CROWN VAN GELDER

SUSTAINABILITY

FACTS & FIGURES

2020

CROWN VAN GELDER B.V.

SUSTAINABILITY FACTS & FIGURES 2020

People Planet Profit

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April 2021

INTRODUCTION

2020 was a turbulent year and 2021 still is. Everybody around the world is dealing with the massive impact of the Corona (COVID-19) virus. It also impacted the results of Crown Van Gelder in 2020 but we were able to write black figures. Our priority was to protect the health of our employees and maintain the service to our customers within the given circumstances.

After two years of research in 2020 Crown Van Gelder developed Crown Native with the Dutch agricultural cooperative Cosun Beet Company as a strategic partner. The agricultural process residue from Cosun's production process, beet pulp, forms a valuable resource for the paper and Crown Van Gelder succeeded in creating paper made out of 20% beet pulp, thus achieving environmental gains in several areas. Crown Van Gelder will start selling paper made with sugar beet fibres in 2021.

In 2020 Crown Van Gelder developed a new book papergrade for Barack Obama's memoir 'A Promised Land' and is honored having supplied this paper for Barack Obama's 768 page book. This new grade a special creamy paper which only weights 45 Lb (66 g/m2) but has a very high opacity and limited 'show through'.

On special request from several of our customers, Crown Van Gelder launched its 3rd Generation Crown Letsgo Silk XF in September 2020.

The certification audits for the ISO 9001 (quality), ISO 22000 (food safety), ISO 14001 (environment), ISO 50001 (energy), ISO 45001 (safety) and FSC® or PEFC™ chain-of-custody took place with positive results. Its shows the flexibility of Crown Van Gelder to maintain sufficiently operating management systems in this changing and turbulent times.

In this Sustainability Report 2020, we highlight the corporate social responsibility issues, which came out of our stakeholder consultation and the covenants with the government.

Miklas Dronkers, CEO
April 2021

CROWN VAN GELDER B.V.

Mission

The future of paper is about creating distinctive, unique added value for customers. For us, this means an agile organization and employees who work together to continually improve products, services and processes.

Strategy

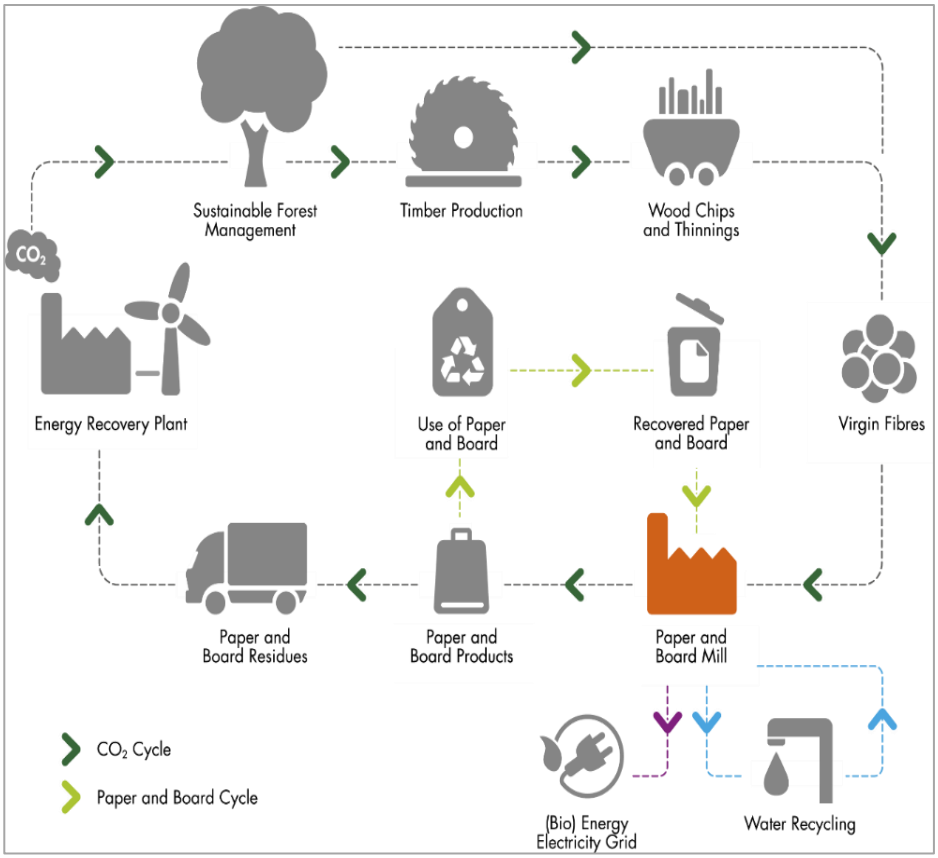
These pillars form the strategy of Crown Van Gelder:

- Safety, health and sustainability come first.
- Bring added value to customers.
- Direct dialogues with customers worldwide.
- Optimalise customers performance with our products and services.
- Agility of organisation and employees.
- Development of employees, especially in personal leadership and ownership.

Profile

Crown Van Gelder B.V. is a public limited liability company with its registered office in the municipality of Velsen at Eendrachtsstraat 30, 1951 AZ, Velsen, The Netherlands. Crown Van Gelder is a speciality paper manufacturer active in niche markets for high speed inkjet, label and packaging. Based in Velsen, the Netherlands, with around 230 staff and two paper machines. Its products – paper on reels – range from 48 g/m2 to 235 g/m2 and are mainly distributed in Western Europa. The company is a subsidiary of Andlinger & Company and registered with the Chamber of Commerce under number 62250108.

The paper industry is uniquely in the world with a fully recyclable product based on natural and renewable raw materials. Of the materials used to manufacture Crown Van Gelder's paper, 99% are bio based; pulp sourced from sustainably managed forests, sugar beet pulp, starch, natural pigments and surface water. Only a few auxiliary materials, colouring agents and glues are not bio based; natural gas is used as an energy source in the manufacturing process. Recycled paper is not used in the manufacturing process because of customers' requirements of high-quality paper specialities.



Corporate Social Responsibility

Client satisfaction

Within Crown Van Gelder all complaints on paper and reel quality are researched and handled by our quality control services. Unfortunately we see a slight rise in complaints in the last few years. The number of complaints rose from 2.7 (2019) to 2.8 (2020) complaints per 1,000 tonnes of product sold because of the changed product mix and we put additional focus on improving our quality and service levels. Customer service is an important topic in each customer visit. Key insights gathered from these visits allow us to zoom in on specific issues that are important to our customers so we may interact and work with them to find the right solutions.

Sales events

In 2020 Covid-19 caused travel and contact restrictions and made it impossible to attend or host any type of events. We had to cancel our Sail event and some other events due to these restrictions. Since we could not present the 3rd generation of our Crown Letsgo inkjet portfolio at DRUPA, we had to refocus our efforts in order to stay connected to our community of high speed inkjet print providers. Because of the limitations in travel and contact we attended a total of two virtual events. Inkjet Insight and Inkjet Summit. Inkjet insight was our first virtual event. With around 796 registries it was a good kick off for a new approach of digital events. We saw it as a good opportunity to experiment with virtual events and introduce our new Letsgo 3rd Generation product line via a digital platform. Our second virtual event of that year was the Inkjet Summit. Approximately 876 people registered for this event and it was the ideal platform to get further acquainted with our Letsgo 3rd Generation substrates. The summit had an interesting setup. Everyone got a virtual booth and had an unique contact system to get in touch with different attendees. Thought the functionality of this needed some fine tuning. Especially the virtual booth missed the human connection you get at offline events. It was a valuable learning moment for Crown Van Gelder. We believe that the future will bring more virtual events and hybrid events. The main lesson being that a lot can be achieved by working remotely while still engaging your community on an digital platform.

