

# SUSTAINABILITY REPORT 2023



**BOLON**

# Contents

The name of this report has been changed to match the report period 2023, not the year of publishing (2024).  
Edited 18.11.2024

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About Bolon	3
A word from our CEO	4
Summary	5
Our sustainability journey	6
Goals and corporate governance	7
Climate	10
Circularity	15
Health and the environment	19
Production	22
Social responsibility	27
Certification and regulations	30
Appendix	32



## About Bolon

Bolon is a world-leading design company that challenges conventions in a traditional industry. A third-generation family business that started with a bold idea: to produce woven rugs from recycled material. 75 years later, we are still driven by innovation, passion and a strong will to explore new design dimensions. We are always moving forward, to improve, to surprise and to create new and unexpected designs.

We are passionate. The ones that follow our hearts. The ones that never stand still. We are dreamers and doers. Humble but confident. We are found all over the world, but we are always down to earth. We believe in creating new dimensions, by challenging conventions and breaking barriers.

Designing fantastic experiences is our passion. And we do everything to keep breaking new ground. This

is why we will continue to deliver beautifully woven designs with the ambition of creating more attractive environments. We are Bolon and we are innovators.

People walk on our floors every day, in countries all over the world. As much as 92% of our production is exported and we are present in no fewer than 61 markets. In 2023, our largest markets were the USA, France, Sweden, Germany and Finland. Last year, we posted a turnover of 314 million Swedish krona (SEK). Like previous years, this further strengthened our position as a leading, global design brand that produces and markets flooring.

TURNOVER (SEK)	<b>314M</b>
MARKETS	<b>61</b>
EMPLOYEES	<b>98</b>

## A word from our CEO

For over 20 years, we have reduced the environmental impact of our floors step by step. We are proud that our sustainability work covers all our products and not just selected niche collections. Because we know that recycled material is the solution for both climate and circularity.

Bolon is a brave company that dares to stand out. We invest in the right expertise to push both Bolon and recycling in the design industry forward. In 2023, we have focused on sustainable innovation, and I am proudly looking forward to 2024 when we implement the results of this year's hard work.

In just a few years, we have significantly increased the amount of recycled materials by doing what we have always done - recognising the potential of recycled materials, and we still have the most premium design flooring on the market.

As innovators, we continue our ambitious work towards our vision: to thrill the world with brave innovation for a sustainable design experience!

Marie Eklund  
CEO, Bolon



# Summary

## CIRCULARITY

- All our products contain recycled material
- On average, 48% recycled material is used in our products

## CLIMATE

- Our production is carbon neutral
- We use 100% renewable energy in all our production

## NO HAZARDOUS SUBSTANCES

- All products are free of phthalates
- All products are free of heavy metals
- All products meet the toughest requirements regarding emissions during use

## SUPPLY CHAIN

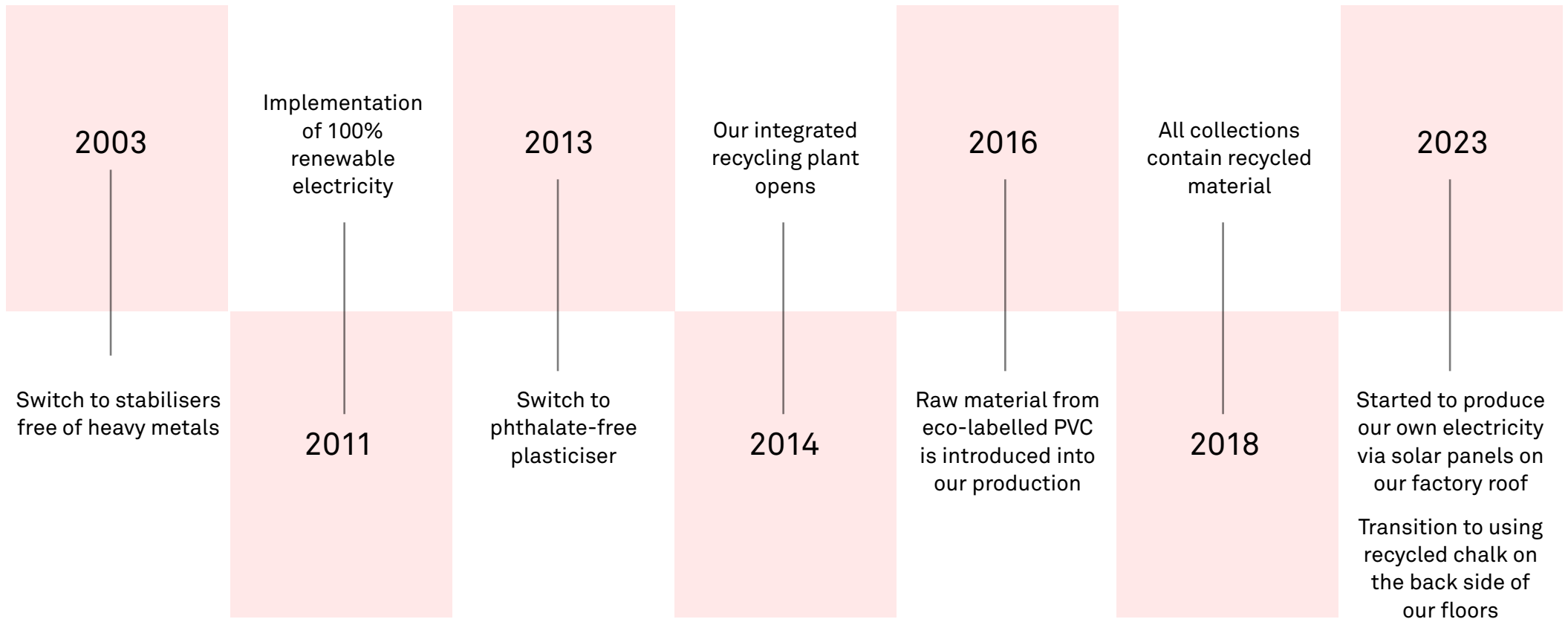
- 100% of our products are made in Sweden
- 99% of all raw materials come from within the EU
- 77% of material comes from Swedish suppliers
- 100% of PVC raw material comes from eco-labelled production

## SOCIAL RESPONSIBILITY

- All employees have health care and other social benefits
- All employees can organize themselves into a union - without any restrictions
- All employees are covered by a collective agreement
- We are an equal opportunities employer. Today, 44% of our employees are women and 67% of managers are women.

# OUR SUSTAINABILITY JOURNEY

## 2003 – 2023





## Goals and corporate governance

We have analysed how we affect our surroundings and how our surroundings affect our business. Above all, we have focused on climate and circularity. Within these areas, we have established a goal to guide us. We call it “our promise”. We have worked on the areas that relate to health and the environment longer and with a clear purpose to remove harmful additives.

