricultural areas of sustainable accessibility (PTCP)
Reticolo idrografico	Hydrographic network

Contributi PGT nuova adozione	New adoption PGT contributions
Osservazioni PGT 2009	2009 PGT observations

6.4 Hydrogeological Structure

The morphology of the Mandello del Lario municipal territory is dominated by the calcareous massif of the Grigne, carved by deep valleys, where gravitational and erosive processes continue to shape the slopes. For example, the walls surrounding the Scarettone valley are subject to fracturing. This leads to frequent collapses, with the considerable accumulation of rocky material, moved in turn by heavy rainfall. The rock forming the high slopes of these mostly rocky mountains is solid and partially dolomitic Esino limestone.

The Moregallo group, on the other hand, is formed from dolomite. The aspects of this rock are, in any case, very similar to those of Esino limestone.

Another significant morphogenetic phenomenon characterizing the Grigne slopes is karst. The chemical dissolution of limestone rocks by weakly acidic rainwater has created numerous grottoes (including the famous Ferrera grotto, 175 m long and 50 m wide, situated along the trail towards Rifugio Elisa), gorges (such as the Enna gorge, crossed by a difficult and scenic trail), and petrifying springs.

The main inhabited areas of the municipality are found on the alluvial fan of the Era stream, now almost completely inactive: the material is predominantly limestone, although there are some portions of crystalline siliceous rocks of glacial origin.

The glaciers that formed the Lake Como basin also had an intense effect in the Mandello area. Evidence of their action is found in the steep lakeside slopes of the Zucco Sileggio and Zucco Manavello mountains and in the U-shaped section of upper Val d'Era. Small morainic deposits and erratic crystalline boulders are widespread below 700-900 m, although they have been partially removed by erosion.

The following is an excerpt of the Geomorphological Elements and Dynamics Chart (chart T.4) for the municipal territory of Mandello del Lario. It shows that the factory is located in a "relict" area of the geological alluvial fan of the Meria stream.



PROCESSI AREALI

AREE POTENZIALMENTE INSTABILI CHE PRESENTANO CONDIZIONI FISICHE E MORFOLOGICHE AL LIMITE DI STABILITA'

-  Falde o coni di detrito in continua alimentazione, non colonizzati o solo parzialmente colonizzati dalla vegetazione
-  Conoidi alluvionali
-  Zone estrattive e discariche
- Conoide Meria**
 -  Attiva
 -  Paleocoenoide
 -  Relitta

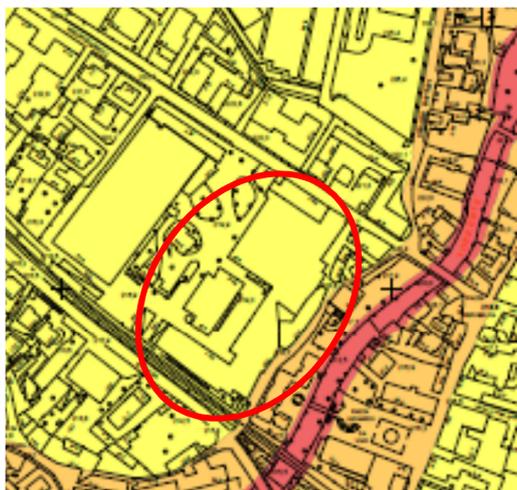
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Translation of the Legend Shown Above: SPATIAL PROCESSES

POTENTIALLY UNSTABLE AREAS WITH PHYSICAL AND MORPHOLOGICAL CONDITIONS AT STABILITY LIMITS

Falde o conici di detrito in continua alimentazione, non colonizzati o solo parzialmente colonizzati dalla vegetazione	Continuously supplied alluvial slopes or fans, not colonized or only partially colonized by vegetation
Conoidi alluvionali	Alluvial fans
Zone estrattive e discariche	Mining areas and landfills
Conoide Meria	Meria alluvial fan
Attiva	Active
Paleoconoide	Paleolithic
Relitta	Relict

Below is an excerpt of the Geological Feasibility Chart (Chart T.9b), showing that the area occupied by the factory has Class 2 feasibility, with “moderate limitations” in the case of interventions.



LEGENDA

-  Limite comune di Mandello del Lario
- CLASSE DI FATTIBILITA' GEOLOGICA**
-  Classe 2: Fattibilità con modeste limitazioni
-  Classe 3: Fattibilità con consistenti limitazioni
-  Classe 3a: Fattibilità con consistenti limitazioni
-  Classe 4: Fattibilità con gravi limitazioni

Translation of the Legend Shown Above: LEGEND

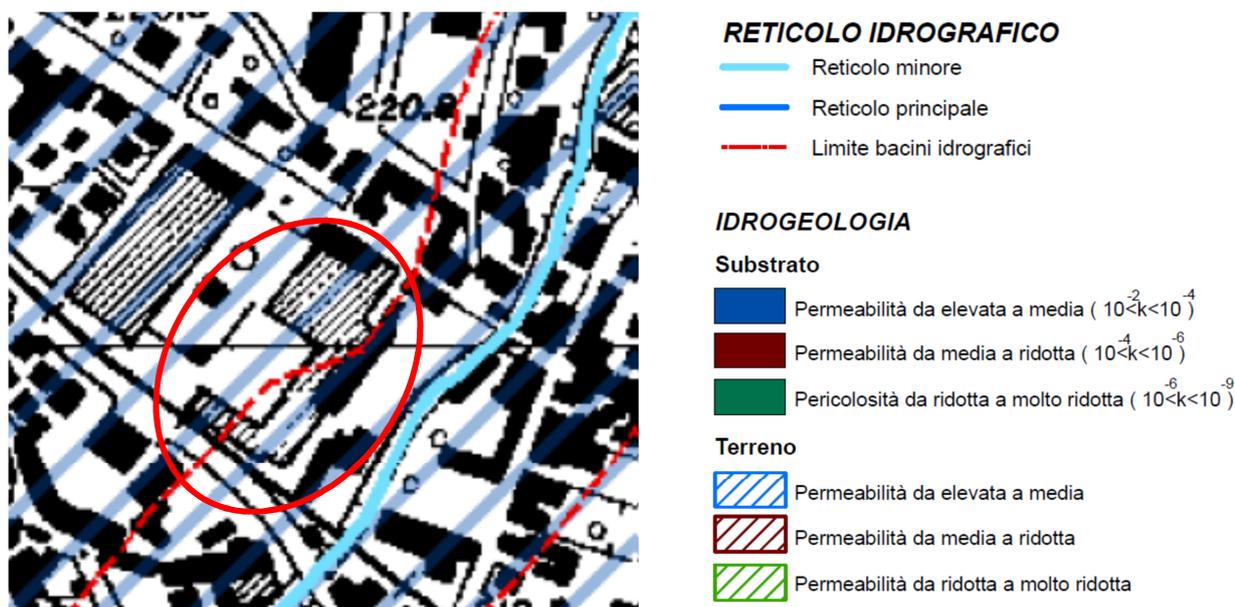
Mandello del Lario municipal boundary

GEOLOGICAL FEASIBILITY CLASS

Classe 2: Fattibilità con modeste limitazioni	Class 2: Feasibility with moderate limitations
Classe 3: Fattibilità con consistenti limitazioni	Class 3: Feasibility with significant limitations
Classe 3a: Fattibilità con consistenti limitazioni	Class 3a: Feasibility with significant limitations
Classe 4: Fattibilità con gravi limitazioni	Class 4: Feasibility with serious limitations

6.5 Main Hydrographic Network

The Municipality of Mandello del Lario is crossed by the Meria stream. The figure below shows the chart of hydrographical, hydrological, and hydraulic elements (Chart T.6) for the Municipality of Mandello del Lario. It shows that the hydrogeological area in which the company ICMA s.r.l. is situated has high to medium permeability.



Translation of the Legend Shown Above:

HYDROGRAPHIC NETWORK

Reticolo minore	Minor network
Reticolo principale	Main network
Limite bacini idrografici	Hydrographic basin borders

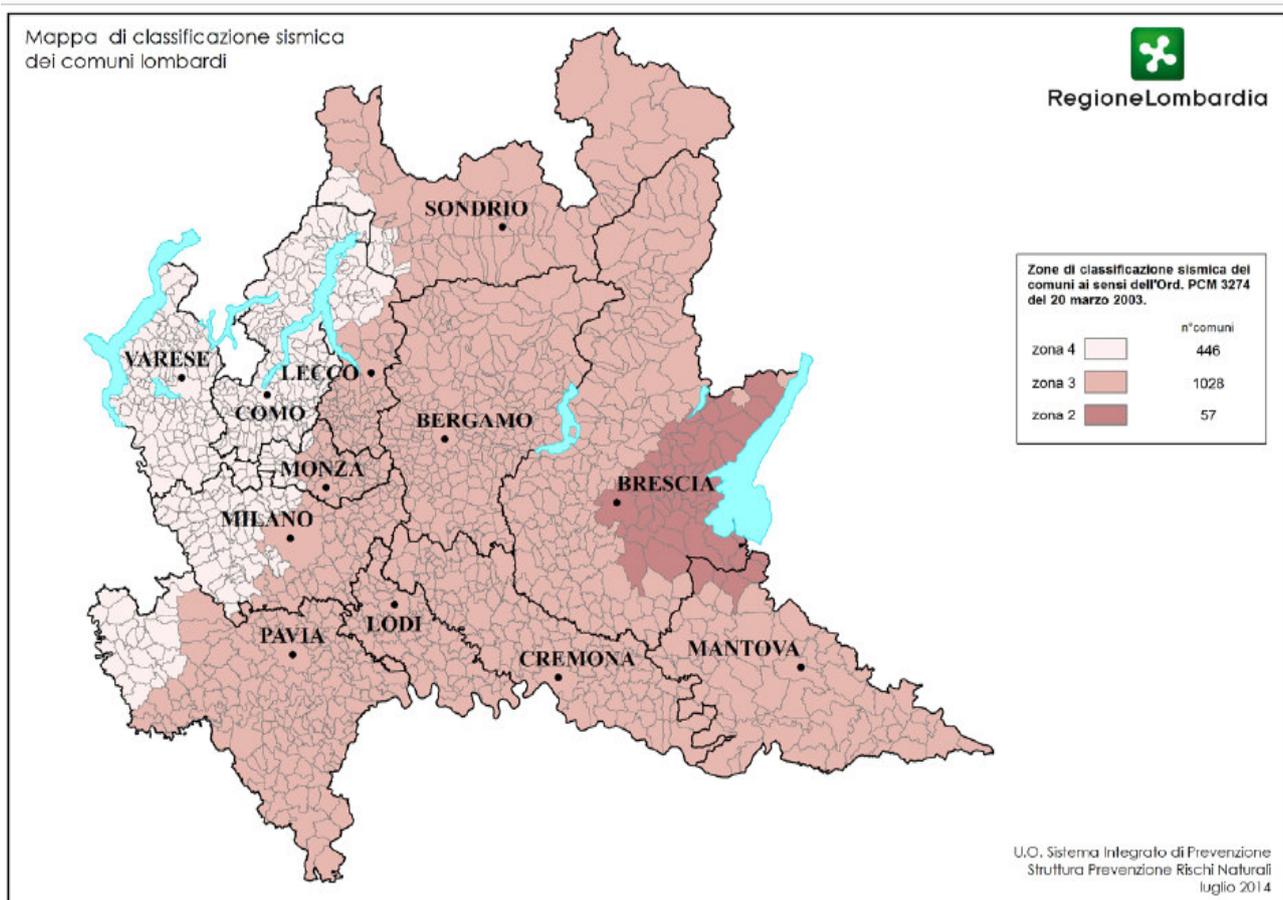
HYDROGEOLOGY

Substrato	Substrate
Terreno	Soil
Permeabilità da elevata a media	High to medium permeability
Permeabilità da media a ridotta	Medium to low permeability
Permeabilità da ridotta a molto ridotta	Low to very low permeability

6.6 Seismic Characteristics

Prime Ministerial Decree no.3274/2003, updated with Resolution no. 2129 of the Lombardy Regional Council on 11th July 2014, which came into force on 10th April 2016, classifies the Municipality of Mandello del Lario as seismic zone 3, “an area of low seismic hazard, which could be subject to mild shaking”. The map below shows the seismic classification of the municipalities in Lombardy.

ISTAT	Provincia	Comune	Zona Sismica	AgMax
03097046	LC	MANDELLO DEL LARIO	3	0.05026



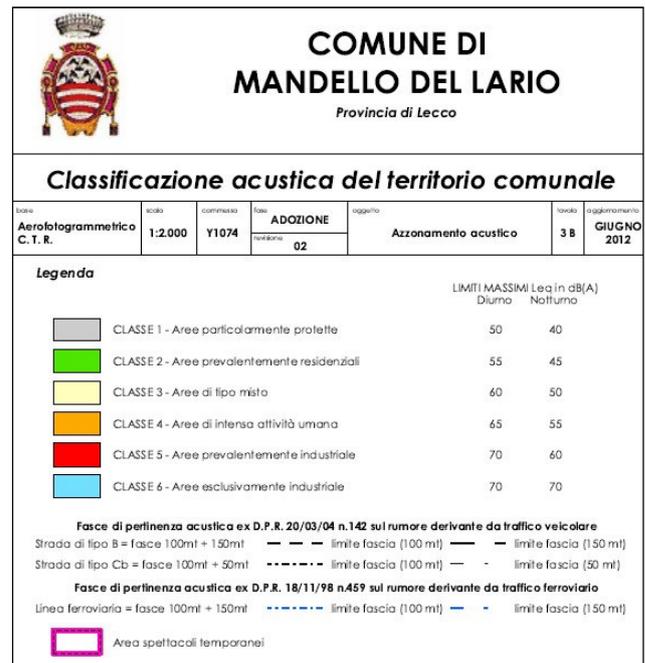
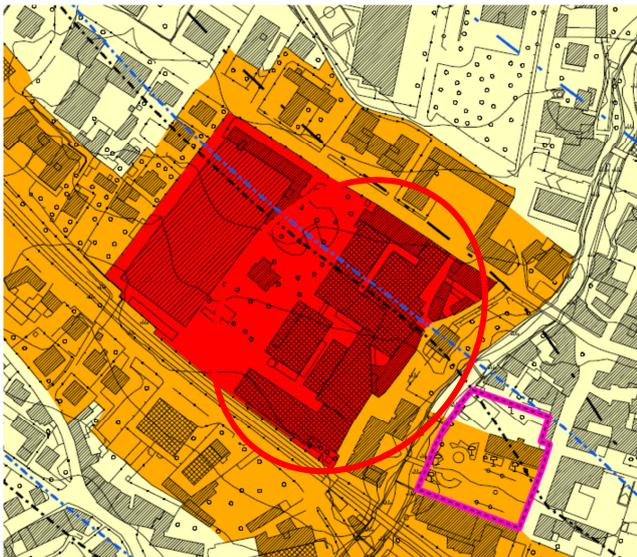
ISTAT	ISTAT (National Statistics Institute)
Provincia	Province
Comune	Municipality
Zona sismica	Seismic Zone
AgMax	Maximum Acceleration
Mappa di classificazione sismica dei comuni lombardi	Seismic Classification Chart for Municipalities in Lombardy
Zone di classificazione sismica dei comuni ai sensi dell'Ord. PCM 3274 del 20 marzo 2003	Seismic classification zones of municipalities pursuant to Prime Ministerial Decree 3274 of 20 th March 2003
N° comuni	No. of municipalities

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Zona 4	Zone 4
Zona 3	Zone 3
Zona 2	Zone 2
U.O. Sistema Integrato di Prevenzione Struttura Prevenzione Rischi Naturali Luglio 2014	O.U. Integrated Prevention System Natural Hazards Prevention Facility July 2014

6.7 Acoustic Zoning of the Area

Based on the acoustic zoning implemented by the Municipality of Mandello del Lario, the Company ICMA s.r.l. falls within area V: Predominantly industrial areas, as shown in the excerpt of the acoustic classification chart below (Chart 3C).



