

## TECHNICAL DATA

### SNOWBRIGHT

<b>Parameter</b>	<b>Value</b>	<b>Tolerance</b>	<b>Comment</b>
Basis Weight	55 to 90 g/m <sup>2</sup>	+/- 4 g/m <sup>2</sup>	As specified by Customer
Bulk / Volume	1.6 / 16 to 2.3 / 23		55 gsm starts at Bulk 1.8
Caliper	99 to 180 micron	+/- 3 micron	180 micron maximum
Brightness	75 iso	+/- 0.75	
Shade	9 (Cream)	+/- 0.5	As specified by customer
Opacity	85 to 94	+/- 1	Dependant on grammage/caliper
Moisture	8%	+/- 0.5	
Tear	275 to 450 Nm	+/- 0.4	
Tensile	2.75 to 4.50 kN/m	+/- 0.4	
Main furnish	85 to 90% mechanical groundwood		Produced from Norwegian Spruce
Secondary furnish	10 to 15% Cellulose (Spruce)		Purchased from Rottneros, Sweden
Wrapping	Kraft wrappers		2 layers
Cores	76mm strawboard		152mm cores on request
Joins	Maximum 2 joins per reel		Marked by red line on reel
Reel Diameter	1000mm or 1150mm		As specified by customer
Accreditation	FSC	Mix Credit NC-COC-016937	FSC Paper on request

All paper supplied according to the General Trade Rules for the supply of paper and paperboard.

Should Technical Data be required for a specific grammage / caliper combination these can be provided upon request.

# HELLEFOSS PAPER AS CARBON FOOTPRINT

Product Book paper  
Site Hellefoss Paper AS

Responsible person email [pch@hellefoss.no](mailto:pch@hellefoss.no)  
Periode of data 2023

## General Hellefoss Paper AS Carbon Footprint Information

Hellefoss Paper AS calculates the Carbon Footprint of its paper products based on the CEPIPRINT and CEPIFINE's user guide to the carbon footprint. (ref). The user guide is based on the Framework for the Development of Carbon Footprints for Paper and Board Products published by CEPI (the Confederation of European Paper Industries) in September 2007 (ref). The forest based industry has a unique position with regard to climate change. The raw material is renewable, the products are highly recyclable and both raw materials and products store carbon. Sustainably managed forests will absorb the carbon dioxide from the combustion of forest based material. At the end of their life cycle the products can be used to produce bioenergy, which is neutral with regard to climate change.

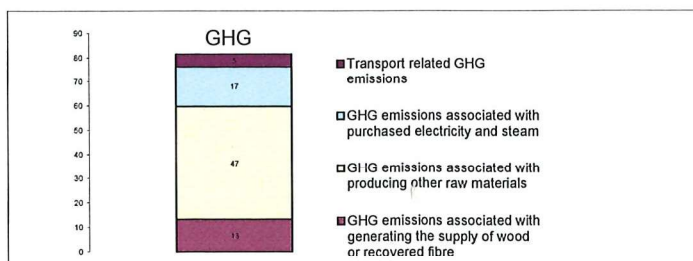
The data used in these calculations is based on annual averages for a paper machine line. The results are measured in units of carbon dioxide equivalents (CO<sub>2</sub>e).

## Hellefoss Paper AS Specific Carbon Footprint Information

The mill is located in Hokksund, Norway.  
Electricity consumption 19MW/Hour  
Production capacity 50000 tonn