In several of our important markets, the interest in and demands for sustainability have increased. So, it is important for us to be transparent, to account for the environmental impact of our products and back this up with different third-party certifications. This will allow us to clearly show how we work continuously to reduce our environmental impact.

Our vision is to offer products that are part of circular material flows, are safe for humans and nature, and have zero climate impact.

Based on our vision, we have formulated the following measurable goal: by 2028 at the latest, all our floors will be 50% circular and we will reduce our current climate footprint by 50%. To control and guide our sustainability work, we have defined and set key targets that are measured monthly and followed up annually.

Today, our floors are free from hazardous substances and have very low emissions over their entire lifespan. We maintain this through careful controls of all types of raw materials and follow-up controls throughout production.

Our goals are integrated into our working day – from research and development to production and sales. Our sustainability goals and the work required to reach them are regularly on the agenda at our management group meetings.

Our journey towards increased sustainability is all about improving our floors and rugs step by step. We have deliberately chosen not to have a special “green collection”. Instead, all our floors will be characterised by the same high levels of performance when it comes to sustainability.

We have received clear signals from many markets that sustainability is of great importance. And above all, there is a strong focus on climate impact and circular products. This means that with our investment in sustainability, we see great potential in being able to strengthen our position in the market – while at the same time reducing the environmental impact of our floors.

We have set up a quality control system to ensure that our sustainability work is properly implemented and develops in the right direction.

**This system consists of three parts:**

- i. Policy – vision and strategy**
- ii. Governance**
- iii. Documentation**

Our policy is based on completed risk analyses relating to business opportunities within sustainability. The policy consists of vision, scope and goals for sustainability work.

Governance describes how all parts of our company can drive our sustainability work and ensure that it is carried out successfully.

Documentation takes place at all levels – from steering group protocols to individual data collected.





## BOLON'S SUSTAINABILITY MANAGEMENT

### **Steering group for sustainability**

This group consists of the CEO, Chairman of the Board, owner, production manager and the head of sustainability. The steering group meets once a quarter to evaluate and make decisions that drive our sustainability work forward. All work is based on the vision and strategy outlined in our sustainability policy.

### **Sustainability department**

This department is responsible for analysing, organising and conducting environmental work within our operations. The sustainability department follows defined monthly goals and ensures the documentation of important data and key figures. Everything is documented in the company's system and reported regularly to the management team.

This department is also responsible for following up with suppliers regarding sustainability requirements and mapping of risks in the supply chain.

### **Production**

Our production must live up to local authority requirements. We have quality control managers within production who are responsible for ensuring that these requirements are met and that all materials are handled correctly. All environmental data from our production is reported in the sustainability department's system and then documented.

### **Product compliance**

Our products are subject to regulatory requirements as well as requirements that we have imposed on ourselves

through different certifications and declarations. When it comes to product compliance, we have appointed a certification expert and a steering group for the development and follow-up of different certifications.

### **Sales and marketing**

Based on facts and information provided by the sustainability department, we create credible marketing communication that regularly refers to standards and reliable sources. Prior to product launches where sustainability is included in the communication, all marketing material is reviewed to ensure that it meets the requirements for valid sustainability communication.



## Climate

The climate issue is currently at the top of the sustainability agenda. At the UN climate summit in Paris 2015, world leaders voted to achieve net zero emissions of greenhouse gases by 2050. For this goal to become reality, we need to be halfway there by as early as 2030 – and everyone must play their part. At Bolon, we are pro-active and want to halve climate emissions throughout our entire value chain by as early as 2028 – from raw materials to after use.

**The climate footprint of our floors**

More and more markets want to know the climate footprint of our floors. The climate footprint is calculated through an Environmental Product Declaration (EPD) certified by a third-party. These standardised and certified declarations determine the environmental impact of a product throughout the entire value chain. We produced our first EPDs in 2016 and they were updated in 2021. The climate footprint according to the EPD-standard is available for all our floors on the market.

Since 2022, Boverket – the Swedish National Board of Housing, Building and Planning – has made it mandatory for all building products to have EPDs. Building certifications including EPDs provide benefits, including the LEED environmental certification system (Leadership in Energy and Environmental Design) which encourages the use of construction products with information regarding their lifecycle. The same applies for BREEAM (BRE Environmental Assessment Method), which is also a

certification system designed to assess a building’s environmental performance.

**Recycling vs. climate impact**

There is a strong link between recycled materials and climate impact. With every kilogram of recycled material, we can reduce our climate impact by up to 2 kilograms of carbon dioxide. We will continue to increase the amount of recycled raw material used in our products to further reduce our climate impact.

Between 2018 and 2023 we have reduced our annual climate impact by 3,890 tonnes, primarily by increasing the amount of recycled material in our products. When it comes to our climate impact, the most challenging part to reduce is that which occurs after manufacturing – such as deliveries to our customers, installation, impact during use and the disposal of used floors. This accounted for 55% of our total climate emissions during 2023.

Fig. 1

**Total CO<sub>2</sub> emissions of the whole supply chain**

**Note:** According to EPD standard.





## MEASURES TAKEN IN 2023 TO REDUCE OUR CLIMATE IMPACT

During 2023, we have actively worked to develop, test and evaluate recycled and BIO-based materials to further reduce our climate impact. These new material solutions will be used in production during Q1 2024.

We replace all fossil-based PVC on the back side of our floors with recycled PVC. This results in a negative climate impact.

We replace all fossil-based PVC used in the weave of our floors with BIO-sourced PVC, which also contributes to a negative carbon footprint.

We produce new renewable energy through the solar panels on our factory roof. This too results in a negative climate impact.

These measures have a major effect on the climate impact of our floors in terms of materials and manufacturing. We still use various additives that cause a certain amount of climate impact, but thanks to our investments in the solutions mentioned above, we will achieve climate neutral floors during 2024.



**Our journey towards our climate goal**

We have decided to index our climate emissions and have chosen 2018 as a base year with the goal of halving emissions by 2028. In the graph on the right, there is also a turnover index based on 2018. Here, you can see how our climate impact has changed between 2018 and 2023.