Translation of the legend shown above:
 MUNICIPALITY OF MANDELLO DEL LARIO
 Province of Lecco
 Acoustic Classification of the Municipal Territory

Base: Aerofotogrammetrico C.T.R.	Basis: Aerial Photography C.T.R. (Regional Technical Map)
Scala: 1:2.000	Scale: 1:2,000
Commissio: Y1074	Clerk: Y1074
Fase: ADOZIONE	Phase: IMPLEMENTATION
Revisione: 02	Review: 02
Oggetto: Azzonamento acustico	Subject: Acoustic Zoning
Tavola: 3B	Chart: 3B
Aggiornamento: GIUGNO 2012	Updated: JUNE 2012
Legenda	Legend
LIMITI MASSIMI Leg in dB(A)	MAXIMUM legal LIMITS in dB(A)
Diurno	Daytime
Notturmo	Nighttime
CLASSE 1- Aree particolarmente protette	CLASS 1- Particularly protected areas
CLASSE 2- Aree prevalentemente residenziali	CLASS 2- Predominantly residential areas

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CLASSE 3- Aree di tipo misto	CLASS 3- Mixed areas
CLASSE 4- Aree di intensa attività umana	CLASS 4- Areas of intense human activity
CLASSE 5- Aree prevalentemente industriali	CLASS 5- Predominantly industrial areas
CLASSE 6- Aree esclusivamente industriali	CLASS 6- Exclusively industrial areas
Fasce di pertinenza acustica ex D.P.R. 20/03/04 n.142 sul rumore derivante da traffico veicolare	Acoustic zones pursuant to Presidential Decree no. 142 of 20/03/04 on vehicle traffic noise
Strada di tipo B=fasce 100mt + 150mt	B-type road= 100 m + 150 m zones
Limite fascia	Zone boundary
Strada di tipo Cb=fasce 100mt + 50mt	Cb-type road= 100 m + 50 m zones
Fasce di pertinenza acustica ex D.P.R. 18/11/98 n.459 sul rumore derivante da traffico ferroviaria	Acoustic zones pursuant to Presidential Decree no. 459 of 18/11/98 on railway traffic noise
Linea ferroviaria=fasce 100mt + 150mt	Railway line= 100 m + 150 m zones
Area spettacoli temporanei	Temporary performance area

Based on the acoustic class, the following emission and immission limits were identified:

	Daytime - dB(A)	Nighttime – dB(A)
Emission limit	70	60
Immission limit	65	55

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6.8 Production Process Description

The production process is divided into various phases as shown below:

Preparation of Coating (Color Mixer)

The measurement of the various components (pigments and fillers, binding agents, additives, and water) is mostly carried out by weighing them directly in the disperser or mixer basin. This phase can be broken down into two steps:

1. Preparation of concentrated pastes. In the first step, the pigments, additives, and water are processed in the disperser (basin with a serrated impeller) and subsequently processed in a horizontal mill. This process forms concentrated pastes or semi-finished products for internal use.
2. Preparation of the coating. In the second step, binding agents, fillers, and water are respectively added to the concentrated pastes produced earlier. This process leads to the formation of the coating material inside a mixer (a basin equipped with a shaft and blades fixed at various heights).

Coating

The coating operation consists of evenly spreading a well-defined layer of coating material onto the surface of the sheet; this is carried out by a "coating machine".

The coating operation can be schematically summarized as follows:

1. The paper is unwound.
2. The application of an excess amount of coating material to the paper using a roll spreader.
3. The coating material is evenly distributed over the whole surface and the excess is eliminated by an air knife.
4. The paper is passed through a tunnel dryer. (warm air at 50-60/100°C) No burners are used in the tunnels and, therefore, no combustion occurs inside them.
5. The paper is wound back onto a reel.

Wetting

The "wetting" operation consists of dampening the back of the previously coated paper sheet with water. The paper then enters the tunnel dryer, where it is dried by warm air.

Embossing

Embossing is carried out by unwinding the continuous sheet from a reel and passing it through specially-made rollers in an embossing calender. The top roller is made of steel engraved with the desired pattern, while the opposite roller is made of compressible fibrous material.

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Two-Tone Dyeing/Lacquering

The color is applied to the paper by a steel roller, which is loaded from an inkwell filled with liquid ink, while a blade removes the excess from the roller surface. The continuous sheet then passes onto a heated spool to be dried and is then wound back onto the reel.

Laminating

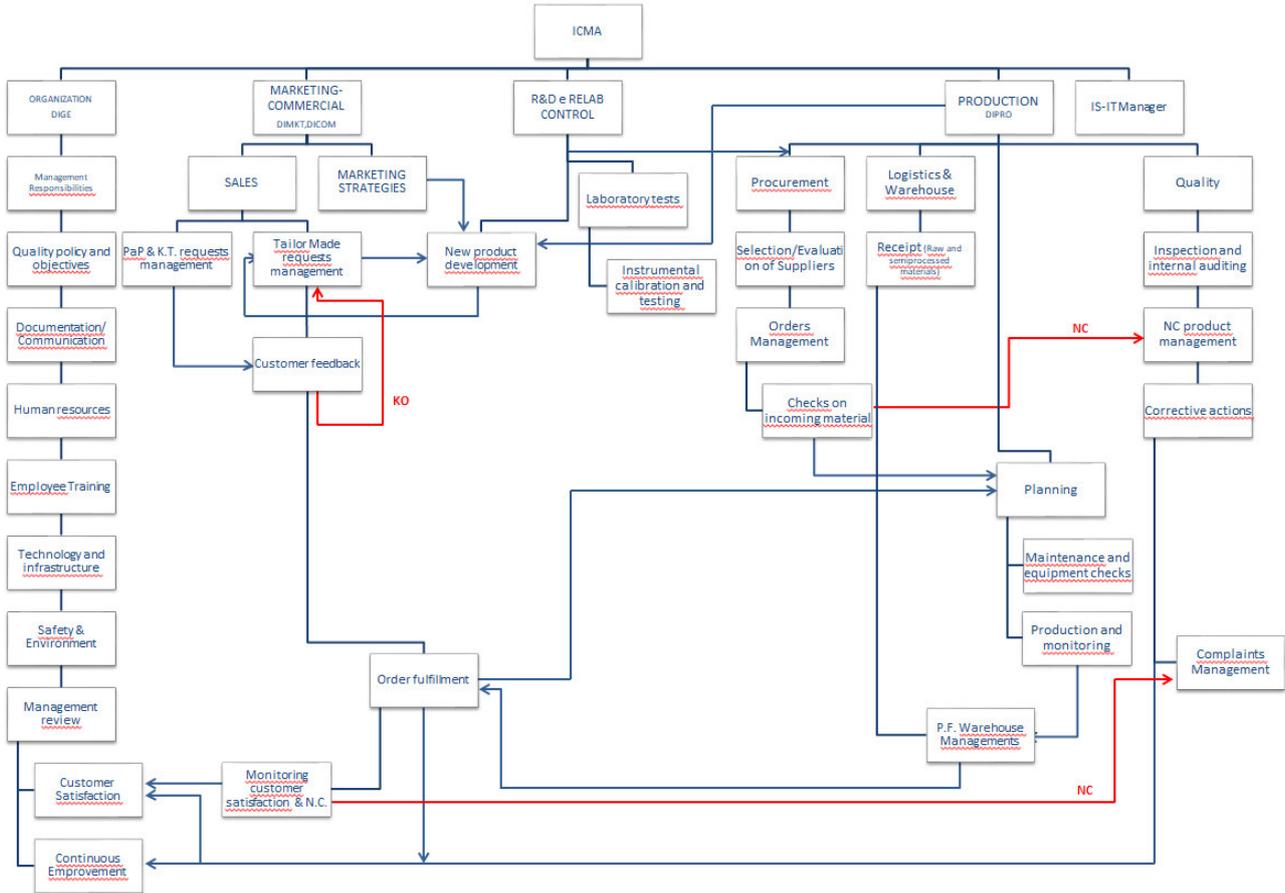
The lamination is carried out by directly spreading a mixture of glue and aqueous solution onto the silicone paper using a roll spreader. The silicone paper sheet then passes onto a heated spool for partial drying and is then laminated with a second sheet of another (coated or flocked) paper. The two laminated sheets are passed into a pressing roller before being wound back onto a reel.

Flocking

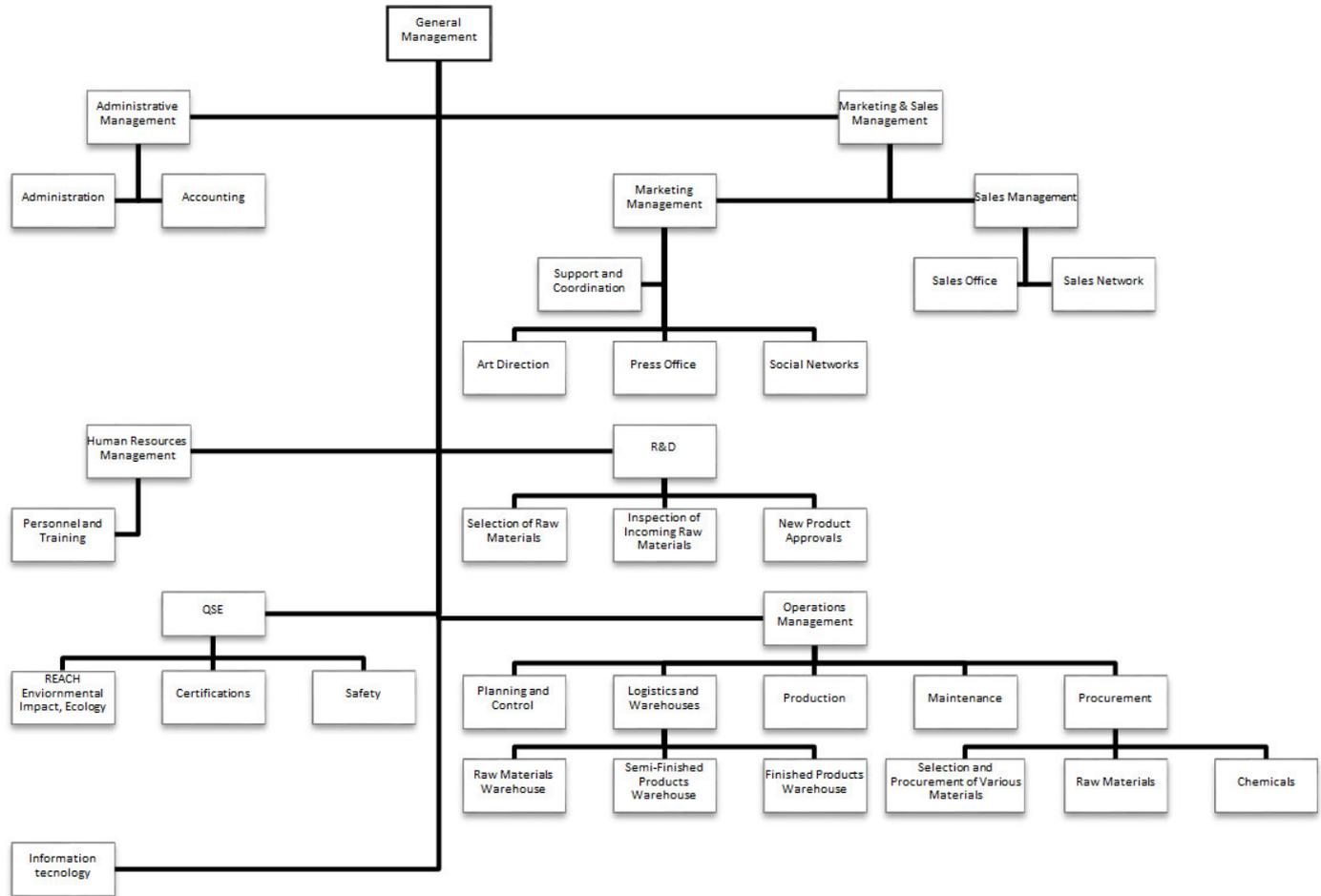
The flocking process can be carried out on raw paper, PVC, polystyrene or PET wound on reels. A mixture of glue and an aqueous solution is applied directly to the material using a roll spreader while an air knife adjusts the amount of glue applied based on the pressure and distance of the reel, eliminating any excess.

The flocked surface then passes into a drying oven, where the aqueous part of the vinyl solution evaporates, and then into a brushing station, where the excess flock is removed. Finally, the material is wound back onto a reel. The processed paper wound onto the reel is moved to the cutter, where it is cut into sheets of various sizes and then packaged.

