



Velvet CARE development project

## Non-Technical Summary

Prepared in cooperation with

Multiconsult Polska Sp. z o.o.

**Multiconsult**

June 2020

## Introduction

Velvet CARE is a Poland's leading manufacturer of sanitary products, including toilet paper, tissue paper and facial tissue, and paper towels. The company has over 120 years of tradition; the production plant located in Klucze in the Małopolska Province has been operating since 1897. In the last 20 years, the plant underwent several ownership changes, becoming a part of International Paper (1996 – 2003) and Kimberly-Clark (2003 – 2013). Investments made in this period provided the machine park with modern processing lines and contributed directly to the fact that the paper mill acquired the status of one of the most important plants producing and processing tissue in the Central Europe.

From 2013 the company has been operating under the name of Velvet CARE as a result of a management buy-out financed by the Avallon MBO II investment fund. In May 2018, Abris acquired a majority stake in Velvet CARE, Poland. Abris Capital Partners Ltd. is the private equity fund registered in Jersey.



Since then further improvements have been implemented. These included the launch of 5 new technological lines (2015-2016) to double the production capacity of the plant and enabling the production of highest quality products. A milestone was the launch of a machine for wet products in April of 2015; thanks to that the company has expanded its business profile and went beyond the frameworks of the manufacturer of paper products.

The Velvet Care company is employing over 600 people. Shortly before Abris' acquisition, Velvet CARE completed a major capital expenditure program, acquiring one of the most modern tissue paper machines in CEE.

The production plant is located in Klucze, 40 km north-west from Kraków, southern Poland. Presently, Velvet Care operates two paper machines for tissue manufacturing, with the overall production capacity of 90 000 tons / year. The total tissue output is processed by converting lines, manufacturing the final products: toilet paper, paper towels, tissue paper and facial tissue.

Velvet Care products satisfy top class quality and safety standards. In January 2016, the company was granted BRC CP (Consumer products) certificate. It is one of the most restrictive standards focusing

on consumer safety, sales/market regulations compliance and quality requirements. The company is very committed to environmental as well as health & safety standards.

Velvet Care manufactures its products in compliance with responsible forest resources management standards, which is confirmed by the FSC (Forest Stewardship Council) certificate. It also meets the strict ecological requirements of EU Ecolabel (Authorisation No. PL/004/002). Velvet Care has implemented quality assurance, environment, and OHS standards, confirmed by ISO9001, ISO14001 and PN-N 18001 certificates.

### Project description

The new tissue paper machine considered by Velvet Care is a modern and innovative solution using ShoePress technology. It will be one of few tissue paper machines of that type in Europe. The new equipment is highly energy and resource efficient and matches benchmarks of the world class manufacturers. Similar machine was commissioned in Klucze in 2018 with EBRD participation.

New paper machine with a capacity of up to approx. 250 Mg / day will be launched. What is extremely important, as before, the production of tissue will be based on virgin raw materials purchased from external sources such as bleached coniferous and hard pulp which will allow for significant reduction of possible impacts related to the functioning of the investment (no pulp mill). An option to potentially use in the future recycled paper is also considered as part of the Project. Ultimately, waste paper within the new paper machine will constitute 90% of the raw material.



Figure 1. proposed production line

Benefits from the implementation of the investment (in addition to issues related to maintaining the company's competitiveness) will also consist in the implementation of an investment that meets the assumptions of the idea of "circular economy" (in line with the assumptions of the Circular Economy Package published on 2 December 2015 by the European Commission) product life cycle, which linearly means the sequence: production - use - waste removal (shot from "cradle to grave"). Closing the life cycle, the company will achieve the sequence: production - use - the use of waste in the next production cycle (from "cradle to cradle"). The essence of this approach is the use of waste generated over the product's life cycle, thereby reducing the consumption of raw materials, reducing the amount of waste deposited, and increasing the waste stream used for recovery and recycling. The installation will allow for annual recovery of up to approx. 63,000 tonnes of paper waste and recycled paper. It should also be emphasized that the above-mentioned materials will be ordered according to strictly

specified specifications and will already be properly sorted and delivered to in the plant only in a bundled form.

The technology used in the new paper machine is optimal for this type of business. Velvet Care has chosen solutions that ensure proper environmental protection. The investment will not cause excessive impact in its surrounding. The devices and solutions meet the requirements:

- Use heat energy efficiently;
- Ensure minimum consumption of water, materials and fuels, and rational use of raw materials;
- Use low-waste technologies that support closed circulation in the Polish economy.