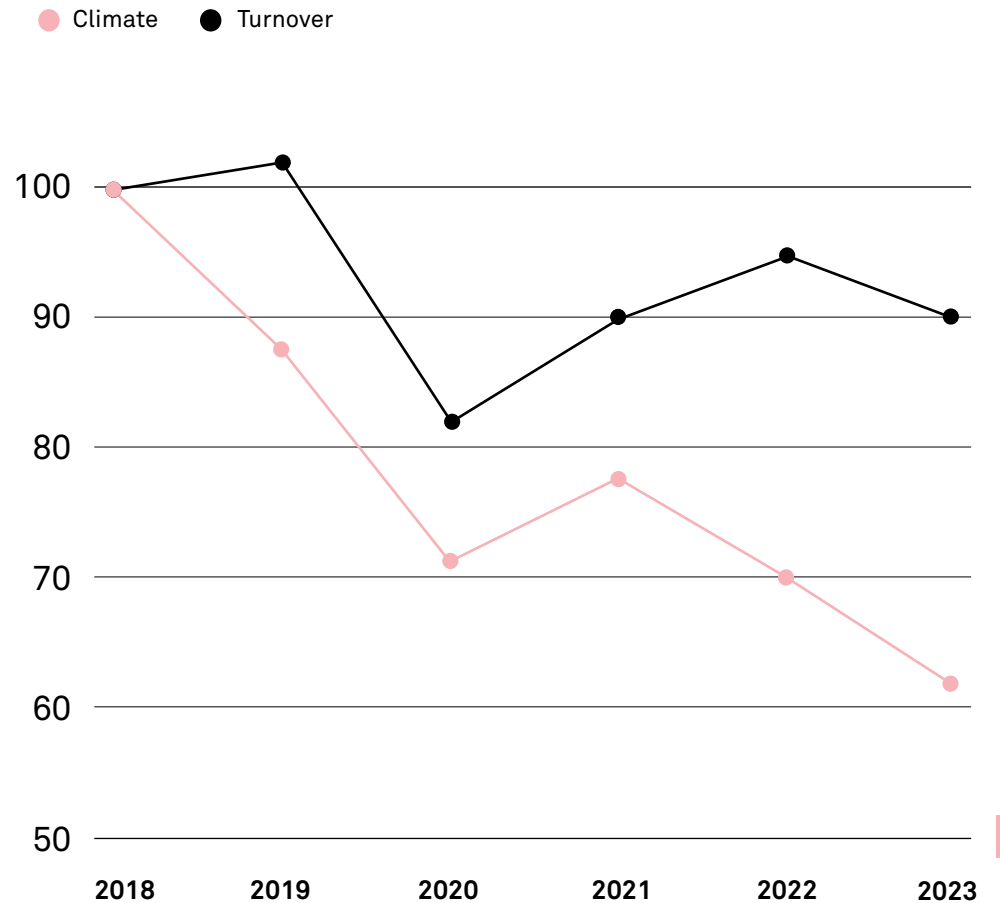
Overall, we have reduced our climate impact by 37% from 2018 to 2023. This means that we are already

close to halving our climate impact compared with 2018.

We have chosen to compare our climate impact with our turnover. This gives us the opportunity to see how we can continue increasing sales whilst reducing our climate impact. This is represented in kilos of carbon dioxide per Swedish krona of turnover – a measurement that strengthens the picture of our growth as something independent from our emissions.

Fig. 2

**Climate index vs turnover index**





# 30 %

The total reduction per krona of turnover between 2018 and 2023

Fig. 3

Kg CO<sub>2</sub> per krona of turnover

YEAR	KG CO <sub>2</sub> / SEK
2018	0.030
2019	0.025
2020	0.026
2021	0.026
2022	0.022
2023	0.021

Viewed from an economic perspective based on the amount of carbon dioxide emissions per Swedish krona of turnover, we can see a clear reduction compared with 2018. The total reduction is 30%.

# Circularity

There is a growing interest in the circular economy and circular flows. Countries and regions such as the EU are focused on reducing waste by driving the development towards circular material flows. The same trend can be found among our customers in different markets. There is also a clear link between material flows and climate impact where circularity becomes part of the solution to the climate crisis. Basically, it's a matter of managing the development from linear material streams – which always lead to large amounts of waste – towards circular flows and zero waste, where used floor materials are taken care of and become new resources. We began strategically investing in circular

flooring as early as 2014, by building our own recycling plant that is directly connected to our factory.

We are actively working on moving from the linear to the circular. We look for and collect increasing amounts of waste for use as new raw materials. We are also developing new opportunities to take back our own used floors in order to reuse them as material in new floors. Taking back our used floors presents a real business challenge – partly as we need to develop systems for collection, and partly because our floors have a long life cycle and come with a 10–15-year guarantee. Our strength is that we already have our own operational recycling plant.

To speed up our sustainability journey, we have already started taking back laid floors.

In 2020, we reached an important milestone by including recycled material in all our products and collections. Instead of having certain “green floors,” we have simply decided that all our floors will include the same high levels of performance when it comes to sustainability. The volume of recycled material we use is steadily increasing and so is the environmental benefit to which our operations contribute. We see this as something unique. Whichever floors our customers choose, they are making an environmentally sound choice.

## RECYCLED MATERIAL

During 2023, we developed our recycling strategy. This has resulted in us receiving an increased amount of recycled material. We started in 2014 by recycling our own production waste instead of incinerating it, which helped save resources and reduce our climate impact. Our next step was to buy production waste from other factories. This waste is processed in our recycling plant and used in the back side of new floors.

In 2023, in collaboration with our raw material suppliers, we started the transition to recycled raw materials. This type of raw material is purchased from our suppliers and then processed into the material we need. This approach has enabled us to greatly reduce the amount

of virgin raw materials used in our manufacturing. Some examples of the waste that we buy are recycled chalk from the manufacturing of marble slabs and recycled PVC from the manufacturing of pipes and window frames. This means that during Q1 2024 we will have 100% recycled chalk and recycled PVC on the back side in our floors.

During 2023, we also made the decision to switch to BIO-sourced PVC in all weave. The raw material for the BIO-sourced PVC we use is waste that comes from the pulp industry.

All this work means that in 2024 we will be able to manufacture floors that consist of an overwhelming majority of recycled material.





With the measures decided upon and started in 2023, we will reach our goal in 2024.