FLOW CHART OF THE PRODUCTION PROCESS



INTERNAL PROCESSES (GENERAL COMPANY ORGANIZATION CHART)



6.9 External Processes (Suppliers/Contractors)

ICMA s.r.l. has various suppliers of goods and services, which are evaluated by means of a specific procedure.

These suppliers can be generally distinguished as follows:

- Suppliers → raw and auxiliary materials;
- Maintenance Workers → boilers, air compressors, etc.
- Contractors → outsourced activities and processes;
- Carriers/recipients → waste disposal, inbound and outbound transportation.

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7 Identification of DIRECT Environmental Aspects – Environmental Impacts

An analysis of the relevant activities carried out directly or indirectly within the production facility of the factory in question is the fundamental basis for identifying the environmental aspects, that is, the interactions with various environmental components arising from these activities.

The environmental aspects identified can be classified as direct and indirect. **Direct** aspects are those associated with activities carried out by the site in question, over which it has total management control. **Indirect** environmental aspects, on the other hand, are those produced by activities entrusted to and carried out by third parties.

Once the direct and indirect environmental aspects related to the site activities had been quantitatively and qualitatively identified and distinguished, their significance was then assessed.

For this purpose, a specific criterion was defined and documented to assess the significance of the environmental impacts using the following methodology:

- Collection of information about the environmental characteristics of the site.
- Identification of potentially sensitive urban or environmental targets.
- Analysis of the use of natural resources (fuels, water, electricity, raw materials, etc.).
- Analysis of the outputs resulting from the Organization's activities (waste, atmospheric emissions, etc.).
- Gathering and analysis of consumption and impact data: Environmental Review.
- Assessment of the environmental aspects subject to provisions of law.

8 Assessment of Significant Environmental Aspects

Once the environmental aspects had been quantitatively and qualitatively identified and distinguished, their significance was then assessed.

The following table shows the “basic” direct environmental aspects taken into consideration and the relative environmental impacts inherent to the primary and/or secondary activities carried out by the Company.

Moreover, it specifies whether or not the resulting environmental impacts occur in normal, extraordinary (e.g. maintenance) or emergency conditions. There are no changes to report since the 2019 edition.

ENV. Area	Environmental Aspect ACTIVITIES / SERVICES	Resulting Environmental Impacts	Conditions N / Extr. / Emerg.	Description of Conditions Extr. or Emerg.
Production	Production	Atmospheric emissions (PM and VOCs)	N	
Production	Production	Atmospheric emissions (PM and VOCs)	Emerg.	Breakage / malfunction of the abatement system
Wastewater	Municipal wastewater	Blackwater discharge into sewer	N	
Wastewater	Wastewater from the factory	Contamination of soil and subsoil	Extr.	Maintenance on the sewage network / accidental spills
Wastewater	Rainwater	Drainage into municipal sewer	N	
Wastewater	Yard runoff, spillage, toilet waste	Contamination of soil and subsoil	Extr.	Spillage caused by broken circuits / leaks / spills
Water consumption	Use of mains water for production	Depletion of a natural resource (water)	N	
Water consumption	Use of mains water for toilet and locker room facilities	Depletion of a natural resource (water)	N	
Water consumption	Use of mains water	Depletion of a natural resource (water)	Emerg.	Pipe breakage / malfunction
Ozone-depleting substances / greenhouse gases	Air-conditioning	Atmospheric pollution	Emerg.	Leaks caused by circuit breakage
Natural gas consumption	Natural gas heating units for room heating/production process	Depletion of a natural resource (methane gas)	N	
Atmospheric emissions	Natural gas units for room heating	Atmospheric pollution	N	-
Electricity consumption	Production	Depletion of an energy resource (national grid electricity)	N	

ENV. Area	Environmental Aspect ACTIVITIES / SERVICES	Resulting Environmental Impacts	Conditions N / Extr. / Emerg.	Description of Conditions Extr. or Emerg.
Fire	Production / Offices	Atmospheric emissions (combustion gases etc.)	Emerg.	Fire on site
Fire	Production / Offices	Production of combustion waste, extinguishing water	Emerg.	Fire on site
Fire	Production / Offices	Contamination of soil and subsoil	Emerg.	Fire on site
Fire	Production / Offices	Fire odor	Emerg.	Fire on site
Fire	Production / Offices	Use of extinguishing water / materials	Emerg.	Fire on site
Noise emission outside of site	Production	Noise	N	
Transport	Transit of heavy vehicles and employees' cars	Induced vehicle traffic	N	
Transport	Transit of heavy vehicles and employees' cars	Atmospheric emissions	N	
Transport	Transit of heavy vehicles and employees' cars	Noise	N	
Transport	Transit of heavy vehicles and employees' cars	Consumption of resources	N	Diesel consumption for the use of company vehicles
Transport	Transit of heavy vehicles and employees' cars	Material spills during transportation	Emerg.	Accidental load spillage
Waste production	Office / Eating Area	Waste production	N	
Waste production	Production	Waste production	N	
Waste production	Production	Production of hazardous waste	Extr./Emerg.	Spillage of hazardous waste
Waste production	Internal maintenance + external maintenance staff leaving waste at the company	Production of maintenance waste	N	
Consumption of chemicals	Chemicals for production/maintenance	Resource consumption	N	
Consumption of raw materials	Production	Consumption of resources	N	-

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ENV. Area	Environmental Aspect ACTIVITIES / SERVICES	Resulting Environmental Impacts	Conditions N / Extr. / Emerg.	Description of Conditions Extr. or Emerg.
Light pollution	Outdoor lighting	Light pollution	N	
Spillage	Production	Waste production	Emerg.	System malfunctions / leaks during transportation / damage to container tanks
Spillage	Production	Soil and subsoil pollution	Emerg.	System malfunctions / leaks during transportation / damage to container tanks

The qualitative and quantitative information shown in this document was gathered with the involvement of various people in the company in charge of managing the individual areas or processes.

Each production phase involves the use of various types of raw materials and resources, such as water, energy, and fuel; the 'consumption' of resources is recorded over time by the appointed people. Moreover, the preparation of the finished product involves the formation of processing residue, ranging from trace pollutants in emission fumes and wastewater to non-hazardous waste discarded downstream of the industrial and packaging/shipping processes. In this case, too, the necessary data were requested from the people in charge of the individual areas involved.

In this Environmental Review, the assessment of resource consumption and outside emissions used the five-year corporate production period 2015-2019 as a reference. The data for the last year (2019) were processed and compared with the same type of data for the previous years. To better analyze the review's figures, the latter were also compared with a basic reference year, namely 2015—which gives a uniformly comparable corporate situation to the current one, in order to immediately observe short- to mid-term variations.

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8.1 Materials for Use and Consumption

The consumption values of the main raw materials used in the production process during the four-year period analyzed are given below.

DESCRIPTION	2015	2016	2017	2018	2019
FSC certified (Kg)	641.996	745.942	797.292	878.036	1.603.993
Polystyrene (kg)	38.700	6.000	42.750	70.763	146.600
non FSC/CW (Kg)	51.923	43.352	23.989	3.739	4.200
TOTAL (kg)	732.619	795.294	864.031	952.538	1.754.793
TOTALE (t)	733	795	864	953	1.755

The table above shows that in 2019, there was a significant increase in the use of FSC-certified material (+82.57%), explained by both a sizable increase in turnover during the same year (+27.50%, as declared by the company) and the company's commitment to reaching the exclusive use of FSC-certified material in the coming years.

For this purpose, the supply of raw materials originating from sustainable processes (e.g. FSC-certified materials) is constantly growing, as highlighted by the conversion of the standard product bases from virgin raw materials to 100% recycled raw materials. Furthermore, as of 2019, it has been possible to trace the origins of materials such as flock (18,000 kg) and Bai for coating (153,000 kg), as required by the FSC certification. To make the values of this review comparable with previous years, the aforementioned data are not given in the comparisons below.

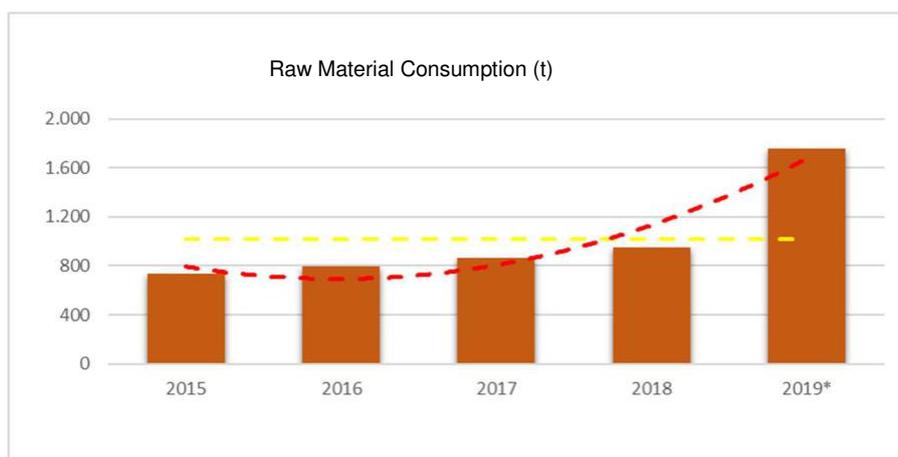
The following table shows the quantities of FSC-certified paper differentiated by production origin.

DESCRIPTION	2015	2016	2017	2018	2019
FSC-mixed	641.996	745.942	796.998	844.266	1.570.408
FSC-recycled	0	0	294	330.770	33.584
FSC-certified (kg)	642	746	797	1.175	1.604

The table below shows the material consumption trend year-by-year and compared with the year of reference, 2015.

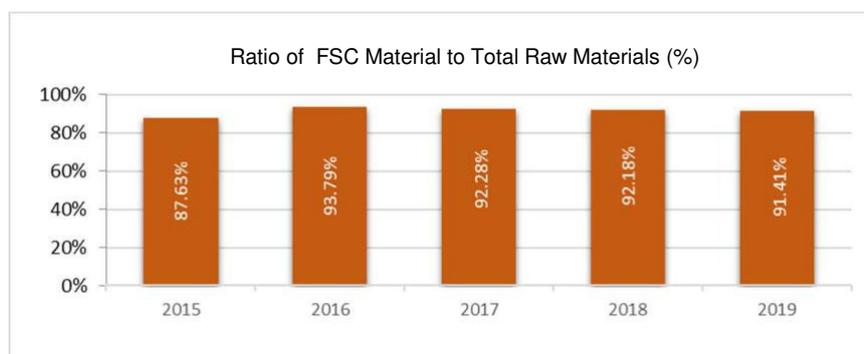
YEAR	TOT (t)	VAR. PREV. YEAR (t)	VAR. % PREV. YEAR	VAR. 2015 (t)	VAR % 2015
2015	732.62				
2016	795.29	62.68	8.55%	62.68	8.55%
2017	864.03	68.74	8.64%	131.41	17.94%
2018	952.54	88.51	10.24%	219.92	30.02%
2019	1.754.79	802.25	84.22%	1.022.17	139.52%

As evidenced by the following graph and the tables above, the consumption of raw materials in recent years has been steadily growing, legitimized by the constant linear increase in the company's production. As mentioned earlier, 2019, in particular, saw a significant increase in the consumption of raw materials, explained by the increase in production.



NOTE: The red dotted line is a 2nd-order polynomial trendline
Yellow dotted line: linear average

The graph below shows the ratio of FSC-certified products to total raw materials used in the production process. This highlights the company's continuous commitment to increasing its use of raw materials originating from a sustainable production process with a smaller environmental footprint. Indeed, it shows how this index, during the last four-year period, has constantly been above 90%.



As far as company production is concerned, the tables below show the quantities of finished products, broken down by materials, as recorded in the five-year period of reference.

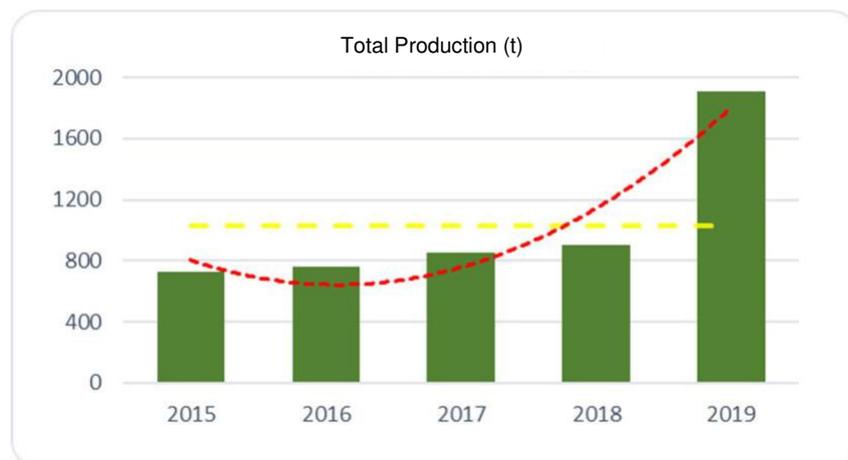
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DESCRIPTION	2015	2016	2017	2018	2019
Heat-sealing kraft (kg)	268.952	378.203	379.399	370.447	521.318
Creative paper and cardboard (kg)	241.917	290.484	294.962	314.904	395.744
Velvet PS (kg)	38.550	5.900	42.500	70.000	145.800
Smooth and embossed raw (kg)	178.052	89.341	131.683	145.025	846.266
TOTAL (kg)	727.470	763.928	848.544	900.376	1.909.128
TOTAL (t)	727	764	849	900	1.909

The following table shows the quantities of material produced compared with the reference year, 2015.

YEAR	TOT (t)	VAR. PREV. YEAR (t)	VAR. % PREV. YEAR	VAR. 2015 (t)	VAR % 2015
2015	727				
2016	764	37	5.01%	37	5.01%
2017	849	85	11.08%	121	16.64%
2018	900	52	6.11%	178	23.77%
2019	1.909	1.009	112.04%	1.182	162.43%

As evidenced by the following graph and the above tables, production has grown steadily, with a significant increase recorded in 2019.



NOTE: red dotted line: linear trend
Yellow dotted line: linear average

8.2 Depletion of Energy Resources

Electricity and natural gas (methane) are used to properly perform all the Company's activities. The two energy sources are analyzed separately below.