As the second stage of Velvet Care in Klucze development, it is planned to launch a cogeneration installation, for both heat and electricity generation. The use of cogeneration in the case of a tissue machine allows to produce electricity and heat energy that is fed into the paper drying system (hot air to the drying cover for the Yankee cylinder, and the supply of steam for the Yankee cylinder itself).

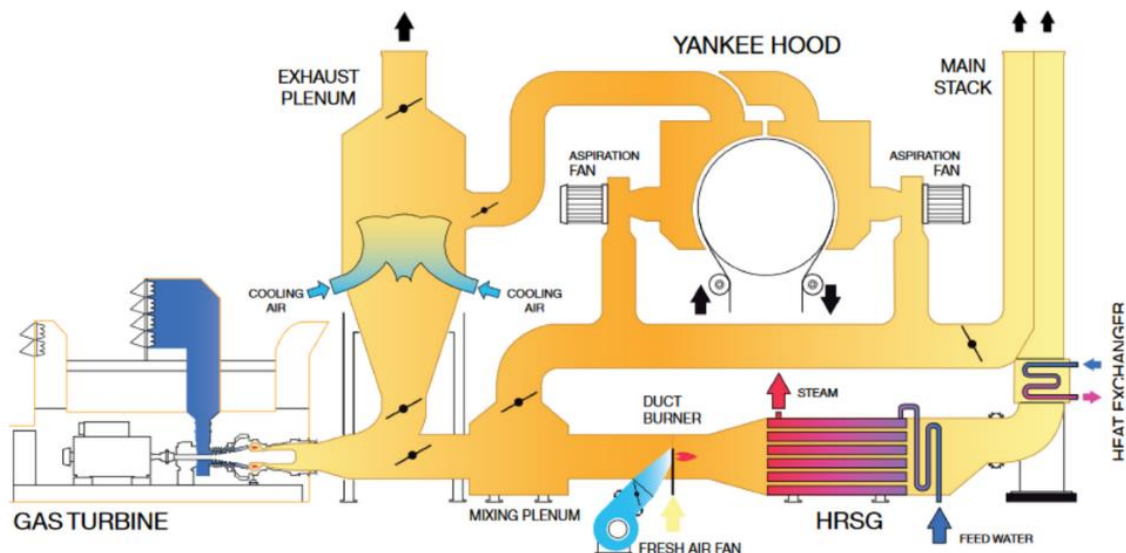


Figure 2. Gas turbine implementation in paper tissue production

### Legislative context of the project

Development of most of the industrial projects in Poland is conducted in the following stages (designing and other associated works are not discussed here):

- If existing local zoning plan (a legal act of local range which defines conditions and constraints for spatial planning in certain areas) does not allow for a certain type of developments, the plan must be changed to allow such developments. Without the plan being changed the development is not possible.
- For projects for which EIA is obligatory or may be required upon discretion of the authorities (an indicative list of such projects is provided in an executive order of the Minister of Environment; the list follows the EU EIA regulations), an EIA procedure is undertaken which is finalized with issue of environmental consent decision (decision on environmental conditions, which among others imposes



requirements that must be taken into account by the construction designs and other environmental obligations for the development).

- Based on the building design assessed by the construction authorities, among others, for development compliance with environmental decision a construction permit is issued based on application of the investor. The investor is free in taking decision whether the development will be developed in phases and whether the whole investment is covered by environmental decision or just a part of it is to be developed. Since November 2008, another EIA assessment may be required by the competent authorities in certain circumstances, such as e.g. design noncompliance with the environmental decision.
- Upon request of the investor, the construction permit issued for the development can be amended, however, any request for such amendment is subject to assessment of compliance with the building law, environmental decision and others.

Please note that unlike in some other European countries the EIA procedure in Poland is conducted separately from the construction permit procedure. If an environmental decision is required and issued it shall be attached to the application for the construction permit. The building authorities will then verify, whether the solutions adopted by a design are in line with the provisions of the environmental decision, hence, the project assessment versus environmental requirements is conducted twice.

For the projects which fall under EU Industrial Emission (IED) Directive requirements, Polish procedures also require the assessment versus the applicable BAT conclusions and respective BREFs to be conducted twice. The first time, the assessment shall be done at the stage of the EIA assessment. The EIA Act requires an assessment of the planned technology against the low-emission technology, which in case of the projects falling under the IED Directive is equivalent to compliance with BAT conclusions and BREF. Further, such projects require an appropriate environmental permit, in most cases an integrated permit (IPPC Permit). An application for such permit shall also present information about the installation compliance with best available techniques. New projects which do not fulfil BAT conclusions criteria will not be granted the IPPC Permit, hence will not be allowed to operate.