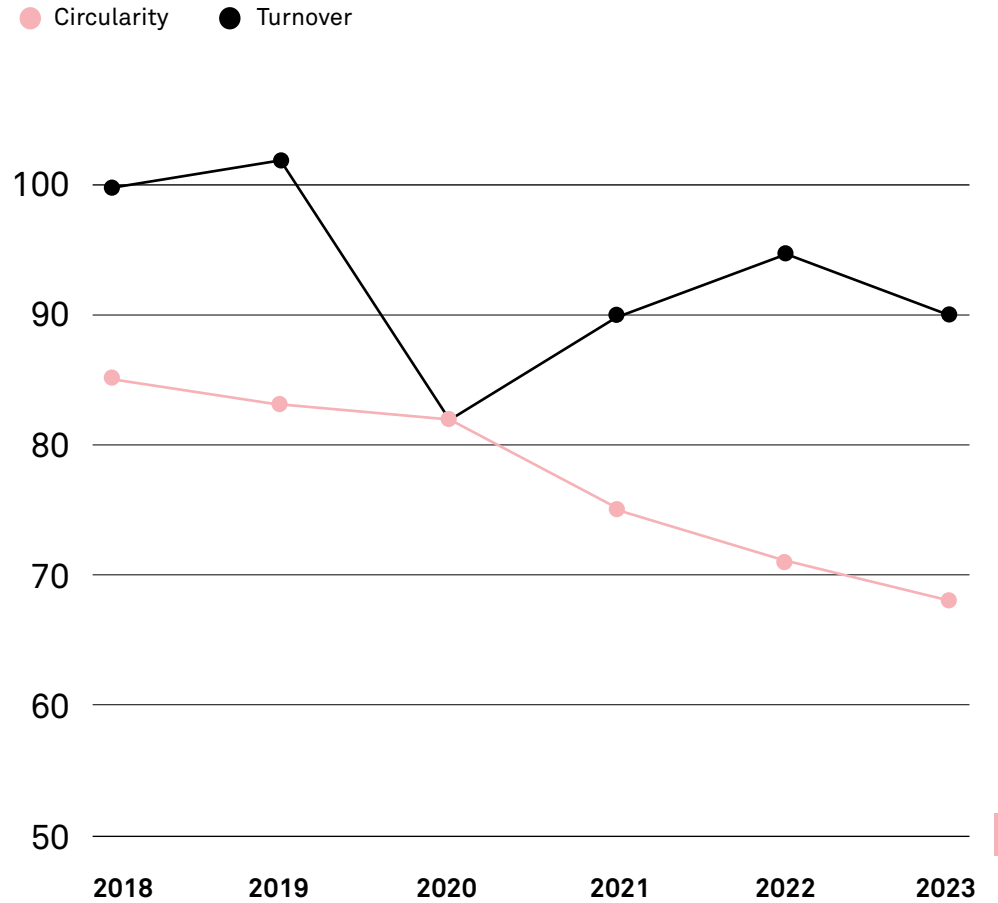
**Circularity index**

To show how much recycled materials we use in relation to the total amount of raw materials, we have created a circularity index where 100 is completely linear and zero is completely circular. From 2018 to 2023, our index has gone from 85 to 68. The goal is to reach an index of 50

by 2028. However, with the measures decided upon and started in 2023, we will reach our goal in 2024. The circularity index is also related to a turnover index which, in the base year 2018, was assigned the number 100.

Fig. 4




Circularity index vs Turnover index



**Note:** Recycling data is based on annual average values of material flows in the factory

Fig. 5

## Share of recycled material in our floors 2020 – 2023

		2020	2021	2022	2023
ROLLS		18%	20%	22%	43%
TILES		24%	28%	31%	50%
ACOUSTIC TILES		27%	30%	32%	50%
AVERAGE VALUE		23%	26%	28%	48%

**Recycled material in our products**

During 2023, recycled material has increased in all our product types. From October 1, 2023, we have bought recycled chalk for recycling as well as to be mixed in granules, which are purchased from a supplier. This means that from Q4 2023, we are selling floors that, on average, consist of 48% recycled material.

# Health and the environment

Emissions and the spread of environmentally hazardous substances have long been important topics in society. This is also important for our customers who buy our floors and for everyone who walks on them. We have focused on environmentally hazardous substances in our sustainability work for a long time now. 20 years ago, we removed all heavy metals that were then commonly used as stabilizers in plastic. Our floors have been completely phthalate-free since 2014 – the phthalates that were used previously in floors have been prohibited within the EU since 2020.

Completely non-toxic floors are essential if we are to create a circular economy where old floors become new resources. For our customers, it is also important to know that emissions from our floors are very low.

In our work within health and the environment, we focus a lot on the chemicals that are used as additives to create the right properties and look in our floors. We also map and analyse the emissions from our factory and the emissions that occur during the time our floors are in use.

The challenge ahead is to find recycled materials that are free from hazardous substances. Every new source of recycled raw material must be carefully checked to ensure that it contains no hazardous plasticizers or heavy metals. In short, more recycled material demands more controls.

Our long-term goal is to manufacture floors that are safe for humans and nature. So, we continually strive to use additives that are free from the EU's risk phrase system for chemicals.

## Additives

Additives are extremely important during the production process and for ensuring product quality. Plasticisers such as Mesamoll® and DOTP belong to the largest group of additives used instead of phthalates. Calcium/zinc and soybean oil are currently used as plastic stabilisers. To give our floors stability and other important properties, fibreglass, polyester thread and polyester felt are added.

As well as meeting the EU's strict requirements and continually meeting the requirements of REACH, our products are registered in the Swedish BASTA system ([www.basta.se](http://www.basta.se)). BASTA goes further than current legislation and covers both chemical products and goods.

## Our journey towards harmless additives

2003	Phasing out lead as a stabiliser
2013	Phasing out phthalates as plasticisers

Fig. 6

## Our additives

COMPONENT	SPECIFICATION	WEIGHT PERCENTAGE
Plasticiser	Mesamoll® (Alkylsulfonic acid phenyl ester)	2.5 - 10%
Plasticiser	DOTP	2.5 - 10%
Stabiliser	Calcium/Zink	<1 - 2.5%
Stabiliser	Soybean oil	<1%
Pigment	Various	<1%
Reinforcement	Fibreglass	1 - 2.5%
Reinforcement	Polyester thread	1 - 2.5%
Felt back*	Polyester felt (90% recycled)	10 - 25%

\*Only in acoustic tiles

Fig. 7

## Emissions certifications

FloorScore	International	Strict requirements for low emissions. Gives points in LEED, BREEAM, WELL
French VOC	France / International	Mandatory French emissions certificate. Awards rankings in different levels. Bolon has A+ which is the best ranking.
Green TAG PHD	Australia / International	Focus on chemicals and health
M1	Finland / International	Tough requirements for low emissions in end products
NAAF	Norway	Tough membership certificate from the Norwegian Asthma and Allergy Association

**Emissions during use**

We test our floors for emissions that can occur during their entire life cycle according to international standards.

To meet the different systems and requirements that exist in different markets, we use the relevant certifications for each market when it comes to emissions and health. We meet the strictest requirements, i.e. less than 0.5 milligrams/m<sup>3</sup> air for volatile organic compounds (VOC). This means that our floors can be used in all conceivable environments.



## Production

All our production takes place in Ulricehamn, Sweden. The entire factory is a dry plant. This means that we do not handle any liquids there except water, which is used as a humidifier to prevent static electricity. We have a closed, circular water system for cooling which is free from additives. The water is taken from deep drilled wells where it is cooled down before being used to cool our plant.

Our entire factory is currently classed as a Class C facility. Between each inspection, we carry out our own inspections to check the impact of our operations on people and the environment. We have not received any complaints and have never had any incidents that threatened the surrounding environment. A quality manager at the factory ensures that we maintain our permits and comply with relevant laws and regulations.

Fig. 8

Factory emissions (measured every three years)



**Emissions**

We measure our emissions released into the air via our ventilation system – regularly and in line with the relevant standards. These emissions are summed up in a total number of kilograms of hydrocarbons per year. We generally have very low emissions levels. The latest measurement shows that we emit less than 0.5 kg of hydrocarbons per day.