ELECTRICITY

Electricity is used for normal production purposes, specifically:

Electromotive force in production: systems and machinery;

- Lighting and IT utilities in the factory and offices.

The following table shows the main uses of electricity.

Resource	Use	Notes
Electricity	Civil: <ul style="list-style-type: none"> • Internal and external lighting; • IT equipment. 	Constant use.
	Process systems <ul style="list-style-type: none"> • Production machinery; • Compressors. 	Constant use during the day.
	Service systems <ul style="list-style-type: none"> • Accessory systems in the building (e.g. alarms). 	Accessory systems: constant use.

It should be noted that the company has two photovoltaic systems for electricity production, positioned on the roof of the factory. The first one was built in 2010 and has a peak power of 87.40 kW, while the second one was built in 2012 and has a peak power of 82.00 kW.

The electricity generated by these systems is used for production and administrative activities. The table below shows the quantity of self-produced energy for the five-year reference period, differentiating between the energy consumed directly by the company (net metering) and the excess energy fed into the distribution network. This shows how there has been a reduction in the amount produced over the years, presumably caused by incorrect maintenance/cleaning of the systems, as well as the panels' natural loss of effectiveness, which has affected their productive efficiency.

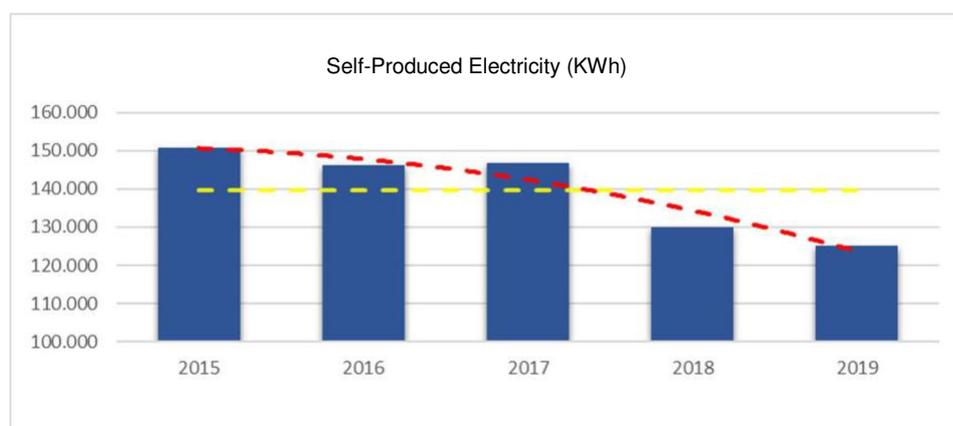
ELECTRICITY FROM PHOTOVOLTAIC SYSTEMS					
DESCRIPTION	2015	2016	2017	2018	2019
ELECTRICITY NET METERING (KWh)	79.728	75.893	75.351	66.064	63.869
ELECTRICITY FED INTO NETWORK (KWh)	71.002	70.173	71.483	64.008	61.155
TOTAL (KWh)	150.730	146.067	146.834	130.072	125.024

This is also highlighted in the following table, where the quantity produced is compared with the year of reference, 2015.

SELF-PRODUCED ELECTRICITY					
YEAR	TOT. KWh	VAR. KWh PREV. YEAR	VAR. % PREV. YEAR	VAR. KWh 2015	VAR % 2015
2015	150.730				
2016	146.067	-4.663	-3.09%	-4.663	-3.09%
2017	146.834	767	0.53%	-3.896	-2.58%
2018	130.072	-16.762	-11.42%	-20.658	-13.71%
2019	125.024	-5.047	-3.88%	-25.706	-17.05%

N.B. Percentage variations of <1% are considered normal.

The graph below shows the negative trend of self-produced energy for the reasons outlined above.



NOTE: The red dotted line is a 2nd-order polynomial trendline
Yellow dotted line: linear average value

Periodic meter readings of both the grid and self-produced electricity allowed the total consumption for the five-year reference period to be monitored. The following table shows the data, differentiating between the quantities sourced from the grid, from net metering, and the self-produced surplus fed into the network. The bottom row of the table shows the ratio of self-produced electricity to consumed electricity.

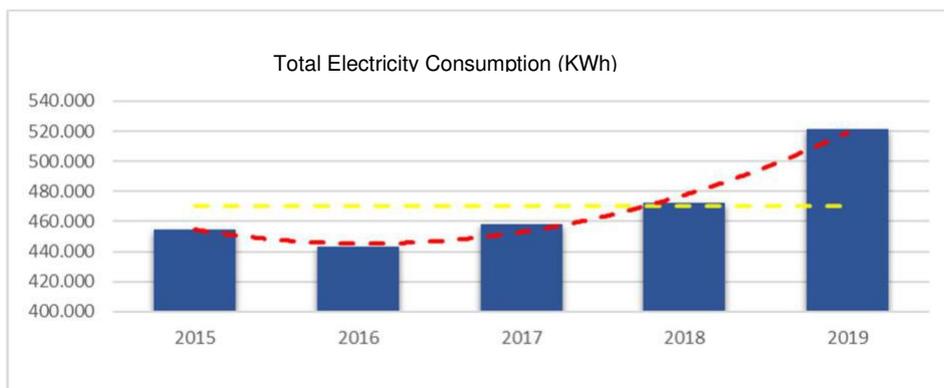
ELECTRICITY BALANCE					
DESCRIPTION	2015	2016	2017	2018	2019
TOTAL ELECTRICITY FROM THE GRID (KWh)	445.980	437.711	454.577	470.048	518.401
ELECTRICITY FROM NET METERING (KWh)	79.728	75.893	75.351	66.064	63.869
TOTAL ELECTRICITY CONSUMED (KWh)	525.708	513.604	529.928	536.112	582.270
ELECTRICITY FED INTO NETWORK (KWh)	71.002	70.173	71.483	64.008	61.155
FINAL ELECTRICITY BALANCE (KWh)	454.706	443.431	458.445	472.104	521.115
RATIO OF SELF-PRODUCED TO CONSUMED ELECTRICITY (%)	28.67%	28.44%	27.71%	24.26%	21.47%

The total electricity consumption for the five-year period is shown in the following table, which also gives a comparison of consumption with the reference year, 2015.

TOTAL ELECTRICITY CONSUMPTION					
YEAR	TOT KWh	VAR. KWh PREV. YEAR	VAR. % PREV. YEAR	VAR. KWh 2015	VAR % 2015
2015	454.706				
2016	443.431	-11.275	-2.48%	-11.275	-2.48%
2017	458.445	15.014	3.39%	3.739	0.82%
2018	472.104	13.660	2.98%	17.398	3.83%
2019	521.115	49.011	10.38%	66.409	14.60%

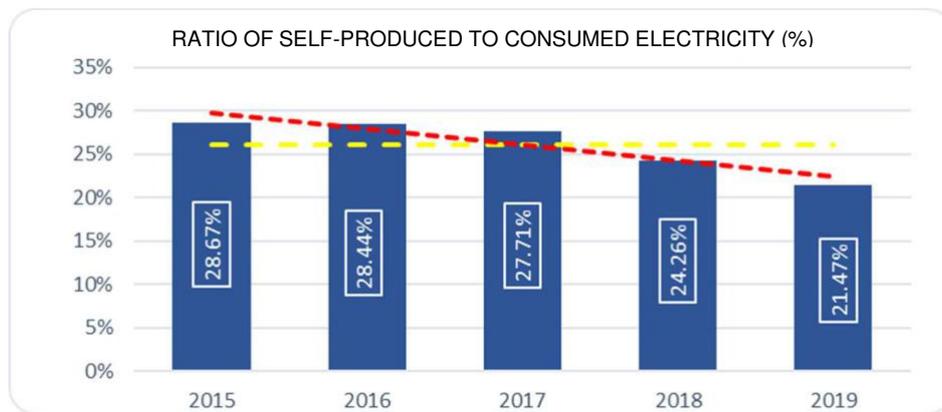
N.B. Percentage variations of <1% are considered normal.

The graph below shows the total electricity consumption, highlighting an increased requirement trend, due mainly to the increase in production.



NOTE: The red dotted line is a 2nd-order polynomial trendline
Yellow dotted line: linear average value

The following graph shows the ratio between the total self-produced electricity (net metering + fed into the network) and the consumed electricity (net metering + withdrawn from the grid). It highlights how the trend (red dotted line) is decreasing. This is presumably due to both an increase in energy requirements following the increase in production in recent years, and the lower productive efficiency of the photovoltaic systems for the reasons already given earlier.



NOTE: red dotted linear trendline
Yellow dotted line: linear average

It should be noted, in any case, that the company is mindful of the origin of the energy purchased and, consequently, the provider of electricity withdrawn from the grid. Indeed, data shown on the invoices issued by the current electricity provider highlight how the renewable energy sources used for the production of the grid electricity have risen from 8.51% in 2017 to 26.18% in 2018.

METHANE GAS

The performance of production activities requires the use of methane gas, mainly for the operation of the steam generation system and, to a lesser extent, to heat the production departments and administrative offices. The table below summarizes the uses of this energy resource:

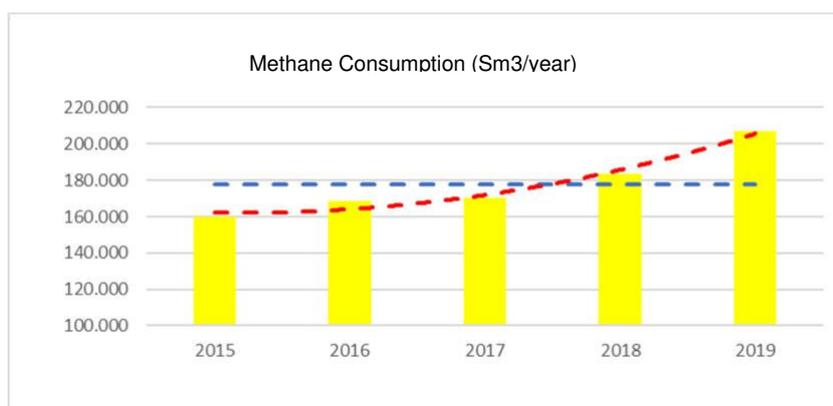
Resource	Use	Notes
Methane	Civil: <ul style="list-style-type: none"> Heating. 	Constant use during the day.
	Process systems: <ul style="list-style-type: none"> Heating and production 	Constant use during the day

The total methane gas consumption for the five-year reference period is given below. This shows how consumption has increased both year-by-year and in comparison with the year of reference, 2105. This is presumably a result of the increase in production.

YEAR	Total Consumption (m ³)	VAR. PREV. YEAR (m ³)	VAR. % PREV. YEAR	VAR. 2015 (m ³)	VAR % 2015
2015	160.193				
2016	168.779	8.586	5.36%	8.586	5.36%
2017	170.231	1.452	0.86%	10.038	6.27%
2018	183.285	13.054	7.67%	23.092	14.42%
2019	207.145	23.860	13.02%	46.952	29.31%

N.B. Percentage variations of <1% are considered normal

The graph below shows the upward trend in methane consumption with a more significant increase in 2019.



NOTE: The red dotted line is a 2nd-order polynomial trendline
Blue dotted line: linear average

OVERALL ENERGY CONSUMPTION

In order for the electricity and methane consumption to be compared, they are transformed into tons of oil equivalent (TOE), calculated using the coefficients shown below:

- Electricity: 1 MWh = 0.23 TOE
- Methane: 1000 Nm³ = 0.82 TOE

The following table shows the consumption of the main energy resources used by the Company (methane and electricity) in tons of oil equivalent (TOE) so that they can be compared and added together.

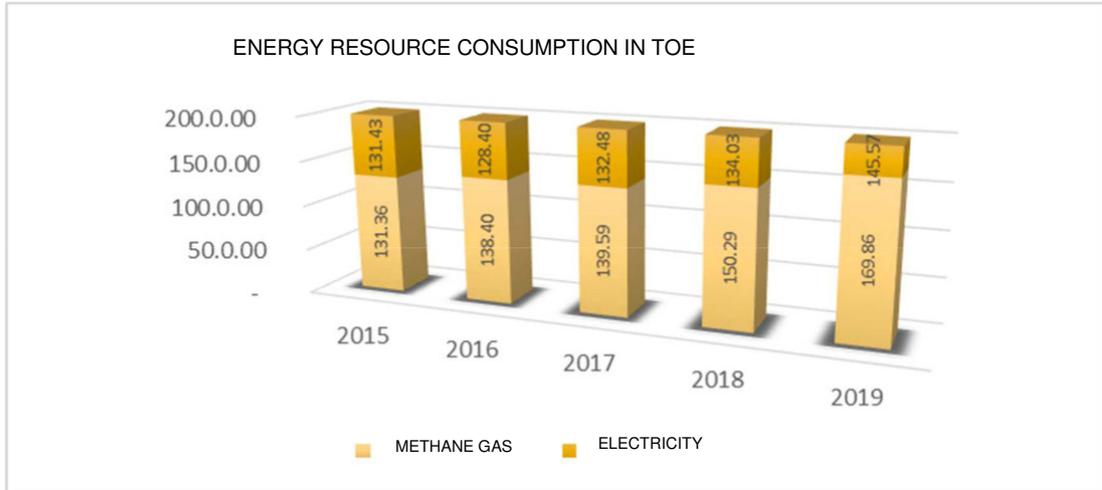
Year	2015	2016	2017	2018	2019
TOTAL ELECTRICITY (KWh/year)	525,708	513,604	529,928	536,112	582.270
TOTAL METHANE GAS (m³/year)	160,193	168,779	170,231	183,285	207.145
	TOE	TOE	TOE	TOE	TOE
ELECTRICITY	131.43	128.40	132.48	134.03	145.57
METHANE GAS	131.36	138.40	139.59	150.29	169.86
TOTAL	262.79	266.80	272.07	284.32	315.43

The table below shows the total energy consumption with the year-by-year trend and in comparison with the year of reference, 2015.

YEAR	Total Consumption (TOE)	VAR. PREV. YEAR (TOE)	VAR. % PREV. YEAR	VAR. 2015 (TOE)	VAR % 2015
2015	262.79				
2016	266.80	4.01	1.53%	4,01	1.53%
2017	272.07	5.27	1.98%	9,29	3.53%
2018	284.32	12.25	4.50%	21,54	8.20%
2019	315.43	31.10	10.49%	52.64	20.03%

The following graph highlights how, during the five-year period taken into consideration, there has been a steady increase in the energy requirements, with a sharper rise in 2019, legitimized by equally steady growth in production during the period in question.