Environment and energy

Improving energy efficiency in the production process is one of Crown Van Gelder's key performance indicators. The company uses a vast amount of steam and electricity in the production process. This energy is generated in its own combined heat and power plant, resulting in a high energy yield. The company strives for optimal production using a minimum amount of energy.
Crown Van Gelder is investigating together with Eneco a next step into a sustainable future by maybe building an electrical boiler of 25 megawatt onsite! (big water cooker). This boiler can be powered by electricity provided by an offshore wind farm close to the factory. With the boiler Crown Van Gelder is able to power down the gas burning turbine during days with enough wind!

By signing the MEE Agreement (Multi-Year Energy-Efficiency Agreement for ETS Companies) Crown Van Gelder committed itself to a joint industry effort to improve its energy efficiency by 1.5% per year and wants to achieve this by including process- and supply chain-efficiency measures in the EEP (Energy Efficiency Plan). The energy efficiency, however, is affected by the economic conditions in which Crown Van Gelder is obliged to operate.

The EEI (Energy Efficiency Index of the internal processes) was 114.8 (reference year 2005 = 100) in 2020, 11.9 percent higher (less efficient) than in 2019. Mainly caused by a lower production volume.

Crown Van Gelder strives a good relationships with regulatory authorities. The company has implemented a procedure that is intended to ensure that Crown Van Gelder is updated quarterly on statutory and regulatory changes so that timely measures can be taken to ensure the continuous compliance with the applicable laws and regulations. In 2015 an application has been submitted to the North Sea Canal Area Environmental Service (Omgevingsdienst Noordzeekanaalgebied) for a new environmental permit. Due to delay with respect to that party this permit has been released to Crown Van Gelder in the beginning of 2020.

All pulp Crown Van Gelder uses is sourced from sustainably managed forests. In 2020, 75% of the pulp was FSC® or PEFC™ chain-of-custody certified (2019 76%). 71% of the products sold was FSC® or PEFC™ chain-of-custody certified (2019: 74%).

Research and development

Product development at Crown Van Gelder is divided into three focus areas: high-speed inkjet, label, and special packaging. Each focus area has its own development team staffed by people with backgrounds in marketing, sales, and technology. The combined knowledge of our R&D team and paper makers enable us to develop and produce papers that continuously deliver on expectations. Key in our innovation process is the close collaboration with customers, equipment manufacturers and other stakeholders. In addition to developing the paper, we invest in the support that makes the paper perform at our customer. In this way we deliver innovations that meet the exact needs of the market. Where needed, we customize our products to customer requirements.

Workforce

The average staff in 2020 was 234 employees (230 FTEs). Absence due to illness was 6.3% in 2020 (2019 6.9%). Offering persons alternative work ensures that the employee stays connected both to work and to his or her colleagues.

Crown Van Gelder also offers opportunities to people with skills deficits to enter the job market. Crown Van Gelder has five legally disabled young employees. The experience has shown just how involved and knowledgeable this colleagues are.

Safety

In 2020 there were no accidents that resulted in absenteeism (2019: 0) and the number of accidents with injury without absence decreased to 9 (2019: 16). In 2020, toolbox meetings were held prior to large maintenance stops. All employees of contractors were tested against the general safety instruction of Crown Van Gelder before they were allowed to enter the site.

Training

For many years, Crown Van Gelder's motto has been 'Paper mill = learning factory' to educate its staff. This improves the quality of the work, their job satisfaction and ensures long-term employability.

Employee participation

Employee participation is an important part of the CSR policy and encourages staff dedication to the company. The Works Council handled four requests for formal opinions and consent and had six formal meetings with the CEO. For the Works Council also meetings were arranged with members of the board of supervisors directors.

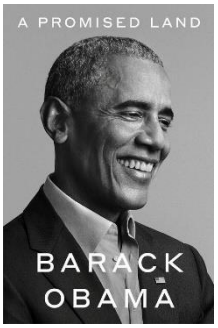
War Child

Crown Van Gelder supports War Child Nederland since 2012 by supplying free paper for their fundraising efforts.

New products 2020

Letsgo 3rd Generation

Crown Van Gelder introduced in 2020 the Crown Letsgo 3rd generation grades. The Crown Letsgo 3rd generation grades bring visible quality improvements in the print result of presses operating with pigment inks and provide the opportunity to improve the Total Cost of Print by reducing ink consumption (5-12%) and save on drying energy. Letsgo Crown Silk XF was the first grade to be introduced in 2020.



Special Presidential Creamy Paper

Crown van Gelder was honoured to supply the paper for Barack Obama's 768 page book. We developed a special creamy paper which only weighs 45 Lb (66 g/m2) but still has a very high opacity and limited 'show through'. The paper can be printed in offset, but is also available in a quality for High Speed Inkjet printing, one of our world famous specialties.

Crown Native

2020 was the year Crown Van Gelder introduced to the world's first sustainable paper made from Dutch sugar beet fibres. The new product line called 'Crown Native' contains less wood fibres achieving a reduced impact on the environment of 16% compared to traditional paper. Crown Native was developed with the Dutch agricultural cooperative Royal Cosun as a strategic partner. The agricultural process residue from Cosun's sugar production process, beet pulp, forms a valuable resource for the paper. Sugar beet pulp is often processed into animal feed or converted into biogas. But by using it in our paper, it becomes a high-value resource.

Crown Native is the result of two years of research. The company investigated several crops to replace part of the wood fibres in the paper. With Crown Native, Crown Van Gelder has succeeded in creating paper made out of 20% beet pulp, thus achieving environmental gains in several areas. Due to the local sourcing, far less transport is required. As a result, Crown Native realises a significant reduction in CO2 emissions, particulate matter formation and water consumption. And because we're using a residual flow, no additional agricultural land is needed.

A big advantage of using sugar beet pulp is that the resulting paper is FDA compliant. This makes sugar beet paper the ideal choice for product packaging, but also for shopping bags and promotional print.