**Energy**

We use certified renewable electricity as well as electricity from our own solar-powered factory, which makes our entire production process climate neutral. There are no emissions from gas combustion or other fossil fuels. All heat is produced using heat pumps. In 2023, the total energy consumption of our factory and head office was 3,777 MWh. From April to December, we generated 853 MWh of self-produced electricity. This saved 317 tonnes of CO<sub>2</sub>, which helped us contribute to fossil fuels being removed from the market.



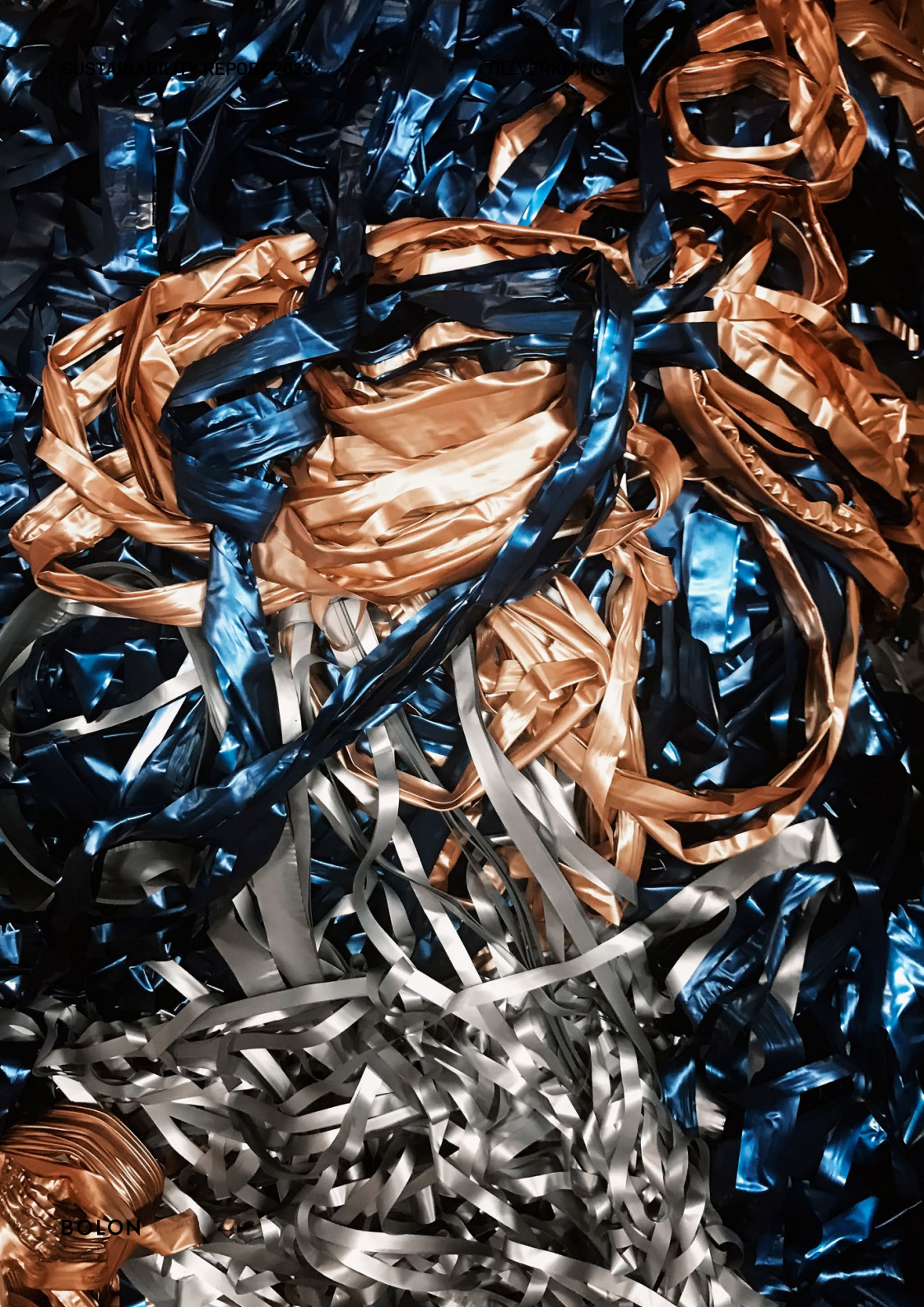
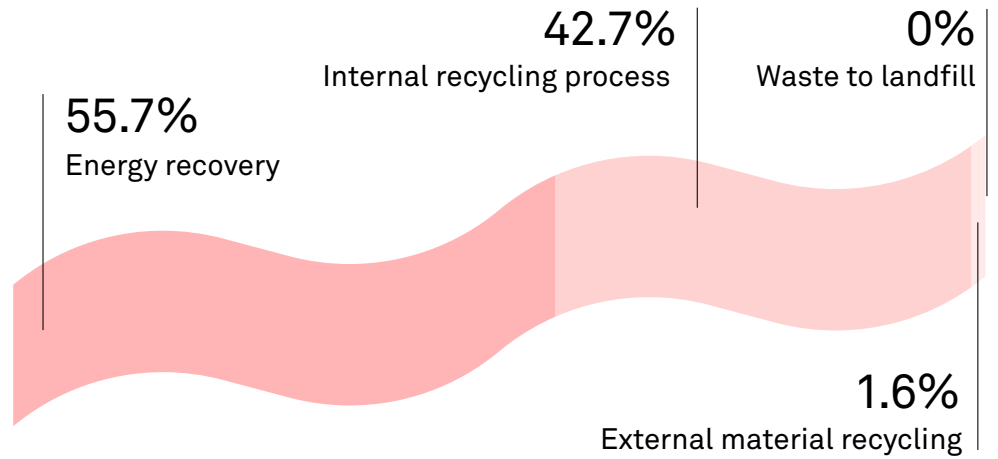


Fig. 9

## Production-related waste



### Waste

Our production generates by-products that we take care of in the following ways:

1. **Internal recycling process**
2. **External material recycling**
3. **External energy recovery**
4. **Waste to landfill**

100% of our production waste is taken care of through material recycling or energy recovery. No waste ended up in landfill in 2023.

Our goal is to increase material recycling from production waste that is currently incinerated as well as to continue having less than 0.5% waste going to landfill.

In 2023, a total of 2,950 tonnes of material was used for floor production and 100 tonnes for packaging. We produced 930,000 m<sup>2</sup> of flooring and rugs.



**Our raw materials**

Our floors consist of PVC polymer that holds the entire floor together and creates the texture and design we are known for. Fillers are used to create the weight, stability and volume we want. Reinforcement materials and various additives are then added.