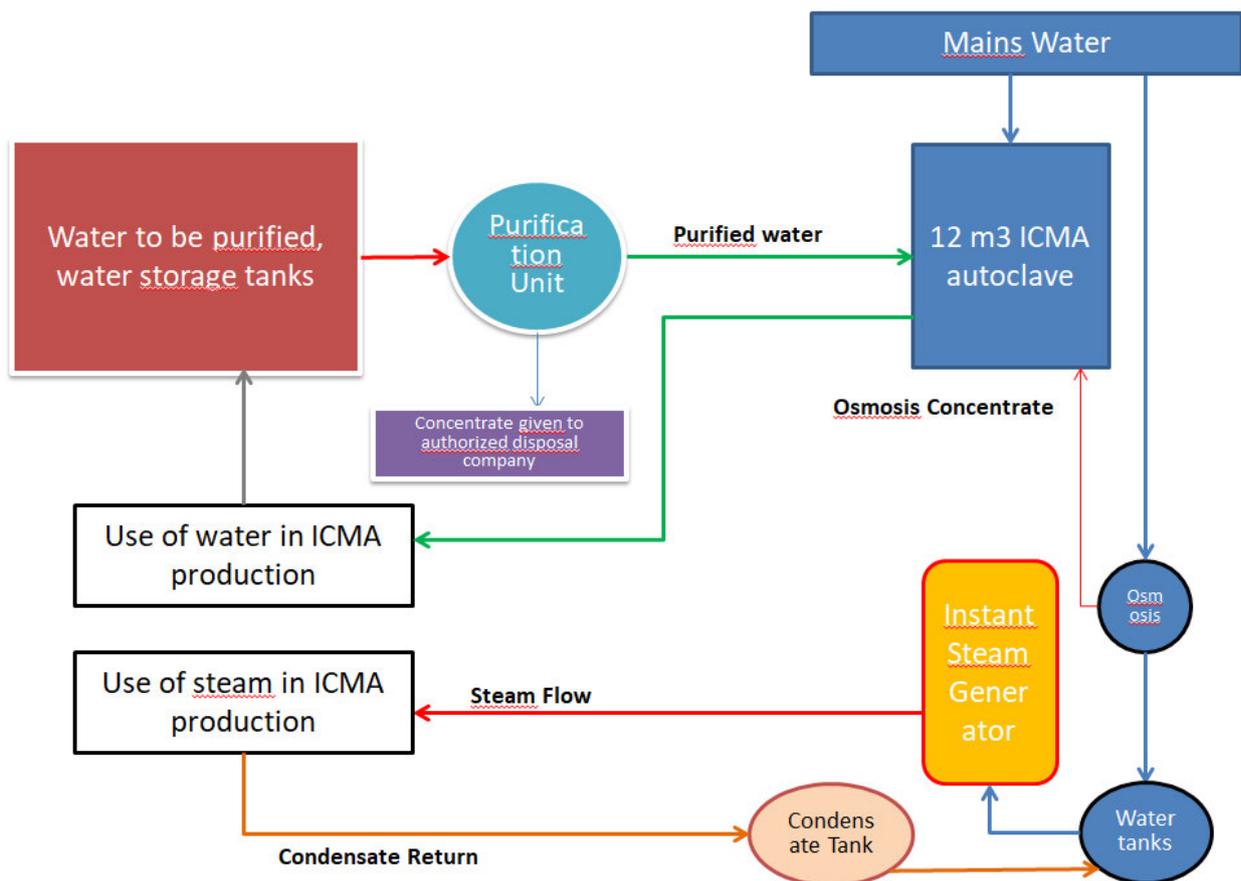
The graph below shows the distribution of energy consumption in TOE, for methane gas and electricity.



8.3 Depletion of a Natural Resource: Water Supply

The Company water is supplied exclusively by the public water main and there is a single meter (serial number 204620).

The water is supplied both for civil and industrial consumption and specifically for the production of steam used in the production process. In recent years, the Company Administration has carried out targeted action to reduce the consumption of water resources. Specifically, the actions have concerned the wastewater treatment plant (2009) and the reverse osmosis system, also used to treat wastewater (2019). A diagram of the company's production water cycle is shown below.

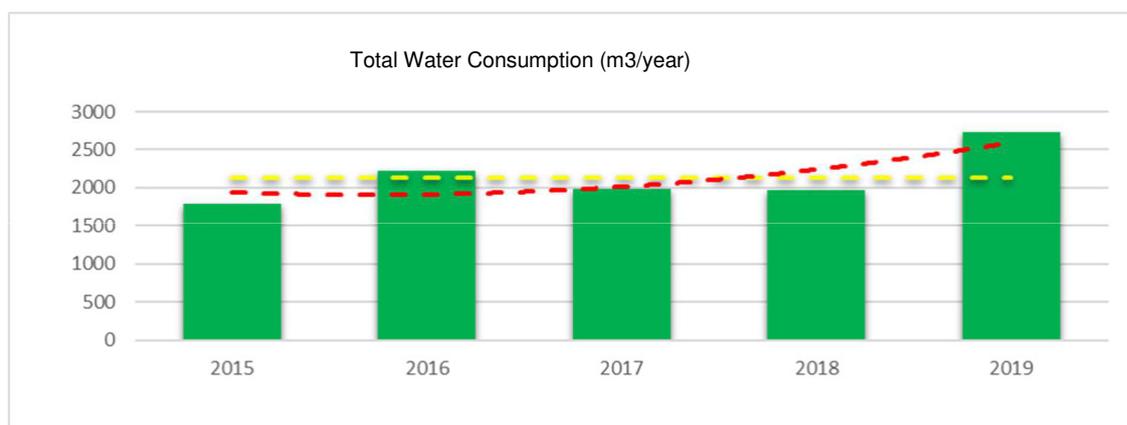


The constant monitoring of water consumption, measured by bills and periodic meter readings, enabled observation of the consumption trend over time, as shown in the table below. It shows increased consumption compared with the year of reference, 2015.

TOTAL WATER CONSUMPTION					
YEAR	TOT m ³	VAR. m ³ PREV. YEAR	VAR. % PREV. YEAR	VAR. m ³ 2015	VAR. % 2015
2015	1.788				
2016	2.226	438	24.50%	438	24.50%
2017	1.980	-246	-11.05%	192	10.74%
2018	1.968	-12	-0.61%	180	10.07%
2019	2.736	768	39.02%	948	53.02%

N.B. Percentage variations of <1% are considered normal

The graph below highlights how water consumption for civil and production purposes has fluctuated considerably in recent years. The trend over the last year has been an increased water requirement, affected by the increased production.



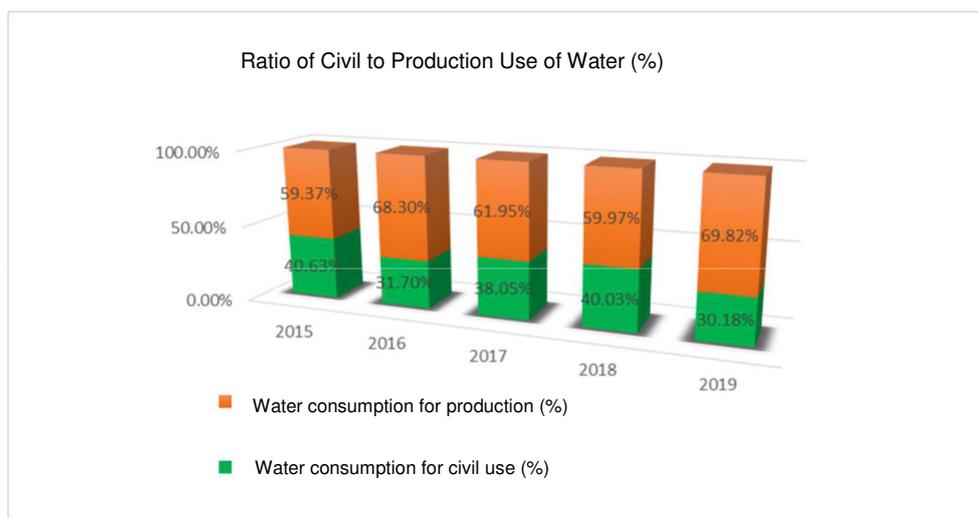
NOTE: The red dotted line is a 2nd-order polynomial trendline
Yellow dotted line: linear average value

To better analyze the consumption trend for water resources, it is appropriate to differentiate between production and civil use, correlating the latter with the number of staff in the company for the years in question. It should be noted that, according to ISTAT data from the report “Water Statistics 2018-2019” (published on 22nd March 2020), the average domestic water consumption per inhabitant is 237 liters/day. For this purpose and, as customary for the production sectors, an average consumption per employee has been established as 80 liters/day. Knowing the days worked and the average number of employees for each year, the average annual consumption for civil use has been estimated. The difference in figures has consequently provided the consumption for production alone. The table below gathers the aforementioned calculations and the ratio between the two types of consumption.

Description	2015	2016	2017	2018	2019
Total water consumption (m³/year) *	1,788	2,226	1,980	1,968	2.376
Average number of employees	35.75	35.00	37.67	38.92	40.00
Number of days worked	254.00	252.00	250.00	253.00	258.00
Water consumption for civil use (m³/year) **	726	706	753	788	826
Water consumption for production (m³/year)	1,062	1,520	1,227	1,180	1.190
Water consumption for production (%)	59.37%	68.30%	61.95%	59.97%	69.82%
Water consumption for civil use (%) **	40.63%	31.70%	38.05%	40.03%	30.18%

* collected data
 ** estimated data

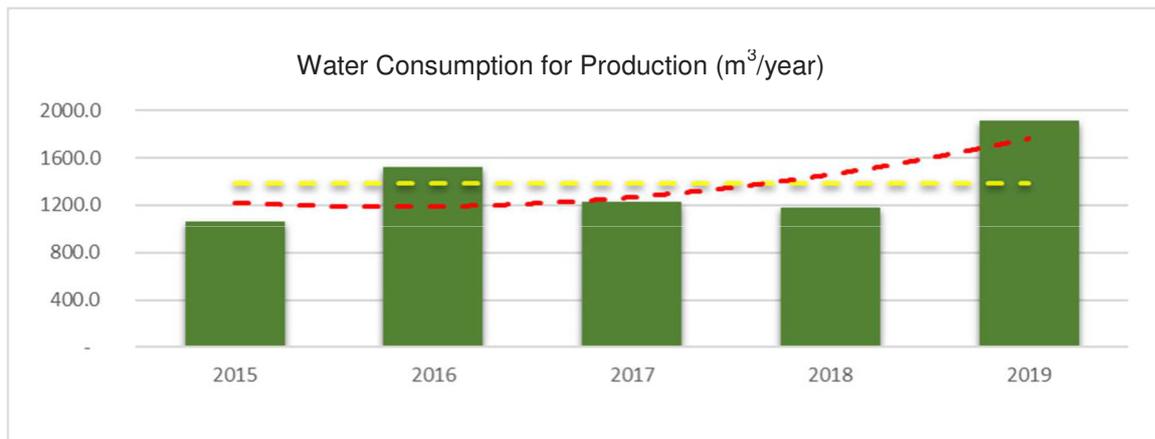
The table and the following graph highlight how the distribution of water resources, particularly in the last year analyzed, increased considerably (+10%), again affected by increased production in 2019.



The following table shows the water consumption for production alone in the five-year period in question and the consumption compared with the reference year, 2015.

WATER CONSUMPTION FOR PRODUCTION					
YEAR	TOT. m3	VAR. m ³ PREV. YEAR	VAR. % PREV. YEAR	VAR. m ³ 2015	VAR. % 2015
2015	1,062				
2016	1,520	458	43.22%	459	43.22%
2017	1,227	-293	-19.32%	165	15.55%
2018	1,180	-47	-3.78%	119	11.18%
2019	1,910	730	61.86%	849	79.96%

This and the graph below highlight that after two years of fairly steady increase (2017 and 2018), 2019 saw a sharp increase, affected by the substantial increase in production recorded last year.



*NOTE: The red dotted line is a 2nd-order polynomial trendline
Yellow dotted line: linear average value*

8.4 Soil and Subsoil Contamination and Internal Water Network

Contamination of the soil and/or subsoil could occur on the production site in question as a result of:

- Breakage of systems / pipes / ducts
- Spillage of raw materials/waste during third-party vehicle loading
- Oil / fuel leaks from the private vehicles of staff or external visitors in the internal carpark
- Oil / fuel leaks from the vehicles used for transporting input/output materials
- Breakage of containers located on the production site
- Liquid leaks from the batteries of electrically-powered vehicles.

To cope with any spillage, the Company is about to adopt designated operational instructions and an emergency kit for spillage.

8.5 Atmospheric Emissions

The atmospheric emissions points are classified based on their intrinsic characteristics and in relation to the provisions of the legislation in force; various situations can be found:

- Significant emissions;
- Atmospheric pollutant emissions of minor relevance;
- Emissions from heating stations.

The Company is in possession of a permit to release emissions into the atmosphere, no. 303 of 07/07/2014, issued by the Provincial Administration of Lecco, for the four emissions shown in the table below.

No.	Equipment Concerned	Rate [Nm ³ /h]	Ø [mm]	Sect. [m ²]	Abatement System	Analysis Parameters	Limits mg/Nm ³	Frequency of Checks
E1	Color Mixer	1600	250	0.049	Baghouse filter	Particulates	10	Annual
E2	Sted	7850	500	0.196	None	VOCs	50	Biennial
E3	Laminating Machine	5000	200	0.031	None	VOCs	50	Biennial
E4	Flocking Machine	2000	300	0.071	Dry filter	Particulates	10	Annual

The emissions analyses are carried out by a specialized company and planned based on the frequency and parameter to be analyzed, as shown in the permit to release emissions, such as Particulates and Volatile Organic Compounds (VOCs), as highlighted in the table above. The latest analyses were carried out in February 2020 for all the emissions with a compliant result.

