

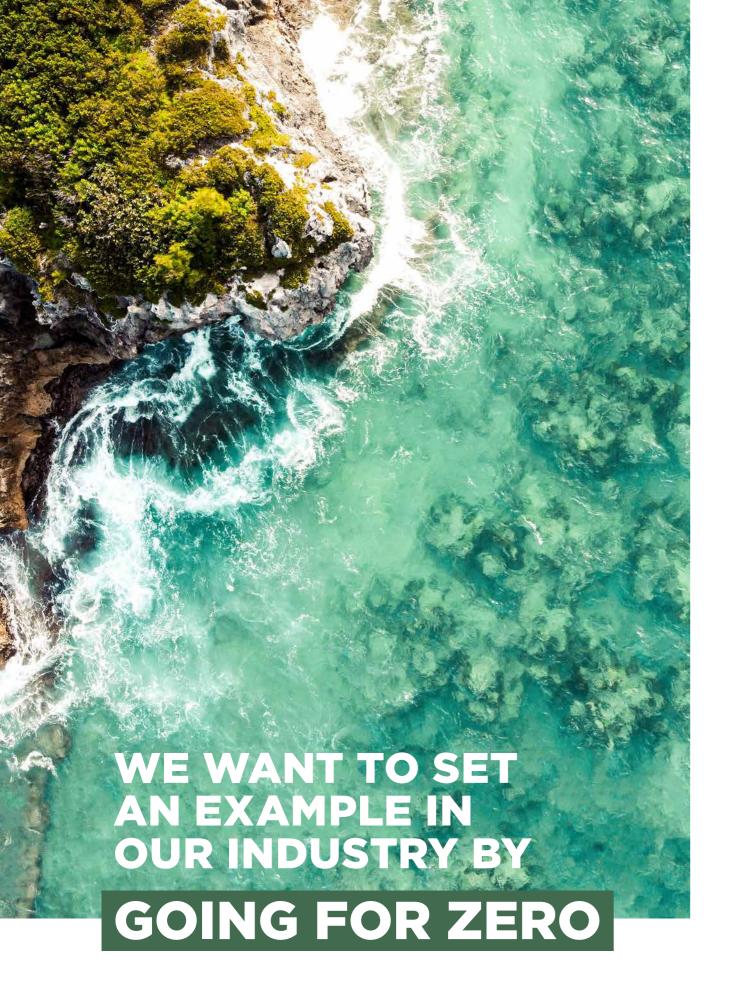
## **KEY GOALS**

## 100% REDUCTION

OF GREENHOUSE GAS EMISSIONS FROM OUR OWN OPERATIONS\*

## 42% REDUCTION

OF GHG EMISSIONS FROM OUR VALUE CHAIN\*\* AND COMPENSATING FOR THE RESIDUAL EMISSIONS THAT CANNOT BE ABATED



### YES, ZERO.

**Yes,** we realize that living up to this strong commitment is going to be a challenge.

Yes, we know that our goal requires solutions that don't yet exist.

Yes, we can't do it all alone.

But that doesn't frighten us. Instead, we know being bold will encourage us to **push the limits** of what's achievable.

Our confidence is the way we stand united behind our sustainability strategy 'Route 2030'.

#1 We take responsibility for the environmental impacts generated in our operations.



water



energy

#2 We value our employees and the people around us.





workforce communities

#4 We take responsibility for our

#3 We work towards a circular economy with the whole supply chain in mind.



packaging

circular solutions



renewable & recycled content in products

renewable energy

climate impact.



CO<sub>2</sub> emissions

#5 We act with integrity and value open communication.