\* In our rolls and tiles

Fig. 10

**Our raw materials\***

45%

CHALK

0.2%

PIGMENT

2.2%

REINFORCEMENT

16%

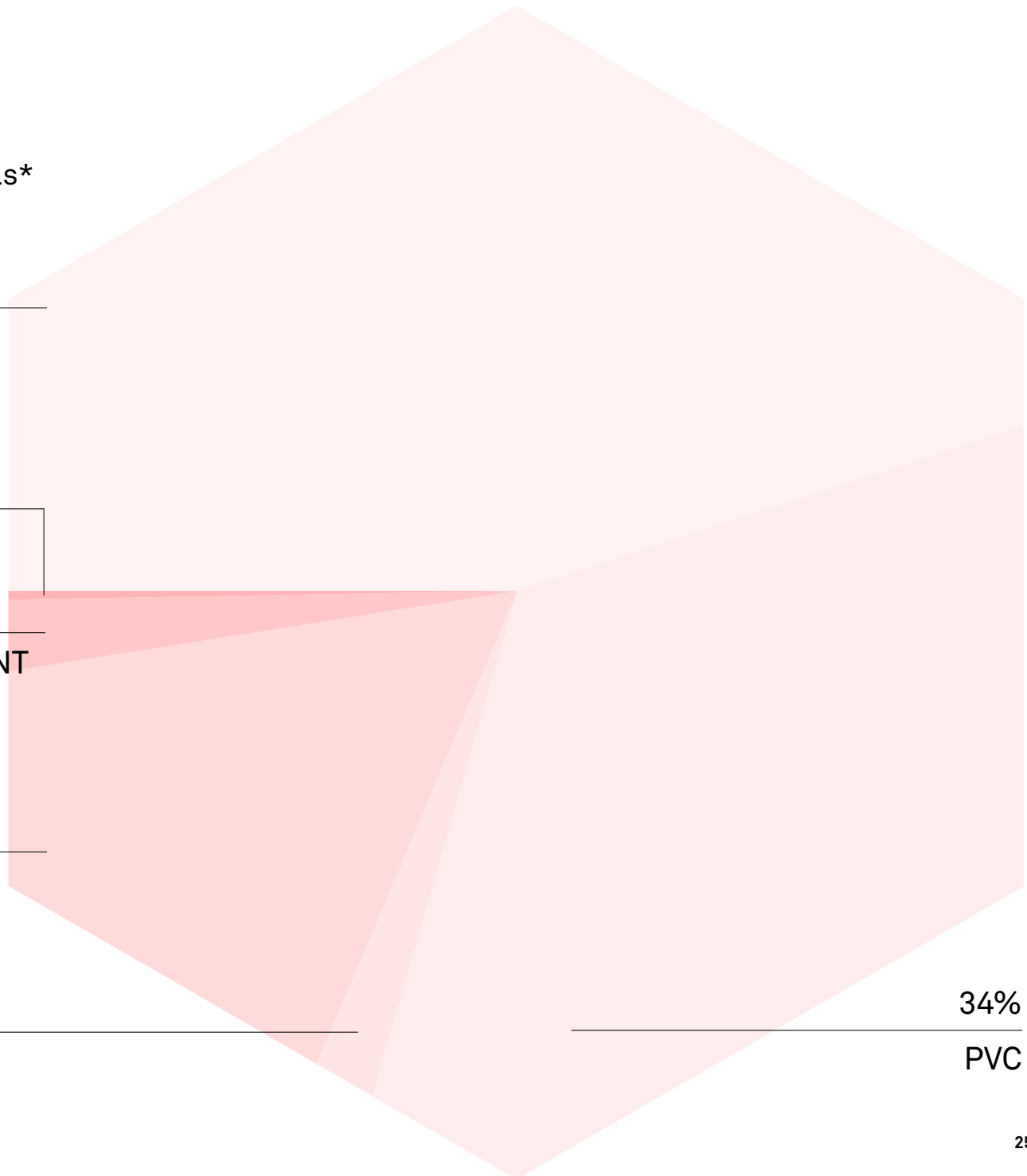
PLASTICISER

2%

STABILISER

34%

PVC



**Our suppliers**

We want to keep our material suppliers close by. No less than 77% of all purchased material comes from Sweden. Only 1% of our material is purchased from suppliers outside the EU.

It is also a requirement that the PVC raw material delivered by our Tier 2 suppliers is eco-labelled and controlled by a third party.

We have investigated our suppliers' sustainability practices and can confirm that a large majority of them have sustainability work in place. We also set specific requirements for recycled raw materials and BIO-raw materials, which can have a major impact on our sustainability goals.