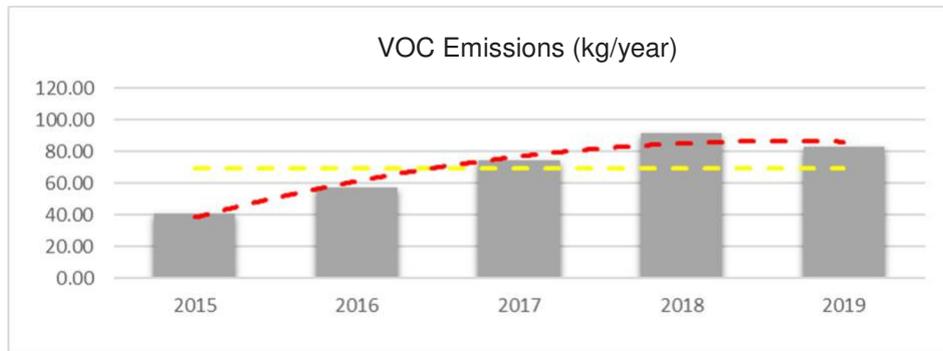
The constant monitoring of emissions, also thanks to the data from analyses carried out on an annual and/or biennial basis, allows their trends to be viewed over time, as shown in the table below. The data have been divided by the parameters sampled, as required by the aforementioned Environmental Permit.

DESCRIPTION	2015	2016	2017	2018	2019
VOCs (kg/year)	40,61	57,68	74,74	91,80	83,27
PARTICULATES (kg/year)	2,11	0,62	1,31	2,05	0,68

The following table shows the atmospheric emissions compared to the year of reference, 2015, for the "VOC" parameter.

VOCs	kg/year	VAR. PREV. YEAR (kg/year)	VAR. % PREV. YEAR	VAR. 2015 (kg/year)	VAR. % 2015
2015	40.61				
2016	57.68	17.06	42.02%	17.06	42.02%
2017	74.74	17.06	29.58%	34.13	84.03%
2018	91.80	17.06	22.83%	51.19	126.05%
2019	83.27	-8.53	-9.29%	42.66	105.04%

The following graph shows how this parameter steadily increased in the years 2015-2018, tending towards a decrease in 2019.

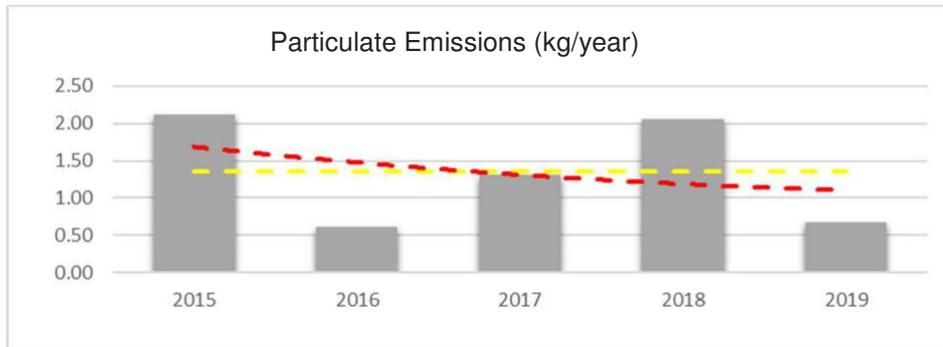


NOTE: red dotted linear trendline
Yellow dotted line: linear average

The following table shows the atmospheric emissions compared to the year of reference, 2015, for the “Particulate” parameter.

PARTICULATES	kg/year	VAR. PREV. YEAR (kg/year)	VAR. % PREV. YEAR	VAR. 2015 (kg/year)	VAR. % 2015
2015	2.11				
2016	0.62	-1.50	-70.80%	-1.50	-70.80%
2017	1.31	0.69	111.94%	-0.81	-38.11%
2018	2.05	0.74	56.67%	-0.06	-3.04%
2019	0.68	-1.37	-66.84%	-1.43	-67.85%

The following graph shows how this parameter has seen a fluctuating trend in recent years, inconsistent with the linear production growth. This is probably due to less use in 2016, 2017, and 2019 of raw materials that cause high particulate emissions in the production phase.



NOTE: The red dotted line is a 2nd-order polynomial trendline
Yellow dotted line: linear average value

To better understand the data given above and for the sake of comparison, the European legislation for Euro 6 petrol vehicles envisages a maximum limit of Particulate (dust) emissions for tests carried out in the laboratory, of 5 g/1000 km.

8.6 Atmospheric Emissions: Heating and Refrigeration Units

The factory contains various heating systems, all powered by methane, as shown in the table below.

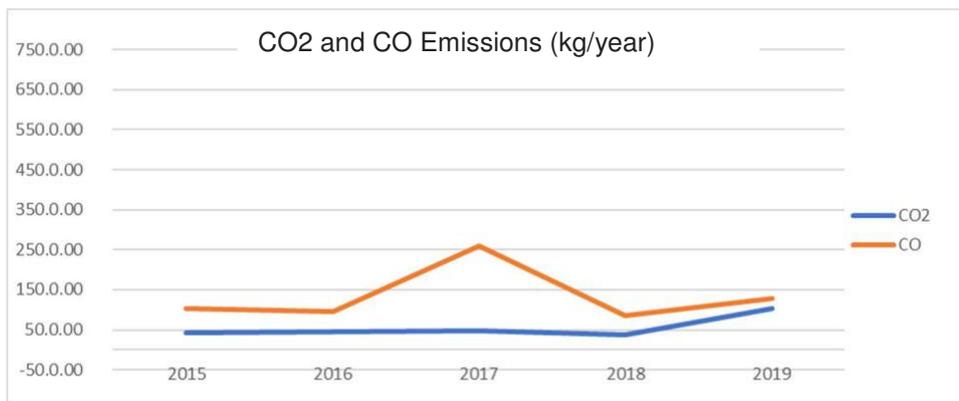
The control and maintenance of the heating systems are carried out by specialized staff appointed in accordance with the laws in force. Responsibility for compliance with frequencies is entrusted, by means of a specific contract, to third parties outside of the company, such as suitably qualified and trained stokers, technicians, etc.

No.	Brand	Serial Number	Location	Use	Thermal Power	Thermal Carrier	Fuel	Smoke Tests	Maintenance
1	Robur GR1/40 model	103188	East Unit	Production area heating	34.40 kW	Air	Methane	Biennial	Annual
2	Robur GR1/40 model	103192	East Unit	Production area heating	34.40 kW	Air	Methane	Biennial	Annual
3	Robur GR1/40 model	108160	East Unit	Production area heating	34.40 kW	Air	Methane	Biennial	Annual
4	Robur GR1/40 model	103164	East Unit	Production area heating	34.40 kW	Air	Methane	Biennial	Annual
5	Robur GR1/40 model	103191	East Unit	Production area heating	34.40 kW	Air	Methane	Biennial	Annual
6	Robur GR1/40 model	103190	East Unit	Production area heating	34.40 kW	Air	Methane	Biennial	Annual
7	Robur GR1/40 model	103158	East Unit	Production area heating	34.40 kW	Air	Methane	Biennial	Annual
8	Robur GR1/40 model	103159	East Unit	Production area heating	34.40 kW	Air	Methane	Biennial	Annual
9	Robur GR1/40 model	103162	East Unit	Production area heating	34.40 kW	Air	Methane	Biennial	Annual
10	Robur GR1/40 model	103186	East Unit	Production area heating	34.40 kW	Air	Methane	Biennial	Annual
11	Robur GR1/20 model	103493	East Unit	Production area heating	17.40 kW	Air	Methane	Biennial	Annual
-	Vaillant Boiler	24081126	West Unit	Locker room	28.00 kW	Water		Biennial	Annual
1	Robur GR1/60	101892	West Unit	-	51.2 kW	Air	Methane	Annual	Annual
2	Robur GR1/80	103047	West Unit	-	66.3 kW	Air	Methane	Annual	Annual
1	Robur GR1/115 model	Discontinued on 26/02/2018	Corridor + laboratory	Production area heating	n.d.	-	-	-	-
2	Robur GR1/40 model	107104	Corridor + laboratory	Production area heating	34.40 kW	Air	Methane	Annual	Annual
3	Robur GR1/115 model	Discontinued on 26/02/2018	Corridor + laboratory	Production area heating	n.d.	-	-	-	-

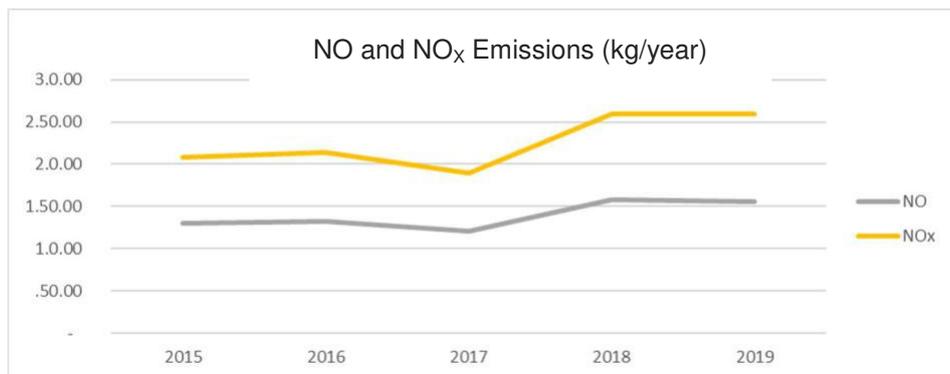
The thermal stations used for heating and for the production cycle emit various types of greenhouse gases as a result of methane combustion, specifically oxocarbons and nitrogen oxides. The constant monitoring of emissions, also thanks to the data from tests carried out during annual and/or biennial maintenance, allows their trends to be viewed over time, as shown in the table below. The data are divided by parameter.

DESCRIPTION	2015	2016	2017	2018	2019
CO ₂ (kg/year)	43.08	46.05	47.57	36.55	104.01
CO (kg/year)	103.62	95.04	259.38	84.48	129.23
NO (kg/year)	1.29	1.33	1.21	1.58	1.56
NO _x (kg/year)	2.08	2.13	1.89	2.59	2.59

The following graph shows the carbon dioxide and monoxide emissions trends during the five-year reference period.



The following graph shows the nitrogen dioxide and monoxide emissions trends during the five-year reference period.



The following tables show the atmospheric emissions compared with the year of reference, 2015, for the various parameters in question: carbon dioxide, carbon monoxide, and the various nitrogen oxides.

CO ₂	kg/year	VAR. PREV. YEAR (kg/year)	VAR. % PREV. YEAR	VAR. 2015 (kg/year)	VAR. % 2015
2015	43.08				
2016	46.05	2.97	6.90%	2.97	6.90%
2017	47.57	1.51	3.29%	4.49	10.42%
2018	36.55	-11.02	-23.16%	-6.53	-15.15%
2019	104.01	67.45	184.54%	60.93	141.42%

CO	kg/year	VAR. PREV. YEAR (kg/year)	VAR. % PREV. YEAR	VAR. 2015 (kg/year)	VAR. % 2015
2015	103.62				
2016	95.04	-8.58	-8.28%	-8.58	-8.28%
2017	259.38	164.34	172.92%	155.76	150.32%
2018	84.48	-174.90	-67.43%	-19.14	-18.47%
2019	129.23	44.75	52.97%	25.61	24.71%

NO	kg/year	VAR. PREV. YEAR (kg/year)	VAR. % PREV. YEAR	VAR. 2015 (kg/year)	VAR. % 2015
2015	1.29				
2016	1.33	0.03	2.56%	0.03	2.56%
2017	1.21	-0.12	-8.74%	-0.08	-6.40%
2018	1.58	0.37	30.12%	0.28	21.79%
2019	1.56	-0.02	-1.08%	0.27	20.47%

NO _x	kg/year	VAR. PREV. YEAR (kg/year)	VAR. % PREV. YEAR	VAR. 2015 (kg/year)	VAR. % 2015
2015	2.08				
2016	2.13	0.05	2.56%	0.05	2.56%
2017	1.89	-0.24	-11.32%	-0.19	-9.05%
2018	2.59	0.70	36.81%	0.51	24.43%
2019	2.59	0.00	0.00%	0.51	24.43%

To better understand the above data and, for the sake of comparison, consider that a small car (e.g. Fiat Punto 1.200cc/65CV, Euro 6) has an average CO₂ use emission of approximately 12.6 kg/100 km (source: “Il Sole 24ore” – *Motori* section).

The factory also has several systems containing refrigerant gases, as shown in the table below. In accordance with legislative obligations, the Company plans inspections to test the absence of leaks in the refrigeration system circuits with the frequency required by law, based on the quantity and type of refrigerant gas contained in the various systems.

The frequency of inspections is shown in the refrigeration system chart shown below. Responsibility for compliance with the frequencies is entrusted to third parties — suitably qualified refrigeration engineers — by means of a specific contract.

Brand and Model	Location	System Log Book Obligation	Periodic Inspection on System Log Book	FGAS Type	GWP	FGAS Content (kg)	FGAS Content (TonCO ₂)
INTERPROID	Fixed refrigeration system	Yes	Annual	R422D	2729.00	4.00	10.92
ELECTRA CCE40RC	Fixed air-conditioner	Yes	Annual	R407C	1774.00	3.36	5.96
AIRWELL	Air-conditioner	Yes	Annual	R410A	2088.00	3.60	7.52
EKIPO EV100 HPR	Heat pumps	Yes	Annual	R134A	1430.00	36.00	51.48
MTA DE049	Dryer	No	-	R134A	1430.00	0.64	0.91
MTA DE018	Dryer	No	-	R134A	1430.00	0.31	0.44

8.7 Wastewater

The factory in question has no industrial wastewater as the water resulting from the production process is collected and fed back into it, thanks to a water recycling system (see production water diagram). The Company only has a drain for domestic wastewater from the toilet facilities, which is conveyed directly to the municipal sewer.

The Company is not subject to RR 4/2006 provisions, as the exclusively owned uncovered outdoor surface is less than 2,000 m².

8.8 Production of Special Waste and Similar

The Company has a specific system for the organization, management, and control of waste, pursuant to Italian Legislative Decree no. 231/2001. The structured system contains rules and organizational procedures aimed at preventing crimes. This involves the application of a suitable disciplinary system to sanction both the failure to comply with the measures indicated by law and breaches of the Code of Ethics.

The Factory in question only produces non-hazardous and urban-like waste. The following table distinguishes the various wastes produced by EWC code, type (hazardous/non-hazardous), and destiny (recycling or disposal).