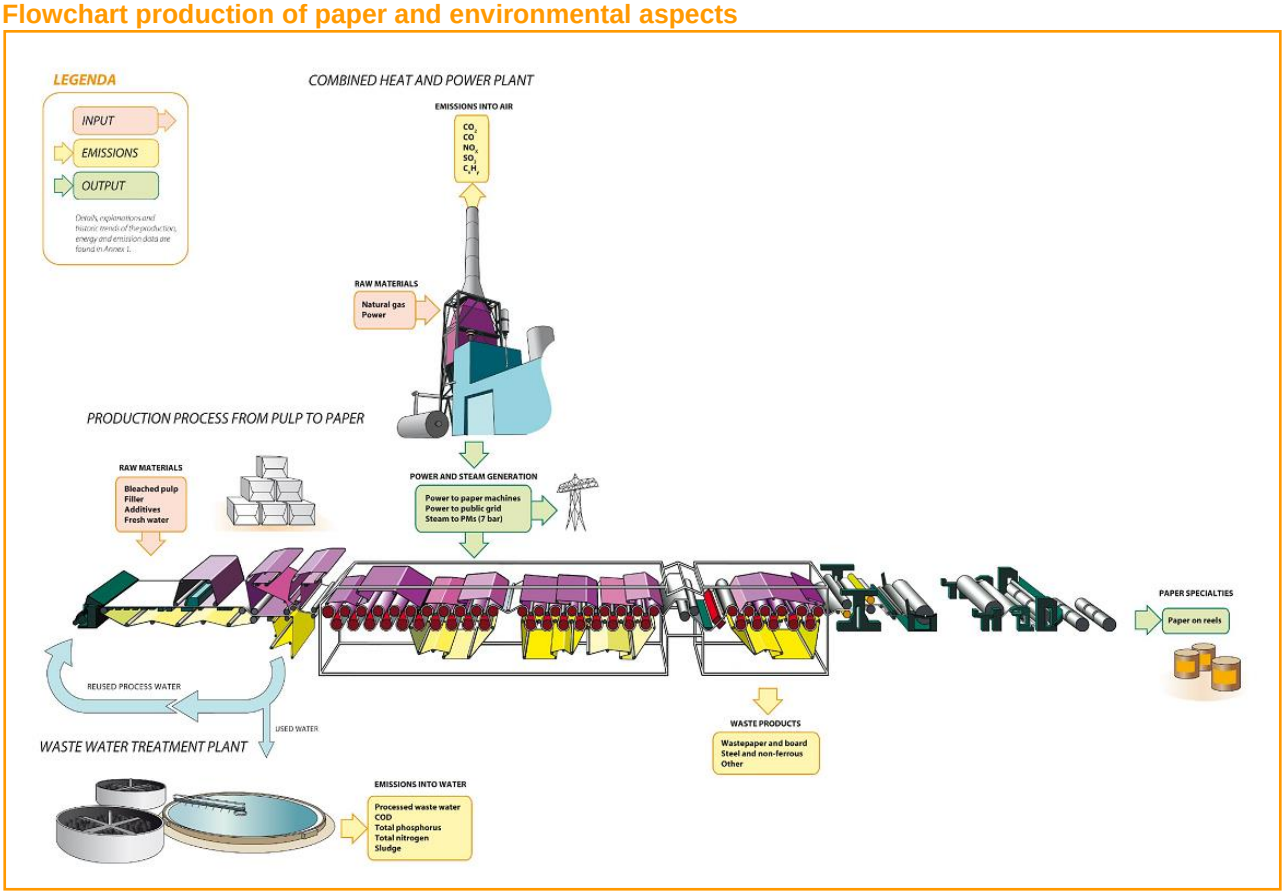
Environmental aspects

Corporate Social Responsibility (CSR) is about making a contribution to the sustainable development of society. The Dutch paper industry is structurally endeavouring to become more sustainable and innovative. The sector is a leader in the optimal use of raw materials and residual flows and continues to be one on the leaders in the field of sustainability in the future. This means a structural focus on reducing water consumption, promoting environmental certificates, lower emissions, dematerialization and stimulating sustainable initiatives.

In the stock preparation phase, all raw materials and additives are received, stored and prepared for use on the paper machines. This involves using raw materials, additives and water and gives rise to emissions due to transport, spills and rejects. Paper is formed, dried and treated on the paper machine. Water and energy are the main inputs, with waste water, waste products and heat being the main emissions. At the level of paper conversion and transport, the main inputs are packaging materials and fuel. The main output is paper on reels.

The company's combined heat and power plant generates all the electricity needed. The main inputs are natural gas and water. The main outputs are steam and electricity. The main emissions are combustion gasses (CO_2 and NO_x) and heat.

Flowchart production of paper and environmental aspects



Production of paper

The company operates two paper machines with a current capacity of approximately 225,000 ton of woodfree paper. Woodfree paper is made of bleached pulp only and contains no post-consumer recycled fibre. To understand the environmental aspects of the various steps of the papermaking process a short overview is given.

Stock preparation

The papermaking process starts with the pre-treatment of the chemical pulp fibres suspended in water. To maximize the strength of the final product, the pulp fibres are cut and fibrillated. The refined product is blended to a homogeneous stock and diluted. Additives and fillers are added to the stock. The stock passes through the vortex cleaners and pressure screens for thorough cleaning.

Wet end section

The clean stock is pumped into the wet end of the paper machine where the papier web is formed. The stock is evenly distributed by the head box on a fast moving, endless wire. In this section, most of the water is removed from the paper web by gravity and vacuum forces. The paper web with a moisture content of about 80 percent then enters the press section.

Press section

As the web passes through this section, the rolls and felts apply considerable pressure to it, reducing its moisture content to 55 per cent before it enters the dryer section.

Dryer section with film press

The remaining water is removed as the web passes over the steam-heated cylinders. The dryer section comprises most of the machine's total length of 100 m. About two-thirds of the way through the dryer section, the paper is almost completely dry and enters the film press. In the film press, diluted starch and other additives are applied to the paper to create the surface characteristics required. The paper is subsequently dried to the required moisture content.

Calender

Finally, the paper passes between the rolls of the calender to create the required thickness and smoothness. The calender has two pairs of rolls that can be adjusted independently for line pressure and temperature. The finished product is wound onto a jumbo reel at a speed of about 1,000 m/min. Quality control is carried out on-line using special scanners and the data entered into the process computer for continuous on-line control of the production process.

Slitter winder

The finished jumbo reel is slit into customer reels on the winder. Each customer reel is numbered for easy identification, wrapped in moisture-proof paper, and stored in the warehouse ready for delivery.

Certifications

Crown Van Gelder is fully aware of its responsibility towards the environment, the working conditions of its employees and the delivery of safe and high quality products to its customers. To ensure that the underlying company policies are fully embedded in the organization an integrated management system has been put in place. The certification includes the development, production and delivery of wood free uncoated and single coated paper for graphical, industrial applications and for the food industry.

The management system has been certified according to the following standards:

• ISO 22000	Food Safety	Since 2015
• ISO 50001	Energy	Since 2013
• EU Ecolabel	Graphic Paper	Since 2010
• OHSAS 18001	Working Conditions	Since 2005
• FSC® CoC *	Sustainable Forestry	Since 2005
• PEFC™ CoC	Sustainable Forestry	Since 2005
• ISO 14001	Environment	Since 1997
• ISO 9001	Quality	Since 1994

With these certificates Crown Van Gelder is an industry leader in the sector. All certificates are available at www.cvg.nl (About us – Certifications).
* Crown Van Gelder B.V. communications' FSC® trademark licence code is FSC-C014690.

Reporting and measuring

Crown Van Gelder believes that corporate social responsibility (CSR) reporting contributes to enhancing its profile as a transparent company. This document provides a detailed overview of facts and figures concerning people, planet and profit aspects. Besides, Crown Van Gelder submits on an annual basis an environmental report to the Dutch authorities based on the European Pollutant Release and Transfer Register (E-PRTR). The production and emission data in this document are based on this report.

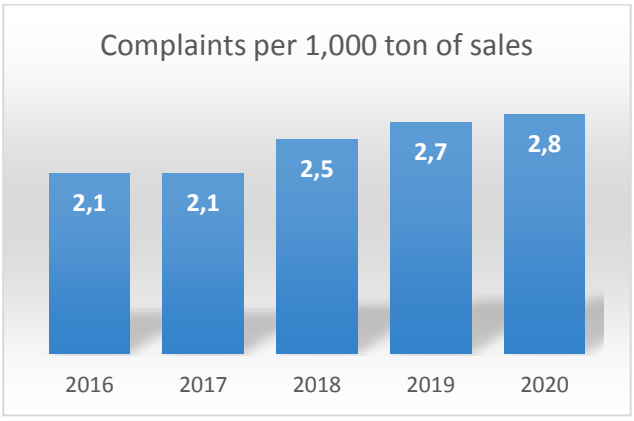
The information presented in this document always relates to results achieved and is not based on estimates, unless explicitly stated otherwise in this document. The environmental and energy statistics meet the guidelines set by the Dutch authorities. The social statistics have been prepared in accordance with the definitions adopted by the paper industry.

The consolidated financial statements, deposited at the Chamber of Commerce, were prepared in accordance with the statutory provision of Part 9, Book 2, of the Netherlands Civil Code and the firm pronouncements in the Guidelines for Annual Reporting in the Netherlands as issued by the Dutch Accounting Standards Board.