Fig. 12

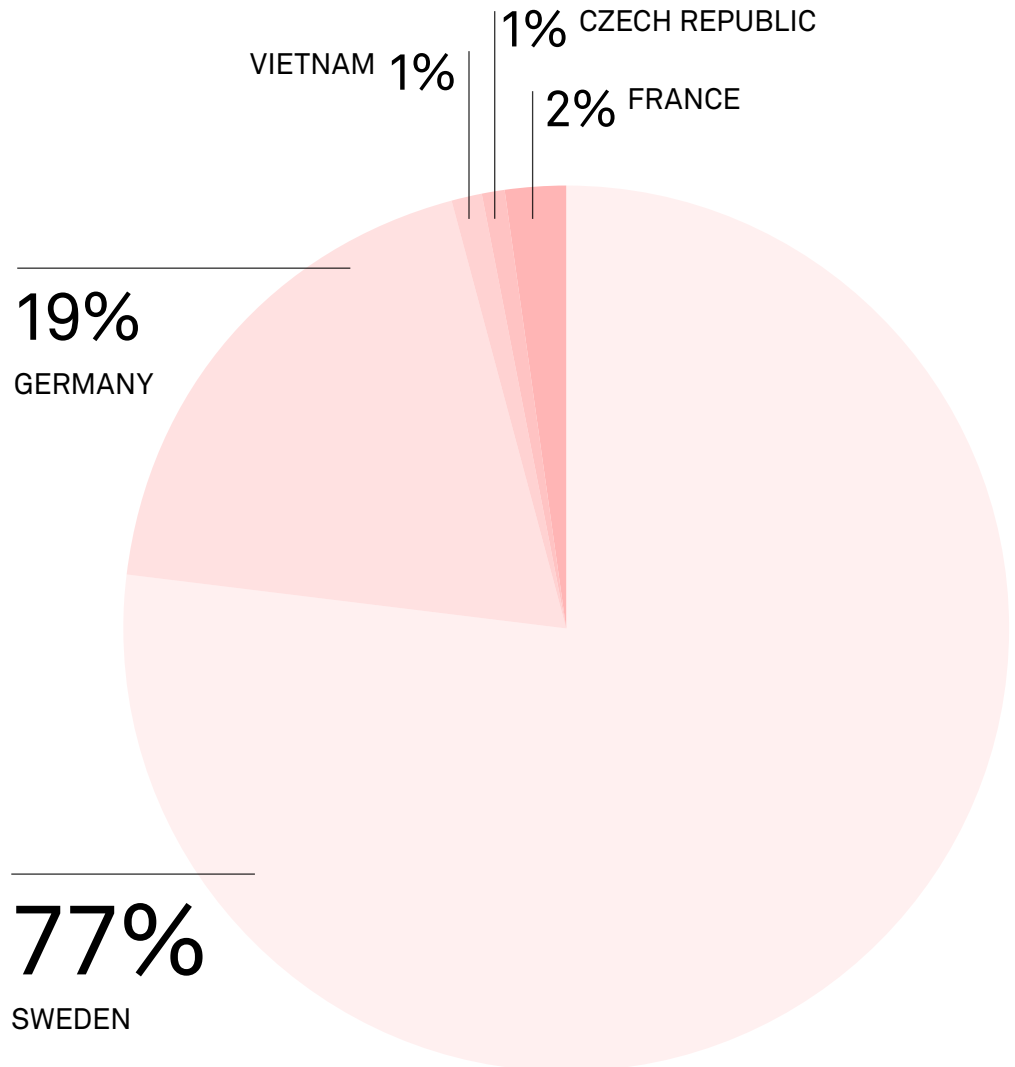
**Our suppliers' sustainability work**

Sustainability area	Raw material*	Packaging*	Forwarders
Provides climate data	73%	50%	100%
Has a sustainability report	55%	33%	83%
Has an environmental policy	100%	100%	100%
Has a social policy and/or code of conduct	100%	100%	100%
ISO9001 and/or ISO14001 certified	100%	100%	67%

\* 99% of purchased raw material + packaging

Fig. 11

**Purchasing of raw materials by country 2023**



# Social responsibility

We are a Swedish company. Our floors are made in the Swedish city of Ulricehamn and our head office is also located there. For us, it is important to respect the laws that regulate the working environment, working conditions and labour laws. A large proportion of our employees are union members, and all employees are covered by collective agreements. A 40-hour week counts as full-time employment for everyone. We have an employee handbook that describes the long list of commitments the company has made to all employees.

The following headlines are covered in Bolon's employee handbook

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Employment contracts

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Forms of employment

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Working environment

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Working hours

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Fire safety

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Labour union contracts and membership

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Health care

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Benefits

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Insurance

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Gender equality plan

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Core values

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Parental leave

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Wages

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Organization

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Vacation policy

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Safety regulations and inspections

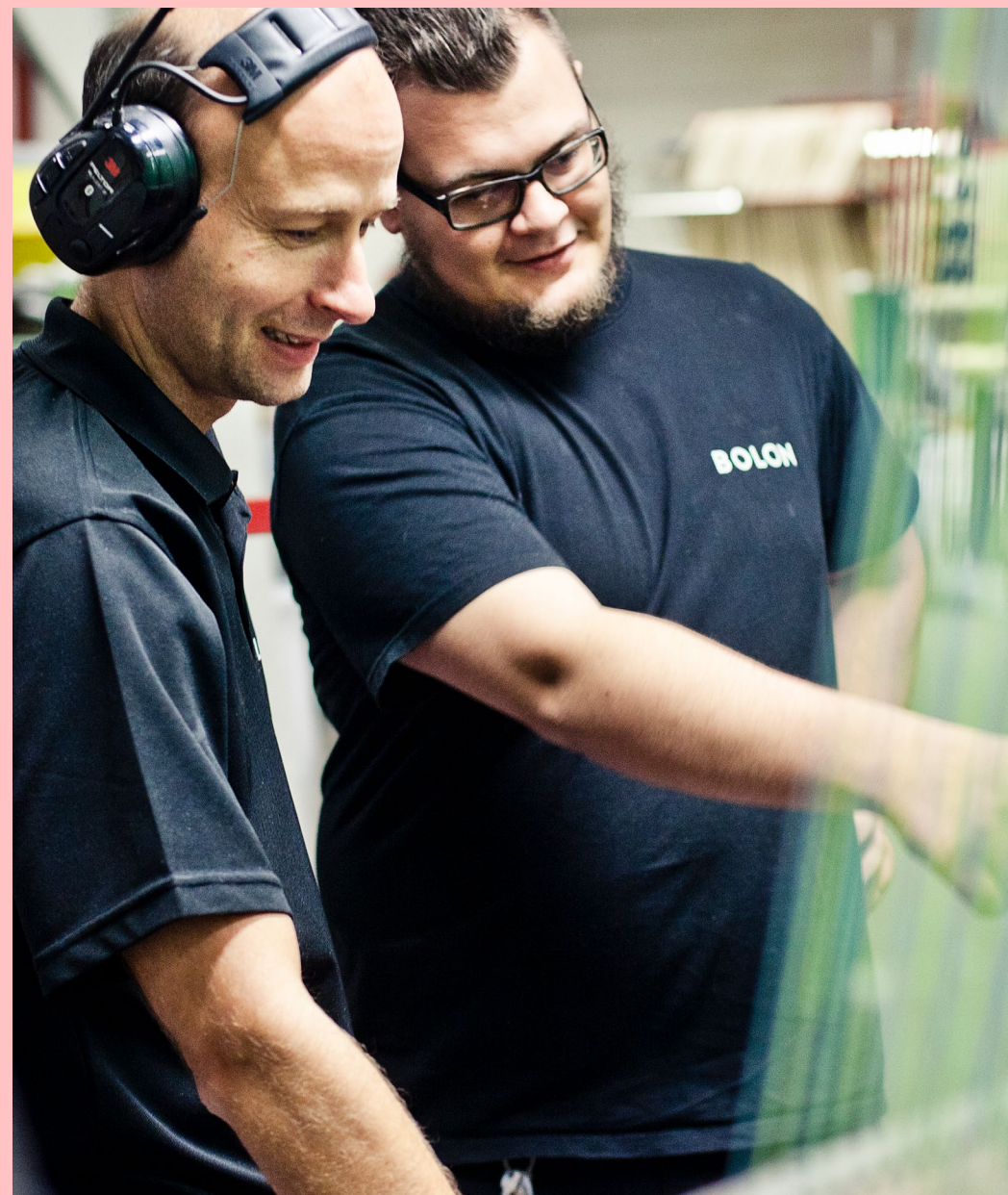
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Education

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Business policy

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## Working environment

Creating a safe and healthy working environment is extremely important to us and is always a high priority – whether it's our office, showroom or production facilities. To ensure this, a safety committee carries out continuous and systematic checks. The safety committee is made up of representatives from the employer's side as well as a safety officer and fire protection officer from the trade unions.

To ensure a good working environment, we carry out regular safety inspections throughout the year. At our production facility in Ulricehamn, we have an evaluation plan for each production department. The results from each completed safety inspection are documented in our service and maintenance system. All production departments must have carried out and documented a safety inspection by the end of the year.

When it comes to offices and showrooms, the work environment

is evaluated annually through risk assessments in the form of meetings with staff from all departments. Work to ensure a healthy working environment for businesses and premises located away from the main site of the company's headquarters has continued throughout the year with improved procedures regarding fire and safety.