Recy/Disp	H/NH	EWC	WASTE Description	2015 (kg)	2016 (kg)	2017 (kg)	2018 (kg)	2019 (kg)
R	NH	15.01.01	<i>Paper and cardboard packaging</i>	47,140	45,240	48,240	39,740	45,440
R	NH	15.01.06	<i>Mixed packaging</i>	7,630	7,320	10,180	10,890	17,320
R	NH	08.03.18	<i>Waste printing toner other than those mentioned in 08 03 17</i>	17	18	10	9	23
D	NH	15.01.02	<i>Plastic packaging</i>	1,120	1,050	900	1,560	2,150
D	NH	08.01.16	<i>Aqueous sludges containing paint or varnish other than those mentioned in 08 01 15</i>	37,480	40,040	39,420	41,760	42,660
TOTAL (kg)				93,387	93,668	98,750	93,959	107,593

The disposal/recycling of the wastes listed above is carried out by specialized companies in accordance with the procedures and timeframes required by the laws in force. An up-to-date copy of the permits of the carriers and recipients used for disposal is kept in the administrative offices. The Company does not transport waste on its own behalf.

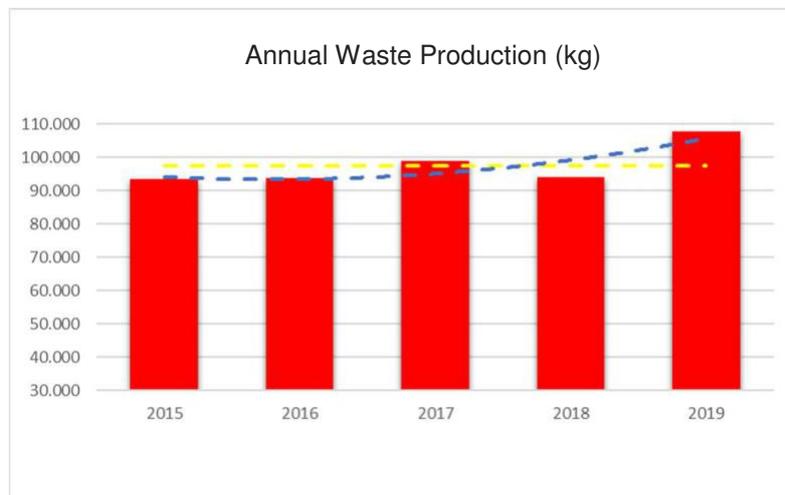
The Company also produces urban-like waste and thus uses the public collection service, in accordance with the methods established by municipal regulations. Specifically, the Municipality of Mandello del Lario implements the separate collection of waste resulting from human activities (classified as urban or urban-like waste) by means of a door-to-door collection service.

The table below shows the year-by-year consumption, compared with the year of reference, 2015.

Year	kg/year	VAR. PREV. YEAR (kg)	VAR. % PREV. YEAR	VAR. 2015 (kg)	VAR. % 2015
2015	93.387				
2016	93.668	281	0.30%	281	0.30%
2017	98.750	5.082	5.43%	5.363	5.74%
2018	93.959	-4.791	-4.85%	572	0.61%
2019	107.593	13.634	14.51%	14.206	15.21%

N.B. Percentage variations of <1% are considered normal

As highlighted in the previous tables and in the graph below, the total production of waste for the period in question increased considerably in the last year analyzed (+14.51%), legitimized by the simultaneous increase in production but was, in any case, well below its annual percentage increase (+112%).



NOTE: The blue dotted line is a 2nd-order polynomial trendline
Yellow dotted line: linear average value

The graph below shows the ratio of recycled waste to the total amount produced during the year. It shows how the production of waste sent away to be recycled is constantly above 50%.



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8.9 Packaging and CONAI (National Packaging Consortium)

The Company has been registered with CONAI in the "User" category since 1998, with member code 11015734. On 05/07/2017, the Company submitted an application to move to the "Producer" category, and CONAI's confirmation was received by e-mail on 16/01/2018.

On 07/07/2018, a request was sent by the Company to COMIECO (National Consortium for the Recovery and Recycling Cellulosic-Based Packaging) to be entered into the "Producer/importer of raw materials" category, as it manufactures corrugated cardboard sheets.

8.10 Induced Vehicle Traffic

The Company's production generates induced traffic as a result of employees' cars (40 in December 2019) and the heavy vehicles of third-party suppliers/carriers.

The Company is not equipped with its own vehicles to transport people or goods.

8.11 External Noise

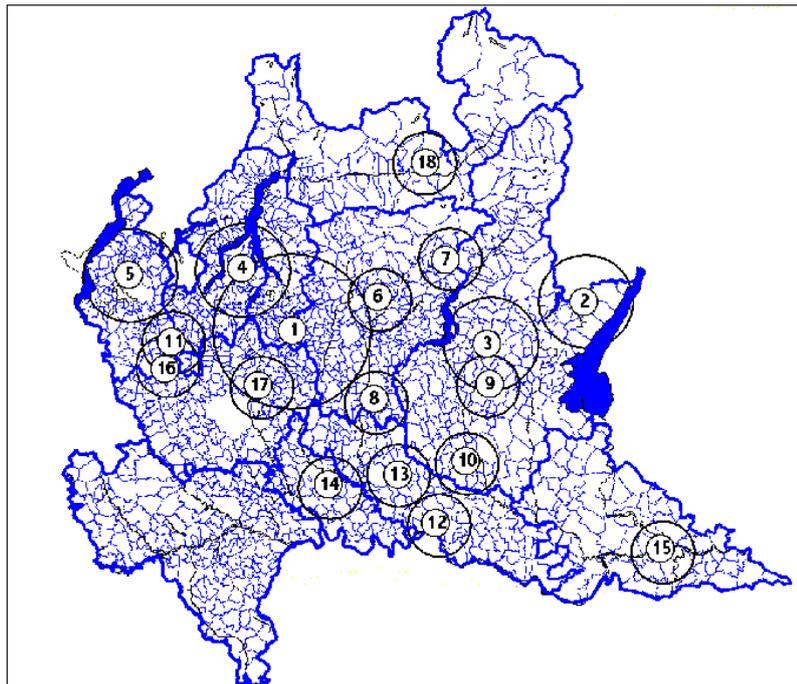
Noise is produced both by mobile sources (heavy vehicles loading and unloading), and fixed sources (machinery inside the Company).

Specifically, the Company falls within band V "mostly industrial", with emission limits of 65 dB(A) during the day and 55 dB(A) at night.

To date, the Company has never performed phonometric surveys outside.

8.12 Light Pollution

Light pollution is an alteration to the natural quantity of light in a nocturnal environment caused by the introduction of artificial light. Particular caution is required for cases in which the site in question is located within the buffer zone of an astronomical observatory, as defined by Regional Law no. 39 of 24/02/2005. The municipality of Mandello del Lario falls within the buffer zones of the Brera Astronomical Observatory of Merate (LC) and the Sormano Astronomical Observatory (CO), as shown in the image below.



The regulation defines “light pollution” as any form of artificial light dispersed outside of the areas for which it is functionally intended and, in particular, beyond the horizon plane.

The radius of the buffer zone was determined by taking into account the fact that the most significant light emission reduction, of 70 – 80%, is obtained at distances of about 25 km, beyond which the mitigation margins are much less evident. It is emphasized, moreover, that for the almost total removal of light interference, it would be necessary to act on even more extended territorial areas, especially in highly urbanized areas such as Lombardy.

Within this buffer zone, while the zeroing of light is not required, the regulation, in any case, sets a radical limitation to upward emissions and all the light sources not compliant with the criteria indicated by the Regional Law 17/2000 must be replaced and modified so as to reduce the light pollution.

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8.13 Asbestos

It was found that several artifacts in the Company originally consisted of asbestos-containing products, primarily the roofing and several drain pipes. In 2007, the aforementioned structures were mapped for their identification, safety measures taken and a decontamination plan was drafted. The removal and disposal took place between 2008 and 2011. In detail, the roof containing asbestos was removed and replaced by new prefabricated panels with a photovoltaic system. The asbestos pipes were also isolated and insulated with special materials for their encapsulation to prevent flaking and volatility. To date, the Company has no asbestos-containing artifacts that could contaminate the internal or surrounding environment; the Company can thus be considered free of asbestos.

9 Identification of INDIRECT Environmental Aspects – Environmental Impacts

Indirect environmental aspects are the aspects over which the Organization does not have full management control, but over which it could have a greater or lesser degree of influence. Specifically, when talking about indirect environmental aspects, we refer to the activities carried out by or related to customers and suppliers of materials/chemicals and/or services.

The table below lists the main indirect environmental aspects identified by the Company, the corresponding environmental impacts, and the responsible parties.

Environmental Aspect ACTIVITIES / SERVICES	Resulting Indirect Environmental Impacts (Actual or Presumed)	Suppliers / Other Responsible Parties
Suppliers of raw materials and chemicals	Accidental spillage or container breakage	Chemical suppliers
Chemical suppliers	Atmospheric emissions / wastewater during production	Chemical suppliers
Management of system and equipment maintenance	Production of waste from maintenance	External maintenance technicians
Management of the Company's system and equipment maintenance	Pollution of environmental matrices in the event of accidental spillage	External maintenance technicians
Waste disposers	Impacts resulting from the treatment of waste (atmospheric emissions / wastewater/ etc.)	Waste disposer
Incorrect or inadequate management of waste on its production site. (e.g. Incorrect management of temporary deposits, the presence of foreign waste, contamination of waste by atmospheric agents, use of packaging or unsuitable collection methods, incorrect, inadequate or illegible labeling, results of atmospheric agent tests on non-representative samples, etc.)	The production of waste that is difficult to recycle / the need to carry out further waste treatment / contamination of environmental matrices on the customer's site	Suppliers of materials/goods and service providers Suppliers - contractors
Consultancy	Any fines and delays in implementing regulations; incorrect advice	Consulting companies
Inbound and outbound transportation (raw materials / waste / etc.)	Fuel consumption	Third-party carriers
Inbound and outbound transportation (raw materials / waste / etc.)	Atmospheric emissions	Third-party carriers
Inbound and outbound transportation (raw materials / waste / etc.)	Incorrect management of transportation (e.g. verbal/ telephone misunderstandings, the absence of obligatory documentation, failure to comply with the permit requirements of the carrier in the case of waste, etc.) Unladen journeys with the consequential waste of time and resources (fuel)	Third-party carriers
Inbound and outbound transportation (raw materials / waste / etc.)	Noise	Third-party carriers

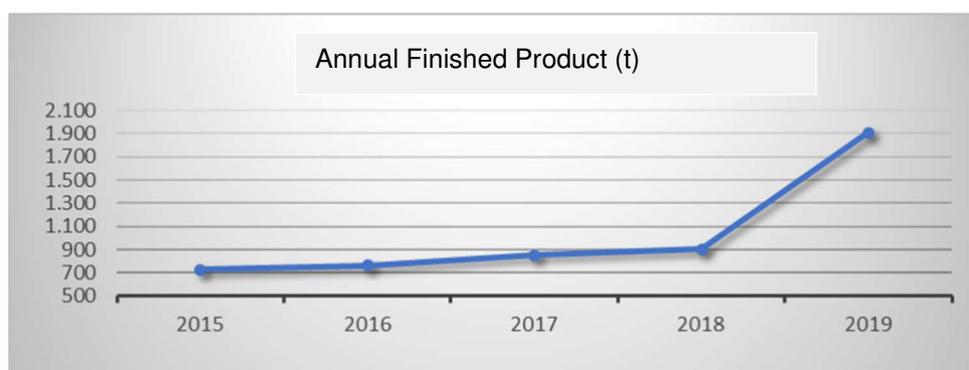
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Environmental Aspect ACTIVITIES / SERVICES	Resulting Indirect Environmental Impacts (Actual or Presumed)	Suppliers / Other Responsible Parties
Inbound and outbound transportation (raw materials / waste / etc.)	Induced Vehicle Traffic	Third-party carriers

10 Indicators

The environmental indicators taken into consideration are based on the relationship between the consumption of a resource (e.g. methane), or the production of a resource (e.g. electricity from renewable sources), or the emissions into the environment (e.g. waste) and some of the process parameters. In this specific case, the annual finished product was chosen for use as a process parameter.

As seen in section 8.1 and highlighted in the graph below, for the five-year period in question, the total annual production was in constant growth, with a sizable increase in 2019.



The table below gives a summary of the environmental indicators selected, compared with the annual finished product (PDT). It highlights the growing trend of the various indicators for the year 2019 in relation to the previous year and to the year of reference, 2015.