PROFIT

1 - PRODUCTION	UNIT	2020	2019	2018	2017	2016
Bleached pulp[1, 2, 3]	ton	115,251	122,068	132,432	145,867	148,670
Fillers[1, 4]	ton	43,333	44,065	45,013	51,376	50,440
Additives[1, 4]	ton	8,595	8,562	9,185	10,456	10,703
Complaints per 1,000 ton of sales	number	2.8	2.7	2.5	2.1	2.1

1. Consumed, as absolutely dry substance.
2. For additional information about certification schemes and regions of origin of bleached pulp grades see table 11.
3. Crown Van Gelder only uses virgin fibres and no secondary fibres, including sugar beet fibres.
4. Region of origin of all fillers and additives is Europe (mainly the Netherlands and Germany).



2 - CERTIFICATIONS	UNIT	2020	2019	2018	2017	2016
Certifications (see page 9)	number	7	7	7	7	7
External audits	days	13	12	10	13	12
Non conformities: Major	number	0	1	2	2	1
Non conformities: Minor	number	2	6	8	9	4
Observations	number	11	9	21	19	2
Opportunities for improvement	number	3	7	8	8	22
Shortcomings per certificate	number	2.3	3.8	5.6	5.4	4.3

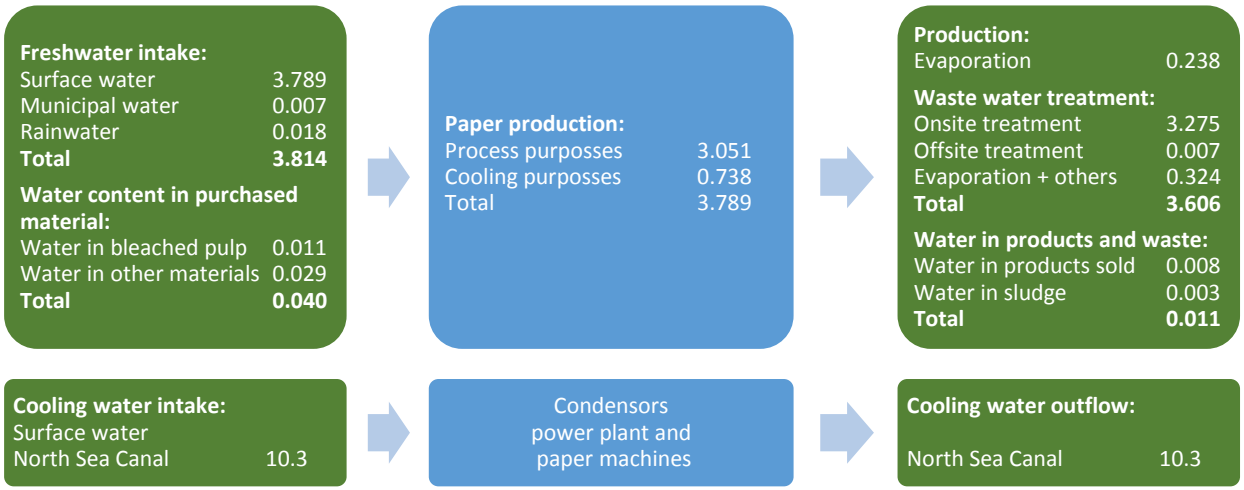
PLANET

3 - WATER	UNIT	2020	2019	2018	2017	2016
Fresh water intake	million m^3	3.79	3.71	3.50	3.45	3.55
Processed waste water	million m^3	3.27	3.23	3.09	2.99	3.11
Waste water per ton of paper	m^3/ton	22.9	20.8	18.1	15.0	15.2
Cooling water	million m^3	10.3	10.3	10.3	10.3	10.3
Water consumption[1]	million m^3	0.25	0.26	0.29	0.31	0.35
Water consumption per ton of paper[2]	m^3/ton	1.74	1.69	1.71	1.62	1.71

1. Water consumption equals water lost during manufacturing plus water in sold products and water in waste i.e. the portion of the water that is removed from a water source that is not immediately returned to the water source (see water profile).
2. Water consumption definition in accordance with the "blue water footprint" of the WFN .

4 - WATER PROFILE 2020

Total amount of water used during paper production at Crown Van Gelder all amounts in million m^3.

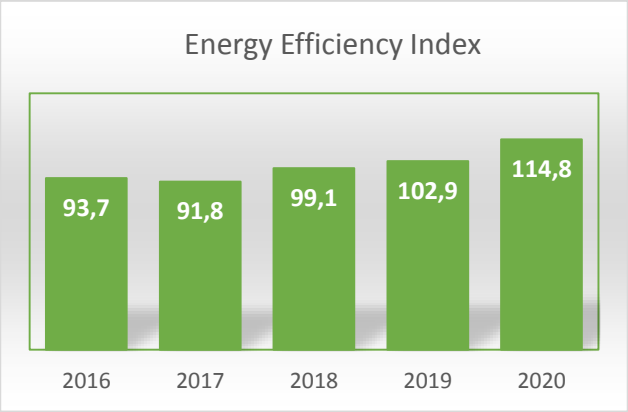


5 - DISCHARGE TO WATER	UNIT	2020	2019	2018	2017	2016
Processed waste water	million m^3	3.27	3.23	3.09	2.99	3.11
Suspended solids[1]	ton	60	55	53	54	54
COD [1]	ton	360	313	345	360	348
BOD_5 [1]	ton	69	55	68	72	62
Total Nitrogen [1]	ton	23	24	23	27	27
Total Phosphorus [1]	ton	4.6	4.5	4.1	4.2	4.0
Chlorides [1]	ton	409	442	369	404	407
Cadmium [2]	kg	0.0	0.0	0.0	0.0	0.0
Chromium [2]	kg	0.0	2.6	0	0	2
Copper [2]	kg	9	10	12	15	16
Mercury [2]	kg	0.0	0.0	0.0	0.0	0.1
Lead [2]	kg	0	0	9[3]	0	0
Nickel [2]	kg	0	0	0	4.8	0
Zinc [2]	kg	33	26	58	44	24

1. Annual emissions based on 24-hour sampling and analysis by Crown Van Gelder. The concentrations of suspended solids and COD in the effluent are measured daily, nitrogen once every three days on average and the remaining parameters are measured at least once a week.
2. In 2020 a total of twelve samples were tested.

6 - ENERGY	UNIT	2020	2019	2018	2017	2016
Natural gas	million m^3	66.7	70.2	70.6	77.3	79.3
Electricity						
• generated in-house	MWh	182,392	204,056	191,562	209,280	216,684
• purchased	MWh	1,229	617	1,113	648	305
• supplied to the grid[1]	MWh	60,051	75,121	69,427	80,271	77,471
• total consumption	MWh	123,570	129,552	123,248	129,657	139,518
Electricity consumption per ton of paper	kWh/ton	864	834	721	652	683
Energy Efficiency Index[2]		114.8	102.9	99.1	91.8	93.7

1. Supply is based on measurement at the combined heat and power plant.
2. The Energy Efficiency Index (EEI) is a measuring instrument of total energy consumption per ton of saleable paper produced. The EEI reported concerns the internal process improvements. In connection with Crown Van Gelder's participation in the Energy Efficiency Benchmarking Covenant, the reference year 2005 is set at 100. An EEI of less than 100 indicates improved energy efficiency of the internal processes. For further information about the EEI see page 4.



