



ENVIRONMENTAL DECLARATION

INVERCOTE![®]

2017

Environmental Declaration 2017

Based on data from the period 2017-01-01 to 2017-12-31

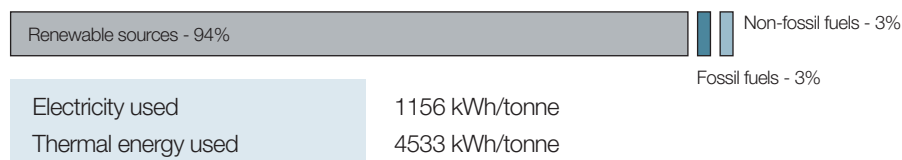
Product:	Invercote family, 180-770 gm ²
Site and company:	Iggesunds Bruk and Iggesund Paperboard
Paper type:	Solid bleached board, virgin fibre

Product composition

Sulphate pulp	77-90 % of which 100 % produced at the site
Coatings	10-23 % of which 0 % produced at the site

Sourcing of energy

Internal and procured fuels used for production of process steam and cogeneration of electricity at the site.



Environmental load

Production site process water use, waste water discharges, atmospheric emissions and solid waste per tonne products in year 2017 (total environmental load of the production of pulp and board produced at the site divided with total production of board and market pulp).

Emissions to water

COD	12 kg/t
AOX	0,12 kg/t
Nitrogen	0,13 kg/t
Phosphorus	0,01 kg/t
Process waste water	65 m ³ /t

Emissions to air

SO ₂ (total)	0,08 kg/t
NO _x	1,54 kg/t
CO ₂ (from fossil sources)	61 kg/t

Waste to landfill

3,65 kg/t

Handling after use of the product and its packaging

Product and packaging recoverable as a material or energy resource. Invercote is intrinsically biodegradable. For quantification regarding composting test should be made on the final packaging after the converting process (EN 13432:2000)

Environmental management

Certified environmental management system according to SS-EN ISO 14001.

Other relevant information: Certified energy management system according to SS 62 77 50 since 2005 and upgraded to ISO 50001 in 2011.

Product composition

Chemical pulp (ECF) ensures that the product has a good hygienic standard as well as taint and odour neutrality. Chemical pulp is produced in an energy-efficient process that makes use of all parts of the log. All pulp used in Invercote is made on site at Iggesund. The coating consists of clay, calcium carbonate and a binding agent in various combinations depending on the end product's properties and intended uses.

Sourcing of energy

Both thermal and electrical energy are used in paperboard manufacture. More than 95% of the thermal energy – the steam – that powers the mill is produced from biofuel. The electricity purchased by the mill supplies 10% of the mill's total energy requirements. The mill is planning to eliminate all fossil carbon dioxide emissions and to become self sufficient on electricity.

Emissions to water

Iggesund Mill is situated on the shores of the Baltic Sea, which is classified as a highly sensitive marine ecosystem. The mill complies with the emissions levels set for it by the Swedish environmental authorities by continually measuring discharged water at about 20 test points. Iggesund constantly monitors the conditions of the marine ecosystems around the mill to ensure that their balance is not disturbed.

COD

Chemical oxygen demand is a measurement of the amount of oxygen consumed in the decomposition of organic compounds. The presence of organic by-products such as bark and wood chips gives rise to a COD value. The Swedish environmental authorities set emission levels based on COD to be acceptable to the local conditions and the marine environment adjacent to the mill.

AOX

Adsorbable organic halogen is formed in the pulp making process. High levels of AOX negatively affect marine organisms. Here, too, limits are set to be acceptable to local conditions and the marine environment adjacent to the mill.

Nitrogen and phosphorus

Nitrogen and phosphorus are elements that when present in large amounts contribute to the overfertilisation (eutrophication) of marine environments.

Process water discharge

The Iggesund mill is geographically located in an area of abundant water supply and there is no shortage of availability. All process water is re-circulated and re-used within the process a number of times. Before final

discharge to the receiving water, process water is treated in three steps which includes mechanical, biological and chemical treatment, a combination of treatment technologies considered as Best Available Technology.

Emissions to air - SO₂ and NO_x

These normally arise from combustion processes used in the production of energy. They contribute to eutrophication, acidification and the creation of ground-level ozone. All emissions are regulated and monitored by the Swedish licensing authorities.

CO₂ (from fossil sources)

Carbon dioxide is an invisible gas that occurs naturally but its increased emissions from fossil fuel use are contributing to global climate change. This figure indicates the emission of fossil CO₂ from the production of Invercote. The figure should not be confused with the far broader concept of carbon footprint, which encompasses much of the product's lifecycle. For information about Invercote's carbon footprint please contact an Iggesund representative in your market or visit www.iggesund.com.

Waste to landfill

Sending waste to landfill creates an unsustainable stress on local landfill facilities and is a growing environmental problem. In the production of Invercote we have systematically reduced our process waste with a very small balance coming from other mill activities where this waste cannot be reused or recycled. As a result, the Iggesund Mill has been deregistered from waste tax by the Swedish authorities.

Land use / land use change

The wood raw material for the Invercote product is sourced from forest lands that are replanted with new trees in order for it to stay forest. The production of Invercote is to no extent contributing to land use change in terms of deforestation.

Water supply

All water used for the manufacturing of Invercote is sourced from the nearby lake Pappersavan. The water used is surface water and not drinking water (ground water). After usage in the manufacturing process the water is cleaned and let out into the sea near to where lake Papperavan via the connecting stream Iggesundån has its outlet into the sea.

Certifications

Mill's environmental certificates: FSC® TUEV-COC-000232 (Logo license: FSC-C110018)
 PEFC™ SP-COC-2778-PEFC (Logo license: 2778)
 ISO 14001 SP-2778 M

<https://www.iggesund.com/en/sustainability/our-certificates/>

Methods

Certification scheme

FSC® Volume credit system
 PEFC™ Volume credit method

Method

All FSC certified deliveries contain 100 % certified fibre
 All PEFC certified deliveries contain 100 % certified fibre

Wood supply

All wood used at Iggesund Mill is either certified in accordance with FSC or PEFC or meets FSC requirements for controlled wood. Invercote can be supplied certified in accordance with FSC or PEFC.

Wood sourcing information, Iggesunds bruk 2017

Type of wood	Country of origin	%	Procurement region	Species	Forest owners	Certificates
Softwood	Sweden	82	Central Sweden	Pinus silvesteris Pinus contorta Picea abies	Forest companies and private owners	DNV-COC-000004 DNV-CW-000004 2003-SKM-PEFC-006
	Baltic area	17	Estonia, Latvia	Pinus silvesteris	State forests and private owners	DNV-CW-000004
	Norway	1	South and West part of Norway	Pinus silvesteris	State forests and private owners	DNV-CW-000004
Hardwood	Sweden	94	Central Sweden	Betula spp Alnus spp	Forest companies and private owners	DNV-COC-000004 DNV-CW-000004 2003-SKM- PEFC-006
	Baltic area	6	Estonia, Latvia	Betula spp Alnus spp	State forests and private owners	DNV-CW-000004

All pulp for the Invercote production is produced internally within the Iggesund Mill. All wood procurement for the production of Invercote is handled by Holmen Skog, a sister company in the Holmen Group. The certificates given in the table above belong to Holmen Skog.

Contact information

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