No.	INDICATOR	DESCRIPTION	Trend 2019 ⁽¹⁾	Trend 2015 ⁽²⁾
1	SELF-PRODUCED ELECTRICITY ID	Self-produced electricity indicator= kg PDT/KWh	↑	↑
2	TOTAL CONSUMED ELECTRICITY ID	Total consumed electricity indicator=KWh/t PDT	↓	↓
3	METHANE CONSUMPTION ID	Methane consumption indicator =m ³ /t PDT	↓	↓
4	TOTAL ENERGY CONSUMPTION ID	Total energy consumption indicator=TEP/t PDT	↓	↓
5	TOTAL WATER CONSUMPTION ID	Total water consumption indicator=m ³ /t PDT	↓	↓
6	WATER CONSUMPTION FOR PRODUCTION ID	Water consumption for production indicator=m ³ /t PDT	↓	↓
7	WASTE PRODUCTION ID	Waste production indicator=t/t PDT	↓	↓

(1) Variation of the 2019 indicator compared with 2018; (2) Variation of the 2019 indicator compared with 2015

The following tables show the trends of the indicators given in the previous table in detail:

1. Finished product/self-produced electricity indicator

SELF-PRODUCED ELECTRICITY ID					
YEAR	SELF-PROD. ELECT. ID/PDT (KWh/t)	VAR. PDT PREV. YEAR (%)	VAR. PDT 2015 (%)	VAR. ID PREV. YEAR (%)	VAR. ID YEAR 2015 (%)
2015	4.83				
2016	5.23	5.01%	5.01%	8.36%	8.36%
2017	5.78	11.08%	16.64%	9.50%	19.74%
2018	6.92	6.11%	23.77%	16.52%	43.43%
2019	15.27	112.04%	162.43%	54.67%	216.39%

2. Total consumed electricity indicator / finished product

TOTAL ELECTRICITY CONSUMPTION ID					
YEAR	TOT. ELECT. ID/PDT (KWh/t)	VAR. PDT PREV. YEAR (%)	VAR. PDT 2015 (%)	VAR. ID PREV. YEAR (%)	VAR. ID YEAR 2015 (%)
2015	625.05				
2016	580.46	5.01%	5.01%	-7.13%	-7.13%
2017	540.27	11.08%	16.64%	-6.92%	-13.56%
2018	524.34	6.11%	23.77%	-2.95%	-16.11%
2019	272.96	112.04%	162.43%	-47.94%	-56.33%

3. Methane gas consumption indicator / finished product

METHANE CONSUMPTION ID					
YEAR	METHANE ID/PDT (m ³ /t)	VAR. PDT PREV. YEAR (%)	VAR. PDT 2015 (%)	VAR. ID PREV. YEAR (%)	VAR. ID YEAR 2015 (%)
2015	220.21				
2016	220.94	5.01%	5.01%	0.33%	0.33%
2017	200.62	11.08%	16.64%	-9.20%	-8.90%
2018	203.56	6.11%	23.77%	1.47%	-7.56%
2019	108.50	112.04%	162.43%	-46.70%	-50.73%

4. Total consumed electricity indicator / finished product

TOTAL CONSUMED ELECTRICITY ID					
YEAR	T.E. ID/PDT (TOE/t)	VAR. PDT PREV. YEAR (%)	VAR. PDT 2015 (%)	VAR. ID PREV. YEAR (%)	VAR. ID YEAR 2015 (%)
2015	0.3612				
2016	0.3492	5.01%	5.01%	-3.32%	-3.32%
2017	0.3206	11.08%	16.64%	-8.19%	-11.24%
2018	0.3158	6.11%	23.77%	-1.51%	-12.58%
2019	0.1652	112.04%	162.43%	-47.68%	-54.26%

5. Total consumed water indicator / finished product

TOTAL WATER CONSUMPTION ID					
YEAR	TOT. H ₂ O ID/PDT (m ³ /t)	VAR. PDT PREV. YEAR (%)	VAR. PDT 2015 (%)	VAR. ID PREV. YEAR (%)	VAR. ID YEAR 2015 (%)
2015	2.46				
2016	2.91	5.01%	5.01%	18.56%	18.56%
2017	2.33	11.08%	16.64%	-19.92%	-5.06%
2018	2.19	6.11%	23.77%	-6.33%	-11.07%
2019	1.43	112.04%	162.43%	-34.43%	-41.69%

6. Water consumption for production indicator / finished product

WATER CONSUMPTION FOR PRODUCTION ID					
YEAR	H ₂ O PROD. ID/PDT (m ³ /t)	VAR. PDT PREV. YEAR (%)	VAR. PDT 2015 (%)	VAR. ID PREV. YEAR (%)	VAR. ID YEAR 2015 (%)
2015	1.46				
2016	1.99	5.01%	5.01%	36.39%	36.39%
2017	1.45	11.08%	16.64%	-27.37%	-0.94%
2018	1.31	6.11%	23.77%	-9.32%	-10.17%
2019	1.00	112.04%	162.43%	-23.66%	-31.43%

7. Waste production indicator / finished product

WASTE PRODUCTION ID					
YEAR	WASTE ID/PDT (t/t)	VAR. PDT PREV. YEAR (%)	VAR. PDT 2015 (%)	VAR. ID PREV. YEAR (%)	VAR. ID YEAR 2015 (%)
2015	128.37				
2016	122.61	5.01%	5.01%	-4.49%	-4.49%
2017	116.38	11.08%	16.64%	-5.09%	-9.34%
2018	104.36	6.11%	23.77%	-10.33%	-18.71%
2019	56.36	112.04%	162.43%	-45.99%	-56.10%

11 Environmental Impact Reduction Strategies

The company is focused on seeking methods to carry out its activities favoring energy savings, the reduction of pollution, the recycling and reuse of waste, and the prevention of potential harm.

It is also aware of the need to ensure ecological sustainability in all its activities, considering the rights of future generations.

The company's strategies and operational management are built on the principles of sustainable development, making sure that its activities are carried out with respect for the environment, economic and social development, and public health, in compliance with the national and international regulations. In this respect, various company actions and projects have been carried out over the years, concerning various aspects and processes of the production activities. These include:

- The "RINASCIMENTO" project, an innovative circular economy process aimed at providing a service with high added value for the client, end-user, and the environment (see details in appendix);
- The company project to obtain BENEFIT CORPORATION status (see details in appendix);
- The "LAETITIA" project, which planted 200 cacao trees in Cameroon (see details in appendix).

The table below gives a brief summary of the actions taken and planned by the company to reduce its environmental impact.

IMPROVEMENTS MADE AND FUTURE GOALS		
Date of Improvement	Type of Improvement	Result
2009	Changes to wastewater treatment system	Reduced water drainage and waste
August 2009	Forest Stewardship Council (FSC) certification introduced	Reduced environmental impact on forest resources
2010	Installation of the photovoltaic system	Reduced energy consumption
2011	Insulation of offices and roof renovation	Reduced energy consumption
2012	Replacement of reception window	Reduced energy consumption

IMPROVEMENTS MADE AND FUTURE GOALS		
Date of Improvement	Type of Improvement	Result
2012	Timers installed for company corridor lighting	Reduced energy consumption
2012	Extension of the photovoltaic system	Installation of the photovoltaic system
2016-ongoing	Environmental information for company employees	Staff empowerment
2017-ongoing	Replacement of internal lightbulbs with new LEDs	Reduced energy consumption
2017-ongoing	Use of refillable printer toner	Reduced environmental impact
2017-ongoing	Participation in environmental education projects in childcare centers and preschools	Involvement outside the Organization
2018	Replacement of the laboratory thermoformer	Reduced energy consumption
2018	Waste sorting introduced in offices	Waste reduction
2018-ongoing	Increased use of FSC recycled raw materials	Reduced environmental impact
Oct. 2018-ongoing	“SECOND LIFE - RINASCIMENTO” project	Creation of a circular economy Shortening of supply chain
2018-ongoing	Supply of drinking water to employees in plastic-free containers	Waste reduction
2019	Reverse osmosis system for wastewater treatment	Reduced water requirements and reduced chemical use
2019	Installation of new pigment mill	Reduced water and energy consumption
2019	Use of recycled marketing materials (e.g. gadgets)	Reduced environmental impact
2019	Creation of vertical communication inside the Company regarding environmental training	Reduced environmental impact
2019	*Distribution of environmental handbook to employees	Reduced environmental impact
2019	*Collaborator training about the “RINASCIMENTO” project	Reduced environmental impact

IMPROVEMENTS MADE AND FUTURE GOALS		
Date of Improvement	Type of Improvement	Result
2019	*Laetitia forest – planting of 200 cacao trees in Cameroon	CO ₂ emissions offset
2019	Installation of low-impact hand dryers	Waste reduction
2019-ongoing	New program for work cycles management	Elimination of paper for the management of workflows
2019-ongoing	Installation of velvet system filters	Reduced atmospheric emissions
2020	Reduced packaging in the employee break area	Reduced consumption of non-biodegradable plastic materials
2020	Recycling of scrap flock	Reduction of wastes no longer usable for the current production process
2020	Cleaning of photovoltaic system panels	Increase in energy from renewable sources
2020	Definition of goals for reducing solid wastes in the supply chain	Waste reduction
2020-ongoing	Changes to company packaging	Reduction of plastic and improved recyclability of packaging
2020-2021	Replacement of chemically produced raw materials with organic alternatives	Reduced environmental impact
2020-2023	Conversion of standard company products to 100% PCW bases obtained with integrated process	Reduced environmental impact - reduction of virgin raw materials
2020 - 2023	New collaboration with Treadom	CO ₂ emissions offset and sustainable economic development
2020-2030	*2030Lab project	Sustainable development

* See annexes

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12 Appendix (Company Projects)

12.1 The “RINASCIMENTO – Paper is Reborn” Project

A virtuous cycle to create environmentally friendly high-end paper.

RINASCIMENTO, an innovative circular economy process, is Icma’s latest creation, aimed at providing a service with high added value for the client, end user, and the environment.

Rinascimento turns the cellulosic scraps of client companies into elegant recycled creative paper, which then becomes the protagonist of the companies’ own packaging projects.

1. The process begins with a detailed analysis of the client company’s handling of cellulosic scraps (corrugated fiberboard boxes, cases, rigid boxes, shopping bags, displays, office paper, catalogs, magazines, etc.), followed by a study of the *Rinascimento* application procedures and the subsequent definition of the project to be carried out.
2. Icma handles all phases of the *Rinascimento* service, coordinating the stakeholders from the withdrawal of scraps at the company site to the manufacture of recycled industrial paper, created according to the technical characteristics predefined in the design phase.
3. Inside the Icma laboratories, the actual metamorphosis of the paper is studied, prepared, and carried out. A custom finish is applied to the recycled industrial paper, making it perfect for the designed packaging project. Thanks to Icma’s technology and flexibility, a practically infinite number of finishes can be created: customizable colors, tactile, visual and even fragrance effects, embossing... The recycled industrial paper thus becomes a wonderful creative paper for high-end packaging.
4. The final phase of *Rinascimento* involves returning the paper to the user. Whether in a boutique store or a company office, the client’s scraps are given new life as creative paper packaging and become a visible witness to an innovative circular economy project and to the company’s commitment to the environment.

ONE PARTNER, INFINITE ADVANTAGES.

1. *Rinascimento* is a virtuous example of the reuse of materials; the project is carried out in a circular economy context and the scraps are traced throughout the whole supply chain.
2. The chain of production is shortened: the scrap paper is used directly as a raw material to manufacture the new paper, without the intermediate step of producing virgin or recycled cellulose pulp, a process that uses large amounts of chemicals, energy, and water.
3. Material transportation is reduced, due to the shortening of the production process and thanks to the careful planning of the service: Icma designs the supply chain and chooses partners based on the geographic location of the scraps and the characteristics of the creative project. This results in less CO₂ emissions.
4. The papers manufactured through *Rinascimento* are true masterpieces— Eco- Sartorial Paper that will be used to create new creative and emotional packaging that tells a story of love for the environment, without losing the unmistakable charm of Icma *sartorial paper*.

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The *Rinascimento* services, like all of Icma's *Tailor Made* products, is designed and made to measure for the individual client company.

ICMA, Italian-made excellence for over 80 years.

12.2 Benefit Corporation Project

Certified B Corp® companies are enterprises that use business as a positive force to create a more just, inclusive society and regenerate the biosphere. They comply with the highest standards of social and environmental performance, transparency, and responsibility. Today, there are over 2600 B Corps in more than 150 sectors and 60 countries throughout the world.

I.C.M.A. S.r.l. was the first European paper company to obtain Benefit Corporation status. Being a Benefit Corporation means voluntarily committing to a journey of continuous improvement concerning environmental impact, the wellbeing of employees, the active role in the community to which the company belongs, but also to the general mission of the company, including ethics, responsibilities, and transparency; all of this while maintaining the nature of an organization that pursues economic goals. To become a certified B Corp®, the company had to pass a thorough evaluation and control process, coordinated by an accredited third party, involving all the corporate functions and analyzing every aspect of the production and organizational model. (<https://bcorporation.net/directory/icma-srl>)

To be a certified B Corp®, a company has to score a minimum of 80 points. The impact assessment concerns various aspects, including the day-to-day actions of the company aimed at having a positive impact on workers, the community, and the environment in which it operates. Moreover, companies can earn more points by showing that their overall business model also creates a positive social and environmental impact. The scores for the certified B Corp® companies are checked by the non-profit organization B Lab.

The following is the score the company achieved in 2020 and the relative breakdown of the various assessments.



Impact Area Scores ⓘ		
 Governance		5.6
	Mission & Engagement	0.9
	Ethics & Transparency	2.2
	+ Mission Locked	2.5
 Workers		22.4
	Financial Security	4.1
	Health, Wellness, & Safety	8.3
	Career Development	2.3
	Engagement & Satisfaction	3.0
	N/A Points	4.5
 Community		14.8
	Diversity, Equity, & Inclusion	3.7
	Economic Impact	4.3
	Civic Engagement & Giving	0.9
	Supply Chain Management	3.3
	N/A Points	2.4
 Environment		37.8
	Environmental Management	3.8
	Air & Climate	3.2
	Water	6.0
	Land & Life	6.2
	+ Resource Conservation	4.2
	+ Land/wildlife Conservation	13.3
	N/A Points	0.8
 Customers		3.8
	Customer Stewardship	3.8

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12.3 Laetitia Forest Project

The “LAETITIA” project involved the planting of 200 cacao trees in Cameroon to offset CO2 emissions at a global level, to protect biodiversity, to fight soil erosion, and to help the economy and social development of the area where the forest was planted.

(<https://www.treedom.net/it/organization/icma-sartorial-paper/event/laetitia>)

12.4 Company Environmental Handbook

DEMATERIALIZATION:

- Use half-printed sheets, or the back, as rough paper
- Set up printers for two-sided printing
- Set up printers, where possible (in administration) for black-and-white printing
- Always ask yourself whether it's necessary to print or whether you can read it on screen
- Conclude emails, after your signature, with a phrase encouraging the receiver to not print the email unless necessary, "Be kind to the planet and only print this email if necessary".

WATER

- Only keep the bathroom tap running for the time needed to wash your hands.
- When brushing your teeth, turn the water off and on again (to save up to 10 l each time).

ENERGY

- Switch off the lights every time you leave the offices or common rooms.
- Switch off your computer when you are in a meeting or doing other activities.
- Especially before the weekend, switch off photocopiers and disconnect them from the network.
- Where possible, print in low resolution and in black and white
- Before printing, always use the print preview function to avoid incorrect prints.
- If possible, set your computer to go into power saving mode when inactive. Don't load screensavers.

COMPUTER SCREENSAVERS

- If possible, unplug the power cord of your computer at the end of the day (many models absorb a limited amount of electricity even when switched off).
- In summer, minimize the use of air-conditioners by taking advantage of the facility's windows and exposure.
- When air-conditioners are switched on, be careful not to allow the cool air to escape into non-cooled areas.