7 - EMISSIONS INTO AIR	UNIT	2020	2019	2018	2017	2016
CO_2 power generation[1]	kton	116	123	124	135	138
CO_2 process generation[2]	kton	3.5	3.1	3.0	3.1	3.0
CO [1]	ton	41	21	68	38	49
SO_2[3]	ton	0	0	0	0	0
NO_x						
· power generation[1]	ton	77.9	83.2	87.1	88.1	91.2
· process generation[4]	ton	0.4	0.3	0.3	0.3	0.3
· relative	g/GJ	38	38	39	37	37
Methane (CxHy)	ton	11.2	14.7	41.7	9.9	13.5
Nitrous oxide[5] (N_2O)	ton	0.8	5.2	5.2	3.4	7.3
Refrigerant R407C and 410a (HFK)[6]	kg	14.5	32.7	32.1	24.0	36.3

1. The concentrations of CO, CO_2 and NO_x and methane in the flue gases are measured twice a year. The total emission is calculated on the basis of the measurement results.
2. The emission of CO_2 originating from the natural gas consumption by the infrared dryers and thermal oil heater of the paper machines.
3. As natural gas contains no sulphur components, there are no measurable sulphur dioxide (SO_2) emissions.
4. The emission of NO_x originating from the oil heating system of soft calenders of the paper machines.
5. The emission of N_2O is measured since 2008, as part of greenhouse gases reporting.
6. The amount of cooling agents that had to be replaced due to leaks in air-cooling systems.

8 - WASTE PRODUCTS	UNIT	2020	2019	2018	2017	2016	DESTINATION
Primary sludge	ton	4,287	4,095	3,287	3,785	3,763	Dust prevention
Biological sludge	ton	713	733	907	954	1,093	Burning (energy)
Waste paper and board	ton	621	579	657	748	836	Recycling
Hazardous waste[1]	ton	84	97	131	74	83	Recycling/incineration
Steel	ton	355	346	444	395	408	Recycling
Non-ferrous metals	ton	22	3	11	7	22	Recycling
Other industrial waste	ton	181	141	171	245	283	Recycling/incineration

1. The definitions of the Eural codes are used for classifying waste streams as “hazardous”. These are among others: cleaning rags, batteries, fluorescent tubes, some coating waste streams, laboratory waste, toners and oil containing waste streams.

9 - REQUIREMENTS IPPC BEST AVAILABLE TECHNIQUES				
ENVIRONMENTAL ASPECT	UNIT	RESULT 2020	TARGET[1]	WITHIN TARGET
Biological Oxygen Demand (BOD)	mg/l waste water	21	25	Yes
Chemical Oxygen Demand (COD)	kg/ton paper	2.5	0.3-5	Yes
Total Suspended Solids (TSS)	kg/ton paper	0.42	0.1-1	Yes
Absorbable Organic Halogens (AOX)	kg/ton paper wet strength	0.22	< 0.05	No[3]
Total phosphorus in effluent	kg/ton paper	0.03	0.002-0.4	Yes
Total nitrogen in effluent	kg/ton paper	0.17	0.015-0.4	Yes
Effluent flow	m^3/ton paper	22.9	3.5-20.0	No[4]
Electricity consumption	MWh/ton paper	0.9	0.6-0.7	Not applicable[2]
Process heat requirement	GJ/ton paper	6.8	7.0-7.5	Not applicable[2]
Nitrogen oxides from combustion	mg/MJ	38.0	30-60	Yes

1. BREF Pulp and Paper Industry, 2015 (http://eippcb.jrc.ec.euroope.eu/reference/), speciality paper mill standards.
   For graphic paper mills, the upper end of the COD BAT-AEL range refers to mills manufacturing paper that use starch for the coating production process (like Crown Van Gelder), which may result in higher COD loads in the effluents.
2. In the BAT/BREF these targets are indicative only.
3. The AOX concentration levels are nevertheless a factor 10 below the mentioned set value of the water permit. Also there is no relation found between AOX and production volume of wet strength paper, AOX in kg/ton saleable papier is 0,002 kg/ton.
4. Because of lower production volume and leakages of cooling water, this target was not met in 2020. Crown Van Gelder expects to reach this target again in 2021.

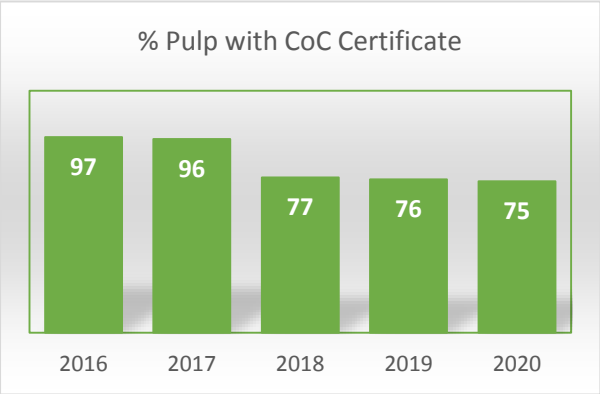
10 - ENVIRONMENTAL COSTS[1] (EUR X 1000)	2020	2019	2018	2017	2016
Tax on natural gas[2] and electricity consumption	177	169	153	135	135
Pollution tax on effluent	237	208	246	244	239
Cost of sludge disposal	189	185	186	177	180
Cost of disposal of other residual materials	-50	-132	-171	-167	-229
Cost of maintaining environmental installations	1,316	1,113	1,332	1,409	1,258
Costs, depreciation and interest involved in environmental installations[3]	491	645	755	573	528
Other environmental costs[4]	93	77	64	73	75
Total environmental costs	2,453	2,265	2,565	2,444	2,186

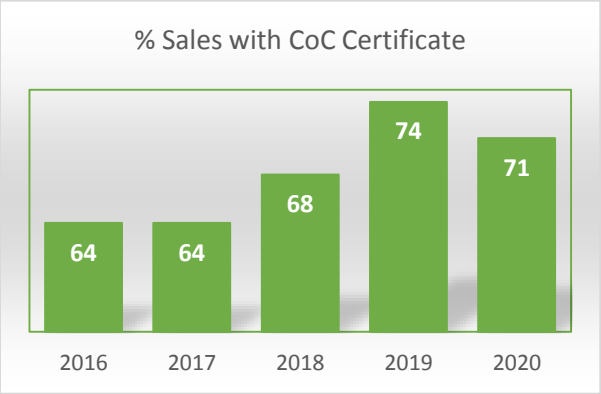
1. Crown Van Gelder regards the following items as environmental costs: taxes imposed by the Dutch government based on emissions, external advice and engineering activities related to environmental issues, expenditure on environmental installations (depreciation, interest and maintenance), external operating costs which include a considerable environmental component, such as the cost of discharging and treating hazardous waste and fines due to deviations of environmental limits or rules.
   No provisions are recognised in the balance sheet for future environmental costs (for instance, clean up of soil pollution).
2. The levy on natural gas only applies to natural gas usage by the infrared drying installations.
3. These installations were built primarily to meet environmental requirements, with the following aims: less pollution from emissions and waste products and protection of the environment outside the production site.
4. Excluding: hours spent by company staff whose primary responsibilities do not include environmental management and environmental expenses associated with procurement of services and materials and forming integral part of the purchase price.