EIA procedure has been initiated by the announcement dated Sept. 16, 2019. The procedure was commenced by Mayor of Klucze Commune and parties were notified according to Polish EIA Act. The same authority requested for statutory opinions of RDOŚ (Regional Directorate of Environmental Protection) in Krakow, Sanitary Inspectorate in Olkusz and Water Management Authorities (in Kraków and in Gliwice) and Marshal Office in Krakow.

All the consultees provided their positive opinions after receiving additional information and explanations.

It is worth to mention, that during the EIA proceedings, Covid-19 pandemic started (epidemy status announced in Poland on March 14, 2020) what restricted consultations in traditional form.

### **Project location and impacts**

The development will be located within the industrial premises of Velvet Care and no land acquisition was necessary for the project. The area is designated for industrial use.

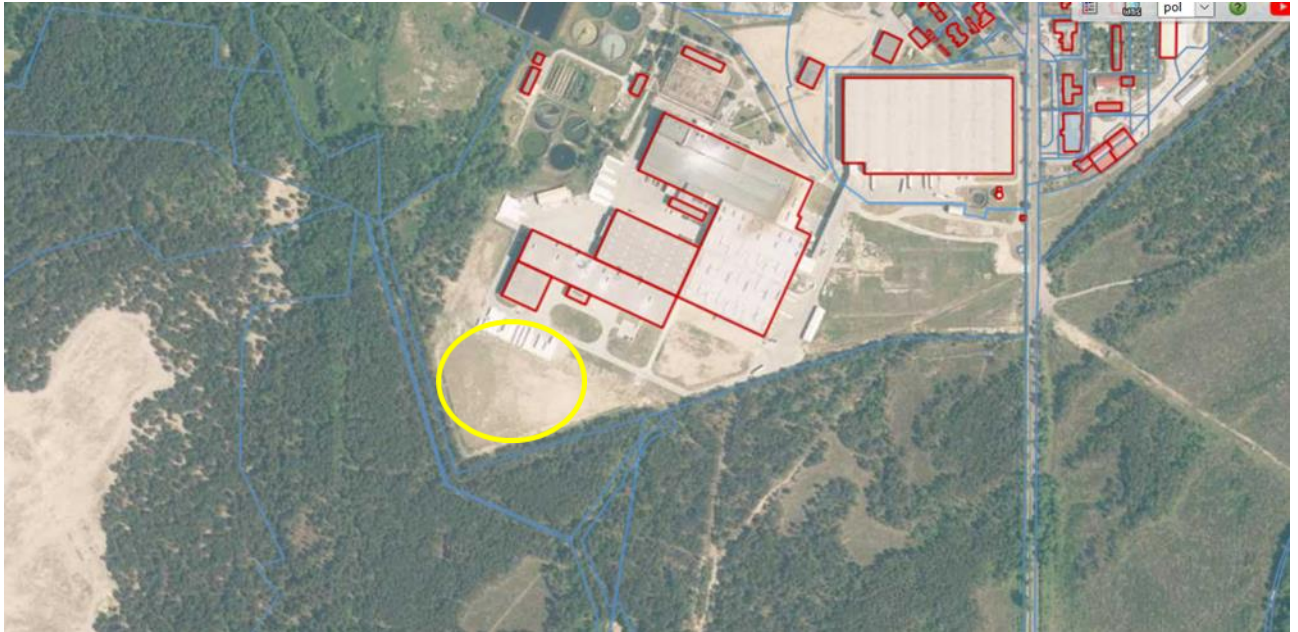


Figure 3. Site location

The site neighbours:

- from the north: other industrial areas (including own wastewater treatment plant, combined heat and power plant and storage facilities) and single-family housing development areas (residential areas are found approximately 500 meters from the new development),
- from the east: forest areas and local road No. 791;
- from the south: woodland (residential buildings in Klucze village are located approximately 400 meters from the border of the plot on which the investment is planned);
- from the west: forest areas (Błędowska Desert).

The site neighbours Natura 2000 Pustynia Błędowska, PLH120014 area to the West and is within buffer zone (otulina) of Eagle Nests Landscape Park (Park Krajobrazowy Orlich Gniazd).