## CEPI Carbon Footprinting Elements

	Fossil CO2 (kg/tonne of paper)	Biogenic CO2 (kg/tonne of paper)
<b>1. Carbon sequestration in forests</b> In line with the CEPI framework carbon sequestration is currently not included in product level carbon footprint calculations. Forest certification and Chain of custody systems assure that forests are managed sustainably and that the carbon sequestration capacity of the forest is maintained or increased.		N/A
<b>2. Carbon stored in the product</b> Biogenic carbon is stored in wood based products. Through paper recycling the carbon stored in products is retained in the paper cycle.		1615
<b>3. GHG from forest product manufacturing facilities</b> Emissions from combustion of fossil fuels at pulp and paper manufacturing facilities including emissions related to purchased pulp.	13	
<b>4. GHG emissions associated with generating the supply of wood or recovered fibre</b> For wood fibre this includes emissions from forest management and harvesting activities. For recovered fibres this includes emissions from the collection, sorting and processing of recovered fibre.	13	
<b>5. GHG emissions associated with producing other raw materials</b> Includes emissions generated during manufacturing of non-wood based raw materials and fuels.	47	
<b>6. GHG emissions associated with purchased electricity and steam</b> Includes emissions associated with purchased electricity, steam and heat used in the production process, including emissions related to production of purchased pulp.	17	
<b>7. Transport related GHG emissions</b> Includes emissions from all in- and outbound transport along the value chain except transport to customers which is calculated case by case.	5	
<b>8. GHG emissions associated with product use</b> This element is not included within our scope as paper producer.	N/A	
<b>9. Emissions associated with product end-of-life</b> This element is not included within our scope as paper producer.	N/A	
<b>10. Avoided emissions</b> This element is currently not included in our scope.	N/A	
<b>TOTAL</b>	<b>95</b>	





# Hellefoss Paper AS

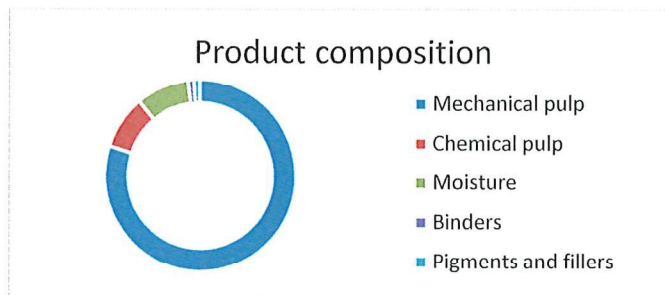
## PAPER ENVIRONMENT 2023



**Located in Hokksund by the Drammen river since 1898.**

Capacity 50.000 tonnes/year of Uncoated Mechanical Book Paper

Mechanical pulp	80
Chemical pulp	9
Moisture	9
Binders	1
Pigments and fillers	1



**Electricity KWh/net ton production - 3300**

**Environmental parameters air 2023: 4966 tCO2 -**

Hellefoss Paper AS has 100 percent usage of green hydro-electric power from 2 on-site waterfalls.

Hellefoss Paper AS products are produced from Spruce growing within a radius of 55km from the factory and the timber transport that follows the EU6 standard for engines is giving us very low CO2 footprint.

All internal handling of goods is done by non-fossil fuel transportation (paper reels, timber, etc.).

Hellefoss Paper AS is transporting all its finished products to the end customers in Europe by trucks sent to Norway delivering other goods, therefore, using already existing capacity.

Hellefoss Paper AS is located on the banks of one of Norway's best Salmon rivers.

Hellefoss Paper AS is certified by Nepcon and is meeting the standards of FSC.

Hellefoss Paper AS is certified with PEFC.

Hellefoss Paper AS is certified with all its grades of book paper in Cradle to Cradle environmental system.

Hellefoss Paper AS grades do not contain any Substances of Very High Concern (SVHC) as defined by REACH regulation of (EC No 23/01/2024).

For more information regarding our products, go to [www.hellefoss.com](http://www.hellefoss.com)





## Paper environment 2023

40000tonn

### Environmental management

ISO 14001	Unit	No
FSC		2006
Cradle to Cradle		March/21
EMAS		No
Wood for mechanical pulp	fm <sup>3</sup> /ton	2,45

### Paper composition

Mechanical pulp	%	80
Chemical pulp	%	9
Moisture	%	9
Pigments and fillers	%	1
Other addatives	%	1

### Environmental parameters

#### Water

COD	kg/ton	34
AOX	kg/ton	< 0,21
N tot	kg/ton	0,22
P tot	kg/ton	0,013

#### Air

SO <sub>2</sub>	kg/ton	0,02
Nox	kg/ton	0,41
CO <sub>2</sub> (fossil)	kg/ton	17,5

### Solid waste landfilled

BDkg/ton 3,1

### Purchased electricity consumption

Spec-energy kWh/ton 3300