11 - CERTIFICATION SCHEMES OF BLEACHED PULP GRADES

PULP GRADE	UNIT[1]	FSC CoC	PEFC CoC[3]	FSC CW[2]	TOTAL	REGIONS OF ORIGIN
Eucalyptus Globulus	ton		2,276	12,404	14,680	Europe
Eucalyptus Globulus	ton	35,179			35,179	Southern hemisphere
Eucalyptus Grandis	ton	26,613	858	2,503	29,974	Southern hemisphere
SBSK	ton			1,426	1,426	North America
NBSK	ton	3,260	16,321	12,115	31,696	Europe
NMHW	ton			443	443	Europe
Total	ton	65,052	19,455	28,891	113,398	
Percentage	%	57	17	24	100	

1 Delivered as absolute dry substance in 2020.
2 Controlled wood.
3 PEFC-CoC is also certified as FSC-CW.





12 - PERMITS AND COVENANTS

Crown Van Gelder has been granted permits in accordance with the following legislation:

- Environmental Management Act. Revised permit granted on 2 March 2020;
  - Notifications for Investment Multi-Year Plan II on 8 March 2004, LPG storage tank on 21 February 2005;
  - Notifications for new storage tanks for additives on 30 May 2005 and DLE gas turbine on 4 October 2005;
  - Notifications for replacements of gas burner for low NO_x type on 23 March 2006;
  - Official addition of articles in permit to comply with IPPC best available techniques principles on 2 December 2008
  - Notifications for new battery charging station on 20 December 2013
  - Notifications for new recycling system for paper losses on 19 December 2013
  - Notification for refurbishment CHD-plant on 2 June 2017
  - Notification for new soft calander paper machine 1on 9 October 2017
  - Notification for battery charging station AGV's on 8 January 2018

  In 2015 a new permit has been applied for. Due to delay with respect to that party this permit has not been released officially yet.
- Discharge of Treated Effluent to Surface Waters Act. Revised permit granted on 4 December 2012;
- Use and Disposal of Radioactive Substances Act. Revised permit granted on 5 February 2018 for small radioactive sources;
- Emission permit for CO_2 granted on 1 June 2005.

The following covenants are applicable:

- Energy Efficiency Agreement for ETS Companies (2009-2020)

13 - NOTIFICATION OF ENVIRONMENTAL INCIDENTS

DEVIATIONS REPORTED TO AUTHORITIES	UNIT	2020	2019	2018	2017	2016
Waste water discharge level	number	3	1	5	8	9
Other reports	number	0	1	1	1	5
ENVIRONMENTAL COMPLAINTS	UNIT	2020	2019	2018	2017	2016
Odour	number	0	0	0	0	0
Noise	number	1	3	1	0	1
Other	number	0	0	0	0	0

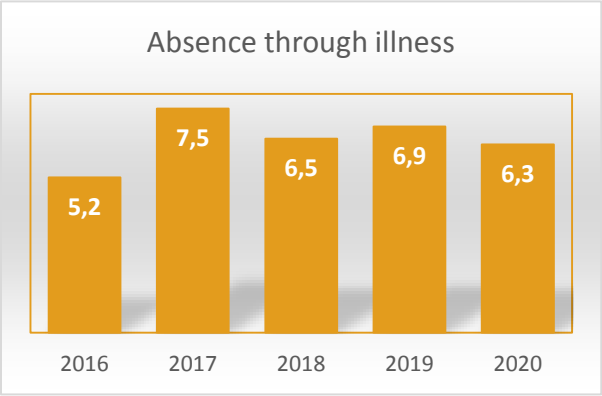
SUSTAINABILITY FACTS & FIGURES 2020

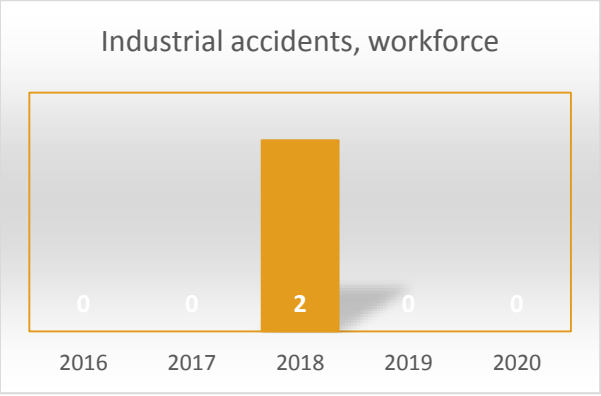
People Planet Profit

PEOPLE

14 - HEALTH & SAFETY[1]		UNIT	2020	2019	2018	2017	2016
Absence through illness[2]	CVG	%	6.3	6.9	6.5	7.5	5.2
Absence through illness[2]	VNP	%	5.8	5.6	6.2	5.2	5.1
Illness reporting frequency[3]	CVG	-	1.1	1.2	1.2	1.2	1.1
Illness reporting frequency[3]	VNP	-	1.0	1.1	1.2	1.1	1.1
Industrial accidents, workforce[4,5,8]	CVG	-	0	0	2	0	0
Industrial accidents, contractors[4,5,8]	CVG	-	0	2	0	0	0
Industrial accident rate, workforce[6]	CVG	/1,000	0	0	7.2	0	0
Industrial accident rate, workforce[6]	VNP	/1,000	10.8	10.2	9.0	9.1	7.4
Lost days per industrial accident[7]	CVG	days	0	0	55	0	0
Lost days per industrial accident[7]	VNP	days	37.6	32.8	20.9	23.0	37.0
Industrial accidents without absence[4]	CVG	-	9	16	20	18	17
Industrial incidents, workforce[9]	CVG	-	31	40	42	52	30
Unsafe situations[10]	CVG	-	72	30	45	58	43
Industrial incidents, contractors	CVG	-	2	7	7	12	1

1. All figures are based on the definitions set out in the Covenant on Working Conditions and Health & Safety of the Dutch paper and board industry. Dutch paper and board mills reported their figures to the Royal Netherlands Paper and Board Association (VNP).
2. Absence through illness is defined as that portion of labour capacity lost in any one year as a result of absence through illness, excluding partial reintegration.
3. Illness reporting frequency reflects the average number of illness reports per employee per year.
4. An industrial accident is defined as a work-related injury, with workers unable to perform either their usual duties or any alternative jobs. Counting starts on the working day following the day on which the worker first reported unfit for work.
   An industrial accident without absence is defined as a work-related injury, with workers able to perform their usual duties or any alternative jobs the following working day.
5. Workforce is defined as the total number of Crown Van Gelder employees. Contractors include supervised workers.
6. Industrial accident rate means the number of industrial accidents per 1,000 employees.
7. Counting of lost days begins on the day following the industrial accident. Days mean calendar days. A return to limited or alternative duties does not count as a lost day.
8. No fatalities occurred at Crown Van Gelder in the 2016-2020 reporting period.
9. An industrial incident is defined as a work-related injury (but not industrial accident, see 4) and/or material damage.
10. An unsafe situation is defined as an situation which has been reported, investigated and may have resulted in a work-related injury and/or material damage.





15 - BREAKDOWN OF WORKFORCE[1]	2020	2019	2018	2017	2016
Employees (average)	234	231	270	274	275
Of whom female	18	17	23	29	31
Full time equivalents (FTE)	230	225	266	269	270
Legally disabled young employees	5	5	6	6	4
Employees joining the company	32	41	25	22	15
Employees leaving the company	17	47	33	19	19
Staff turnover in %	7.0	20.0	11.0	6.9	6.9
Average age of employees[2]	48	47	48	49	47
Average number of service years[2]	17	17	19	18	17
Percentage of employees educated	NOT AVAILABLE	31	33	81	80

1. Almost all personnel are employed by Crown Van Gelder in the Netherlands. Four salesmen employed by Crown Van Gelder are stationed in Germany, France, United Kingdom and United States of America (boots on the ground).
2. At 31th December.

16 - SOCIAL ASPECTS	UNIT	2020	2019	2018	2017	2016
Sponsoring local[1]	euro	1,945	2,345	2,085	11,654	1,176
Sponsoring War Child[2]	euro	0	0	0	330	1,550

1. Crown Van Gelder sponsors activities in the IJmond for organisations where employees do volunteer work.
2. The yearly donations are excluding the value of the delivered paper for communication and money raising by War Child, in accordance with the sponsoring agreement between Crown Van Gelder and War Child.