Safety inspections are carried out to prevent unsafe behaviour and accidents. If an accident should occur, an incident report is made. Everything is documented in the company's service and maintenance system to ensure that action is taken, followed up and completed. During safety committee meetings, all incidents are presented along with an action plan to prevent similar incidents occurring again in the future. There were only a few minor incidents reported in 2023. All incidents were handled and reported according to the routines described above.



**Equality**

At Bolon, we have had a good balance between women and men for a long time. Both in terms of total employees as well as in management positions and on the board. In 2023, 44% of our employees were women. 67% of our management team are women, and our board consists of 80% women.

From Bolon’s gender equality policy: *Men and women must be treated on equal terms. The same conditions apply for all jobs carried out at the company and men and women are treated equally regarding both internal and external recruitment – as well as in staff development and setting salaries. All employees have the right to be treated with respect and with regard to everyone’s legitimate demands for privacy – regardless of gender, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation or age. Discrimination in any form is not accepted at Bolon.*

To ensure a good balance between men and women continues, we have established a gender equality plan.

All employees, regardless of role or position within the company, have private health insurance through their employment which they can use when needed.

**Business ethics**

We value good business ethics highly and have formulated a policy that includes an action plan to counter corruption and bribery.

Together, we carry out risk analyses and take a preventative approach to fighting corruption. For us, this is not just a way to minimize risks and unethical elements in the workplace. We also see it as part of our social responsibility.

Fig. 13

**Equality**

	Female board members	Female managers	Female employees
2020	80%	70%	47%
2021	80%	50%	42%
2022	80%	67%	41%
2023	80%	67%	44%

# Certification and regulations

Today, we operate in 61 markets. In these markets, there is a wide range of voluntary product certifications that bring credibility and meet customers' expectations and requirements regarding our floors. These certifications cover indoor environments, materials and sustainability.

We take great care to ensure that we meet all rules and legislation that apply in every market that we operate in. Today, we are a global player and operate on five continents. Our products always comply with all regulations in every market. Technical specifications have been developed

for each product and safety data sheets are available for all materials. This information is updated as our products change.

Our products and processes meet the relevant criteria for even the toughest certifications. These certifications, which are carried out by a third party, are a way for us to be transparent and clearly show that our products and processes maintain high environmental standards.

Our products meet the material requirements for various building certificates such as LEED, BREEAM and WELL.

We have received the Swedish BASTA declaration for chemicals. And when it comes to emissions during use, we have been awarded the international FloorScore certification.

We have also made an environmental declaration (EPD) for all collections. An EPD is carried out by a third party, which is a life cycle analysis based on ISO standards. It shows resource consumption and the environmental impact during a product's entire life cycle. Our latest EPDs were carried out in 2021.

Fig. 14

## List of certifications and declarations

CERTIFICATION/ DECLARATION	COUNTRY/ REGION	DECLARATION	ENVIRONMENTAL PERFORMANCE	AIR QUALITY/ HEALTH	COMMENTS
BASTA	Sweden	●	●		Strict requirements regarding chemical content.
BRE Global	International		●		Ranking of product in different levels. Bolon products are ranked between A+ and A. Part of the international BREEAM label for buildings.
Byggvaru- bedömningen	Sweden	●	●		Ranking in different levels, our products are ranked as accepted. Requirements for chemical content and certain life cycle criteria.
DGNB- navigator	Germany / International	●			Based on ISO standard. Provides reference to more durable materials.
FloorScore	International			●	Strict requirements for low emissions. Gives points in LEED, BREEAM, WELL.
EcoProduct	Norway		●		Ranking in different levels based on data in EPD.
Byggvarudeklaration - eBVD	Sweden	●			Industry-wide database used by, e.g. Byggvarubedömningen and SundaHus.
EPD	International	●			EPD Environmental product declaration. Based on ISO standards.
FDES (EVEA)	France		●	●	Lifecycle analysis including health carried out according to French standards.
French VOC	France / International			●	Mandatory French emissions certificate. Awards rankings in different levels.
Best practice PVC	Australia / International		●		Ecolabelling of the production of PVC raw material.
Green Tag	Australia / International		●		Assessment based on life cycle, rankings in different levels.
Green Tag - PHD	Australia / International	●		●	Focus on chemicals and health.
Kretsloppsmärkning	Sweden	●			Declaration of chemicals in the floor as well as care instructions and information about environmentally safe handling after use.
M1	Finland / International			●	Tough requirements for low emissions in end products.
NAAF	Norway			●	Tough membership certificate from the Norwegian Asthma and Allergy Association.
SundaHus	Sweden		●		Ranking of different material used in buildings.

# Appendix

FIGURE	DESCRIPTION	REFERENCE	PAGE
1	Total CO <sub>2</sub> emissions of the whole supply chain	According to EPD standard. A1-A3 is raw material used in production A4-D is all impact after production.	11
2	Climate index vs turnover index	Production data, life cycle data and financial turnover	13
3	Kg CO <sub>2</sub> per krona of turnover	Production data, life cycle data and financial turnover	14
4	Circularity index vs turnover index	Production and purchasing data	17
5	Share of recycled material in our floors 2020 – 2023	Production and purchasing data	18
6	Our additives	Declaration of contents. Available for all collections.	20
7	Emissions certifications	Current certifications are available at Bolon.com	21
8	Factory emissions	Air measurement 2021 (measurement is carried out every 3 years. Emissions are calculated by FID measurement)	23
9	Production-related waste	Production data and statistics/invoices from external waste management.	24
10	Our raw materials	Contents declaration. Available for all collections.	25
11	Purchasing of raw materials by country 2023	Purchase data.	26
12	Our suppliers' sustainability work	Mapping completed in 2023.	26
13	Equality	Annual report 2023.	29
14	List of certifications and declarations	Current certifications are available at Bolon.com	31
15	Factory flows of materials and energy	Production data, purchasing data, measurement data.	33



# Appendix, additional information

Fig. 15

## Factory flows of materials and energy

\* Emissions are calculated through FID measurement every 3 years

\*\* Does not include wooden pallets and packaging details

\*\*\* Head office energy use is included in the result

	Unit	2020	2021	2022	2023
<b>Total floor production</b>					
Flooring produced	m <sup>2</sup>	1 020 000	1 090 000	1 100 000	930 000
<b>Waste</b>					
Landfill	tonnes	3	1	4	0
Energy recovery		448	420	521	371
Material recycling		36	24	21	11
<b>Emissions into the air</b>					
Emissions into the air *	kg hydrocarbon	x	166	x	x
<b>Water consumption</b>					
Factory humidification	m <sup>3</sup>	1707	928	1067	964
<b>Material use</b>					
Virgin raw material	tonnes	3500	3300	3250	2950
Recycled raw material		663	979	1129	1060
<b>Packaging material**</b>					
Plastic		14	7	15	7
Cardboard		81	93	96	93
<b>Energy use</b>	MWh				
Factory and HQ***		4800	4750	4520	3777

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