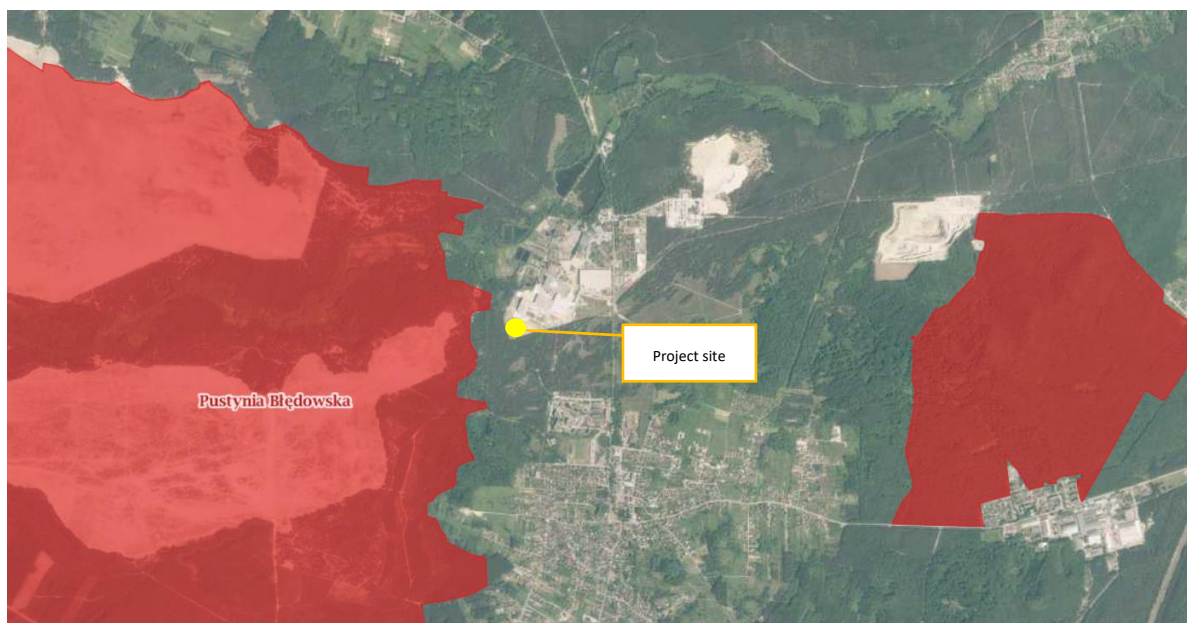


Figure 4. protected areas found close to the location

The environmental emissions from the new installation are not expected to significantly affect the subject of protection of nature-protected areas (mainly sand grown, rare plant species) and the integrity of Natura 2000 sites as long as water regime is not changed significantly.

The nearest residential areas are found ca. 400 m from the new installation and the concerns of the local authorities and the community were raised regarding the noise emission from the new development. Based on the noise propagation study, no noise level exceedance is expected after the construction is completed. This will be verified during post-construction monitoring.

Given future use of recycled paper, a potential issue of odour nuisance will be considered. Given the installation will need to comply with Bat conclusions for Waste Treatment, this issue will be subject to verification during the separate EIA procedure.

The environmental impacts generated at the construction, operation and decommissioning stages were analysed in the EIA report. The planned investment, despite being located adjacent to Natura 2000 site, will not affect the integrity of the Natura 2000 network. It has been stated that the analysis the existing and planned infrastructure will not have a limiting effect on environment.

Key project impacts were summarised below:

**Noise emission** – the issue was broadly discussed during the Environmental Impact Assessment procedure and there were several meetings held with local authorities and interested parties (including local NGO – Zojda and residents of Klucze) to discuss the results of noise emission modelling. The modelling company took very conservative parameters for the study, to ensure future compliance with the environmental standards. Moreover, Velvet Care was obliged to present a post-construction noise monitoring results to confirm that no exceedance is recorded.

**Air emission** – the operation of the new installation will not be associated with excessive air emission. This was analysed during the EIA report preparation and no issues were identified.

**CO2 emission** – Production of PM8 is planned to start in 2022 and reach full capacity in 2025. Its CO2 emission benchmark will be at the level of 0,93 t CO2/tonne of paper in 2023 (start-up, and utilising electricity from the grid) to 0,53 tCO2/tonne of paper in 2025 when full capacity is reached and electric energy supply fully covered by inhouse co-generation.

CO2 emission benchmark from all the three paper machines will decrease from 1,533 in 2014 to 0,637 t CO2/ tonne of paper produced in 2025

**Water consumption** – Current Velvet Care groundwater abstraction is 792 565 m3 per year. It is planned to increase the consumption by 1.3 million m3. The total annual consumption will be 2.1 M m3. The current water permit allows for abstraction of 1,99 M m3 annually. Therefore, it will be necessary to apply for a change of the permit and increase the permissible annual consumption by 0,11 M m3. During the investigation, it was confirmed that there are spare water resources, that are sufficient to cover the increased consumption.

**Wastewater discharge** – there is an on-site wastewater treatment plant used for cleaning wastewater before discharging to Biała Przemsza River. The results of current monitoring, as well as calculations of future capacity of the plant indicate that all wastewater can be treated at the existing plant with only minor modernisation required.