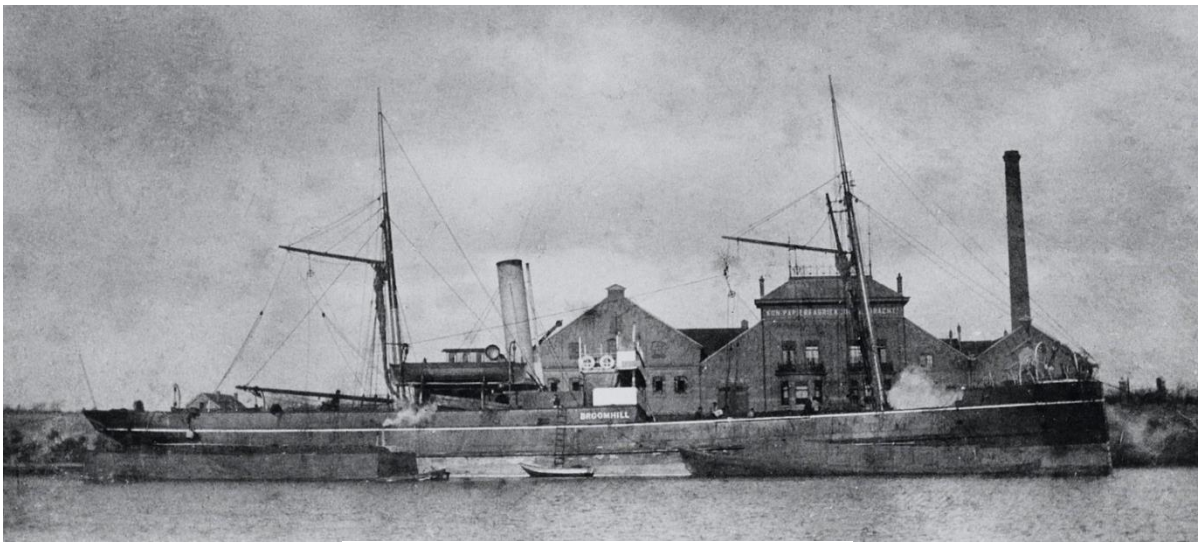
Our core values: value-driven, agile, connecting and integrity

17 - MEMBERSHIPS OF CROWN VAN GELDER

AWVN (FIB)	Dutch General Employers' Association
BeterBusiness	Local Company Plaform (Haarlem-IJmond)
BMI	Book Manufacturers' Institute
CEPI	Confederation of European Paper Industries
DNHK	Deutsche-Niederländische Handelskammer
Doxnet	The document X-perts network
EuroGraph	European Association of Graphic Paper Producers
FENEDEX	Federation of Dutch Export Companies
FIB	Foundation Fund Industrial Associations
IPN Global	The International Printers Network Limited
KCPK	Knowledge Centre for Paper and Board
KWA	Dutch Association for Quality, Health and Safety and Environmental Management systems
MyTec	Association Learning to Work in Technique (Stichting Leer Werken in de Techniek)
NBA (NIVRA)	The Netherlands Institute of Chartered Accountants
NEA	Dutch Emissions Authority
NEVI	Dutch Purchasing Association
NOVAGRAAF	International Patent and Trademark Consultancy
NVC	Dutch Association for Packaging
NVDO	Dutch Association for Efficient Maintenance
NVVK	Dutch Association for Safety
ORAM	Business Association Region Amsterdam
OV IJmond	Association for Companies IJmond
OVVN	Association for Companies Velsen-Noord
PEFC Nederland	Dutch Association for PEFC
RISI	Pulp and Paper Industry Intelligence
SMK	Dutch Association for Ecolabel
Techport	Industry and Education Platform in the Metropolis Region Amsterdam
VEMW	Dutch Federation of Non-Domestic Energy and Water Consumers
VNO-NCW	The Confederation of Netherlands Industry and Employers
VNP	Royal Netherlands' Paper and Board Association

18 – SPONSORING AND DONATIONS

War Child
Stichting Vrienden van Velsen-Noord
Stichting Papiergeschiedenis Zaanstreek
Stichting dierenambulance Kennemerland
IJmuider Stichting Zee- en Havenmuseum 'De Visserijschool'
Prinses Maxima Centrum
Sportvereniging Kampong Hockey



Paper Mill Van Gelder in 1896

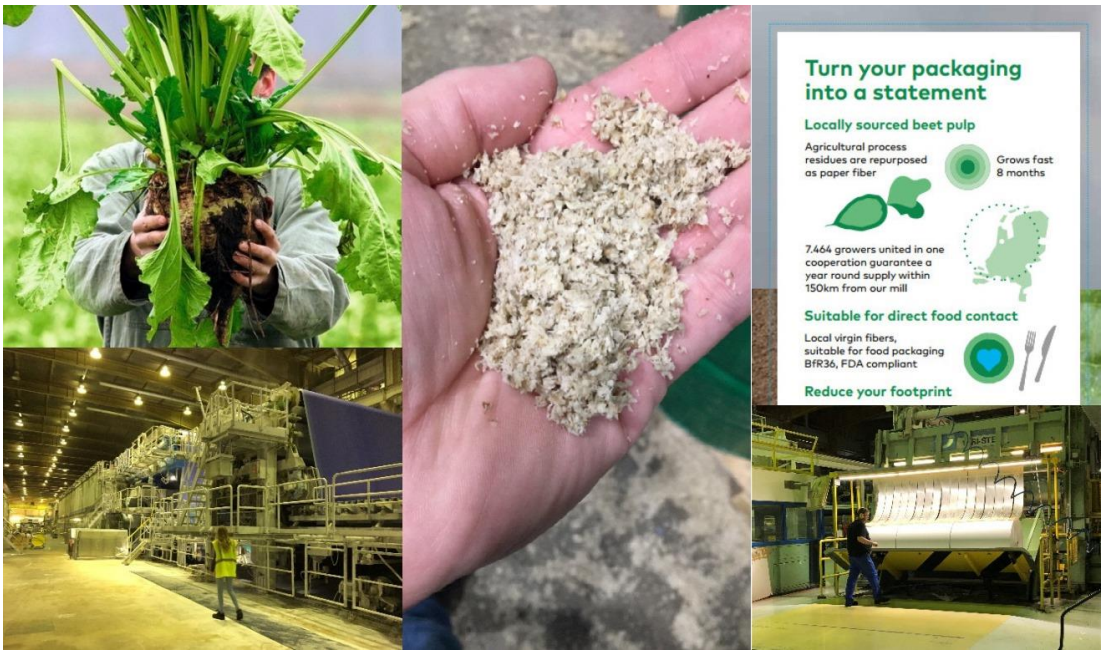
STAKEHOLDER CONSULTATION

The stakeholders of Crown Van Gelder include customers, shareholder, investors, employees, the local community, the government, and NGOs. A summary of stakeholder contacts and engagement methods in 2020 is presented in the table below. Contacts with relevant NGOs are maintained by the Dutch and European trade associations (the Royal Netherlands Paper and Board Association, VNP, and the Confederation of European Paper Industries, CEPI) Crown Van Gelder is represented in all of these organisations (see notes 1 and 2).
The third column lists the sustainability aspects which stakeholders regarded as important in 2020. On that basis, the Management Team defined actions to be included in the action plans for 2021, see fourth column.