**Waste generation** – as the development of the project, Velvet Care plan to implement an investment that meets the assumptions of the idea of “circular economy” (in line with the assumptions of the Circular Economy Package published by the European Commission on 2 December 2015) product life

cycle, which linearly means the sequence: production - use - waste removal (shot from "cradle to grave"). Closing the life cycle, the company will achieve the sequence: production - use - the use of waste in the next production cycle (from "cradle to cradle"). The essence of this approach is the use of waste generated over the product's life cycle, thereby reducing the consumption of raw materials, reducing the amount of waste deposited, and increasing the waste stream used for recovery and recycling. The installation will allow for annual recovery of up to approx. 63,000 tonnes of paper waste and recycled paper.

### Will the plant meet the standards?

The production process is strictly monitored and controlled, in line with Polish regulations and international standards, including EU Best Available Techniques (BAT) requirements. These include a set of parameters that the installation must comply with to be allowed to operate. The requirements set in Pulp and Paper BAT conclusions, which are the current State-of-the-Art parameters are currently fulfilled and will be complied with for the new paper machine. The key parameters included in the BAT conclusions include wastewater quality and volume, water and heat consumption, and electricity use.

The table below presents the information for 2019:

Parameter		Unit	According to BAT	Results 2019
Wastewater	COD	kg/ADt	0,15 – 1,5	0,351
	BOD <sub>5</sub>	mg/l	< 25	6,08
	Suspended solids	kg/ADt	0,02 – 0,35	0,05
	Phosphorous	kgP/ADt	0,003 – 0,015	0,0096
	Nitrogen	kgN/ADt	0,01 – 0,15	0,0719
Wastewater volume		m <sup>3</sup> /ADt	3,5 - 20	8,386
Water consumption		m <sup>3</sup> /ADt	10 - 25	8,673
Heat consumption		GJ/ADt	5,5 – 7,5	6,03
Electricity use		MWh/ADt	0,6 – 1,1	1,012

ADt – Air Dry tonne expressed as 90% dryness (specific unit for paper production)

The parameters presented in the above table indicate that Velvet Care will be able to meet the requirements of applicable Polish and EU standards.

### Health&Safety and Community security

There were no significant chemical hazards identified at the plant, but there are areas where explosion zones are possible due to paper dust concentrations. There were 3 cases of fires in the last 10 years and the company is aware of the risk.

In 2013 Velvet Care ordered preparation of Explosion Hazard Assessment developed by 4Safety company. This was updated in 2019 together with the Explosion Protection Document. Explosion hazard zones were identified. Ventilation and electrical installations in these areas are not built according to the ATEX regulations.



At present, Velvet Care is developing new protection plat, prepared by ATEX company, which also includes new installed lines. An action plan will be created based on the new document.

### **Community interactions**

As already mentioned, the paper mill in Klucze has been working for more than 120 years and the local community got used to its day-to-day operations.

Velvet Care has actively participated in local social life, charity campaigns, and has provided finance and material support to the health care system, educational system as well as cultural and sports events.

In 2019 Velvet Care took active part in approximately 20 local events, including job fair, picnics, sport events, visits at schools etc. Additionally, there were several internal events organized, for example International Women's Day, International Apple's Day or football tournament.

In 2020, during the COVID-19 epidemic, the Company has actively supported hospitals, authorities and the local community. It has donated protective masks and tissue products to the hospitals. Additionally, the Company organized the fundraising for the purchase of the respirator for the hospital in Olkusz. For each PLN donated by the workers, the Company donated additional 3 PLN.

During the epidemic, the Company has temporarily suspended their marketing activities and allocated the funds to support the hospitals and the community.

To the workers, the detailed instruction for dealing with difficult and crisis situations has been established. It is an internal document covering wide spectrum of potential situations and providing contact information and ways of proper reactions. The document includes environmental aspects, as well as potentially controversial excessive hospitality situations.

### **Additional information and grievance handling**

Any comments or concerns can be brought to the attention of the company in writing (by post or e-mail) or by filling in a grievance form.

All grievances will be registered, assigned a number, and acknowledged as received within 7 days. A response will be provided within 30 days. A similar grievance mechanism is available to employees.

Grievance contact data:

Management office in Klucze (Biuro Zarządu w Kluczach): tel: 32 75 87 101;  
Łucja Krzykawska: [lucja.krzykawska@velvetcare.pl](mailto:lucja.krzykawska@velvetcare.pl)  
e-mail: [kontakt@velvetcare.pl](mailto:kontakt@velvetcare.pl)