STAKEHOLDER GROUP	STAKEHOLDER CONTACTS OR ENGAGEMENT METHODS IN 2020	SUSTAINABILITY ASPECTS IMPORTANT TO THIS STAKEHOLDER	ACTION SCHEME 2021
Customers	Customer visits (digital) or calls by sales and product managers and technologists	Customer satisfaction (complaints, service and new business development)	Decreasing number of complaints and further improve 'Boots on the ground'.
	Conducting customer satisfaction survey of key customers	Customer satisfaction, product quality and service	Making customer satisfaction subject of the customer service approach
	Audits done by customers concerning the quality control and chain of custody system	Hygiene, good housekeeping and chain responsibility Sustainable forestry	To make it possible for customers to audit specific processes at Crown Van Gelder To maintain the high level of purchased CoC certified pulp
	Stands and presence at international exhibitions Product development in cooperation with OEM's and customers	Voice of the customer	To intensify the contacts with OEM's to further promote our Crown Digital range and other new products
Shareholder and investors	Monthly meeting and continuous consultations with Andlinger & Company	Results ROCE Dividend policy Sustainable operations Corporate social responsibility reporting	To continue monthly meetings and continuous consultations with Andlinger & Company
Local Community	Meetings with the Velsen-Noord Local Platform	Noise and traffic safety Local sponsoring activities	To attend the monthly Local Platform meetings
Employees and unions	Biannual information meetings between Management Team and all employees at mill site Regular meetings of the Management Board with the Works Council and labour unions	Health and safety Training programmes Communication Competence development Sustainable employability	To promote safe behaviour as a spearhead in 2021 The four core values are included in regular employee assessments Improve sustainable employability
Governments and NGOs	Regular contact with provincial authorities and inspectors of Public Works and Water Management	Installations to be fully in compliance with IPPC requirements (BREF Pulp & Paper Industry)	To improve waste water treatment

STAKEHOLDER GROUP	STAKEHOLDER CONTACTS OR ENGAGEMENT METHODS IN 2020	SUSTAINABILITY ASPECTS IMPORTANT TO THIS STAKEHOLDER	ACTION SCHEME 2021
Governments and NGOs	Meetings with the Dutch government, represented by VNP	Increase energy efficiency (MEE covenant)	To improve energy efficiency by optimisation of the paper machines as described in the Energy Efficiency Plan
	Meetings with the EU government, represented by CEPI In November 2011 CEPI presented the 'Energy Roadmap 2050' to European Commissioner Hedegaard[3]	Climate change and energy efficiency Promotion of sustainable forestry and biodiversity Development of clean technology	To review the BREF Pulp & Paper together with the IPPC bureau in Sevilla To maintain the level of purchased CoC certified pulp
Suppliers	Regular contact with the representatives of our suppliers	Sustainable operations and chain responsibility	Corporate social responsibility is an issue within the supplier evaluation

1. VNP represents the interests of the Dutch paper and board industry in the Netherlands. Crown Van Gelder has a representative on the VNP Environment Committee and several employees in working groups.
2. CEPI represents the interests of the European paper and board industry in its dealings with EU institutions. Crown Van Gelder is represented in the CEPI Environment Committee.
3. The CEPI report 'Unfold the Future – 2050 Roadmap to a low-carbon bio economy' can be found on the website www.cepi.org.



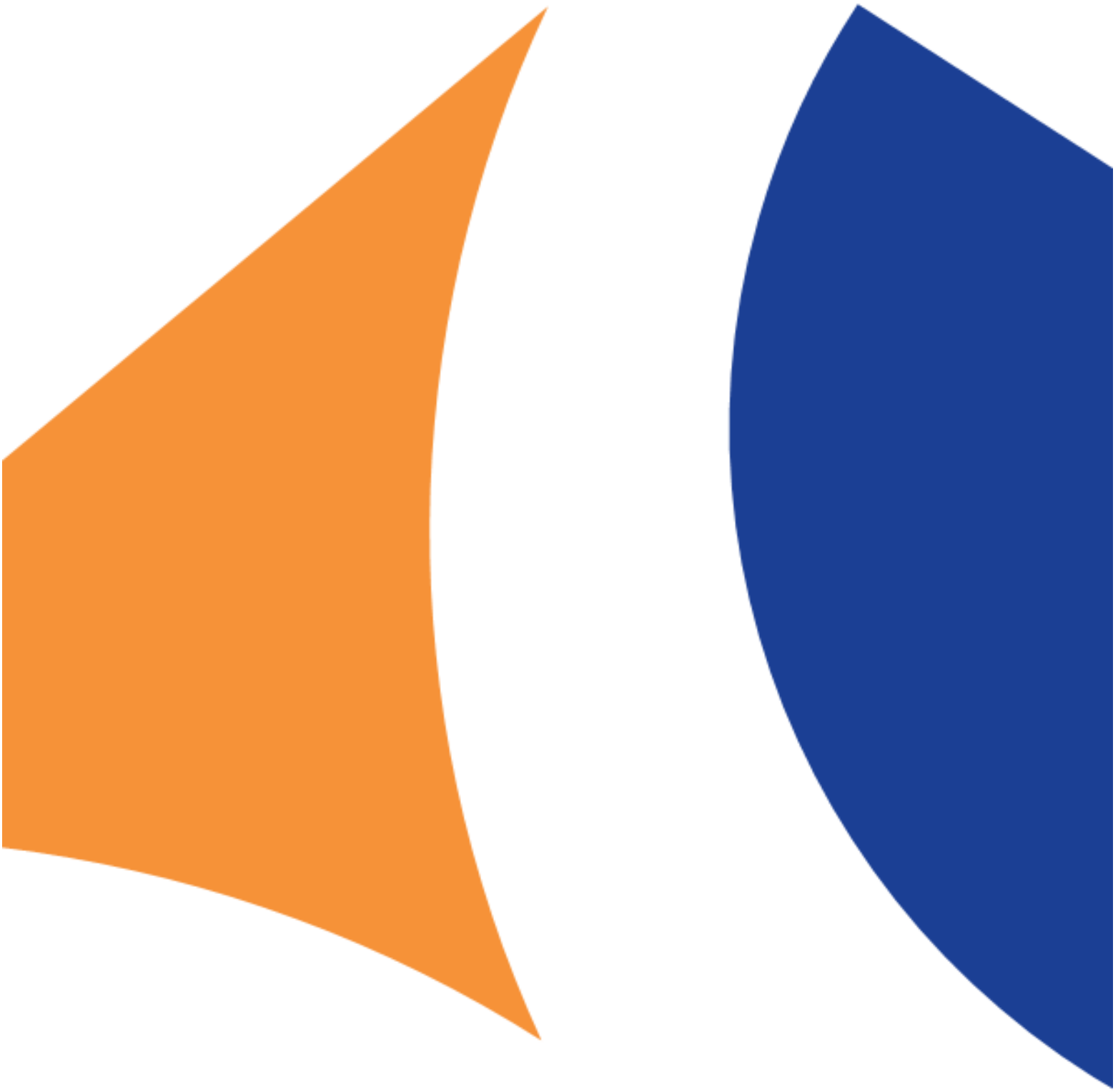
ABBREVIATIONS AND DEFINITIONS OF TERMS

BOD_5	Biochemical Oxygen Demand after 5 days
CO	Carbon monoxide
CO_2	Carbon dioxide
CoC	Chain of Custody
COD	Chemical Oxygen Demand
CSR	Corporate Social Responsibility
C_xH_y	Hydrocarbons
EEI	Energy Efficiency Index
EIA	Energy-Savings Investment Allowance
EU-Ecolabel	Environmental label according to EU Regulation 1980/2000
FSC	Forest Stewardship Council
FTE	Full time equivalents
GMP	Good Manufacturing Practice
IFRS	International Financial Reporting Standards
IPPC	Integrated Pollution Prevention and Control
ISO	International Standard Organisation
NBSK	Northern bleached softwood kraft
NGO	Non-governmental organisation
NO_x	Nitrogen oxides
OEE	Overall Equipment Effectiveness
OHSAS	Occupational Health and Safety Assessment Scheme
PEFC	Programme for the Endorsement of Forest Certification schemes
REACH	Registration, Evaluation and Authorisation of CHemicals (EU Regulation)
ROCE	Return On Capital Employed
SO_2	Sulphur dioxide
SOP	Standard Operating Procedure
WFU	Woodfree uncoated paper

For additional information about some figures also see several Tables.

Abbreviations of memberships of Crown Van Gelder see Table 17.

The paper machines of Crown Van Gelder



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