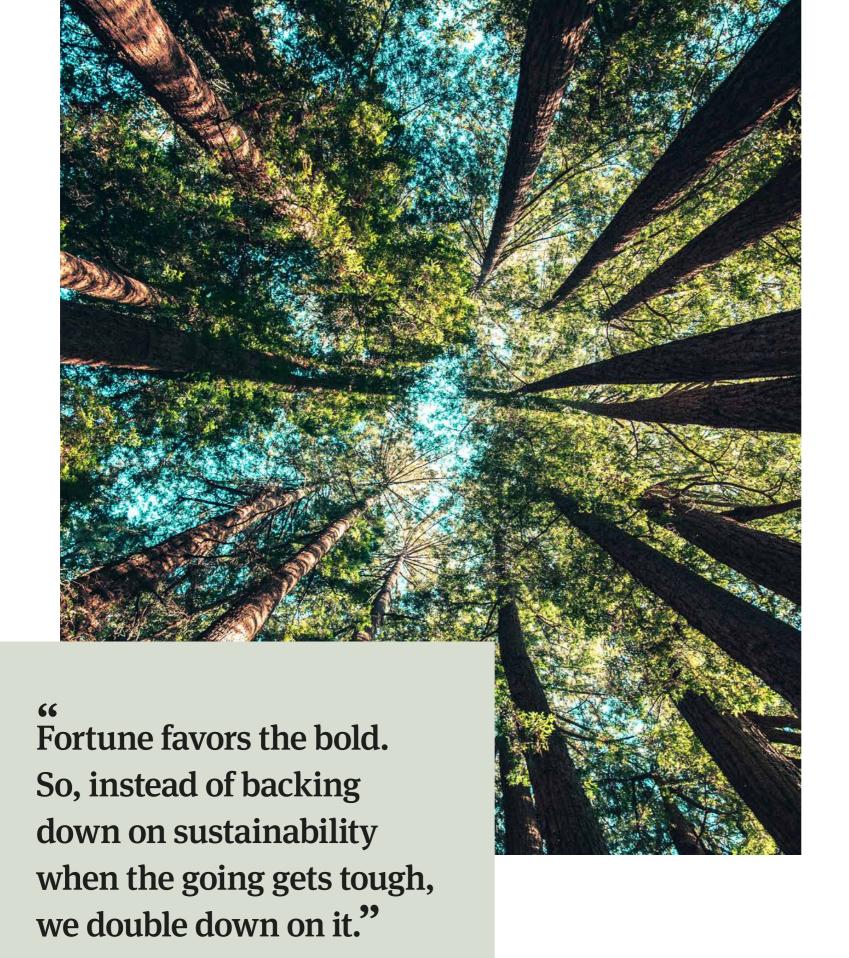


communication

code of conduct for

B.I.G. policies & guidelines

suppliers



# READY TO JOIN US TOWARDS A SUSTAINABLE FUTURE?

#### **CONTENTS**

- 10 Why we prioritize sustainability
- 12 How we impact the whole lifecycle
- 14 Stage 1: Raw materials
- 18 Stage 2: Production
- 26 Stage 3: Usage
- 30 Stage 4: End-of-life solutions
- Design for circularity
- 36 Which certifications make us stand out
- 38 Who has our back

Wim Coppens, VP Flooring

8

## WHY WE PRIORITIZE SUSTAINABILITY

Simply put: because we care both about people and about the planet

Uncountable square meters of flooring pass under our feet on a weekly basis. Strolling around the house, navigating the office, shopping in town ... we encounter floors everywhere. And Beauflor has a big piece of the pie, designing, producing and distributing large volumes of vinyl flooring to all corners of the world every year.

Well aware of our enormous social and environmental responsibility, we've integrated a sustainable approach into all aspects of our business – from deeply caring for our employees to offering a growing number of eco-friendly flooring solutions.









Every product lifecycle starts with the extraction and sourcing of raw materials. Two basic principles help us to pinpoint effective actions on this front.

First, **the less material needed, the better**. We always try to optimize our products so that we only need a minimum of material to begin with.

Second, for the materials we do need, we **minimize our footprint** by focusing on renewable and recycled content.





#### Partnering up with trusted suppliers

We've defined several supplier goals to make sure we only surround ourselves with like-minded partners:

- develop processes to enable the remediation of any adverse human rights impacts we may cause or to which we may contribute within our supply chain
- actively advocate our Code of Conduct for Suppliers, which is now part of the terms and condition in our contracts
- help our suppliers to optimize their sustainability efforts and reduce their environmental impact
- screen all suppliers on sanctions
- screen new suppliers on 3 domains: anti-bribery & corruption, environmental performance, and human rights



#### Optimizing transport

We source our raw materials close to our manufacturing facilities. Moreover, through smart logistics, we halved the amount of deliveries per week, instead of organizing daily deliveries.



#### Innovating recipes

One of our main efforts in reducing the need for virgin raw materials is how we continuously optimize our product recipes - which has already led to significant reductions in GHG emissions.



OUR BELGIAN CUSHION VINYL PRODUCTS WITH BLACK FELT BACKING CONTAIN UP TO 20% OF RECYCLED FIBERS DERIVED FROM PLASTIC BOTTLES.

#### **MATERIAL MATTERS**

#### PVC, much more eco-friendly than its reputation ...

More than 200 different additives are used to convert PolyVinyl Chloride (PVC) into thousands of applications. These additives provide a wide range of benefits to PVC products, including improved durability, thermal insulation, reduced maintenance, enhanced functionality and recyclability. Moreover, 57% of PVC consists of chlorine, which is made from common salt, while many other plastics are oil based. Last but not least, the production of vinyl flooring requires limited energy use, compared to, for example, the production of ceramic tiles.

#### especially if used with ortho-phthalates-free plasticizers ...

PVC comes in two forms: as a rigid, unplasticized polymer (used in window frames, doors, etc.) or as a flexible plastic (used in credit cards, children's toys, etc.). Our vinyl floors belong to the second category, which contains plasticizers. However, our plasticizers are entirely free of harmful ortho-phthalates. To illustrate: we always use DOTP, a plasticizer that is considered safe by the European Chemicals Agency, due to its excellent toxicological profile. In other words: our clients can rest assured, we guarantee 100% safe flooring solutions.

#### and natural fillers ...

Natural fillers, in the form of calcium carbonate (mainly limestone), are used to add bulk to the mixture and to reduce the amount of resin required. This is what gives the vinyl its deep luxury texture. The limestone also adds dimensional stability to the floor and provides a neutral background to set off the colour or pattern. Good to know: limestone is known for its UV resistance, which increases the durability of the floor. The material also reduces the volume of VOCs (volatile organic compounds) released into the atmosphere and requires little or no processing.

#### combined with other consciously chosen materials.

Vinyl flooring consists of multiple layers: a base layer, a core layer, a printed layer and a protective wear layer. Each of these layers contains different materials, but we keep a close eye on their environmental impacts. For example, the stabilizers we add to the PVC are organic. The inks we use to print the pattern are water based, 100% recyclable and free of toxic fumes. The PU lacquer is hardened with UV light, which helps minimize energy consumption in our factories.

## 8 TIMES

PVC CAN BE RECYCLED REPEATEDLY UP TO 8
TIMES, WITHOUT COMPROMISING ON QUALITY.
WITH OUR FLOORING HAVING A LIFE SPAN OF
UP TO 25 YEARS, THIS MEANS THE MATERIAL
CAN BE USED FOR UP TO 200 YEARS!





Energy efficiency, effective waste management, responsible packaging, water stewardship and smart transport are key environmental priorities. Needless to say, we pull out all the stops to address these topics adequately and thus drastically reduce our carbon footprint and combat contamination.

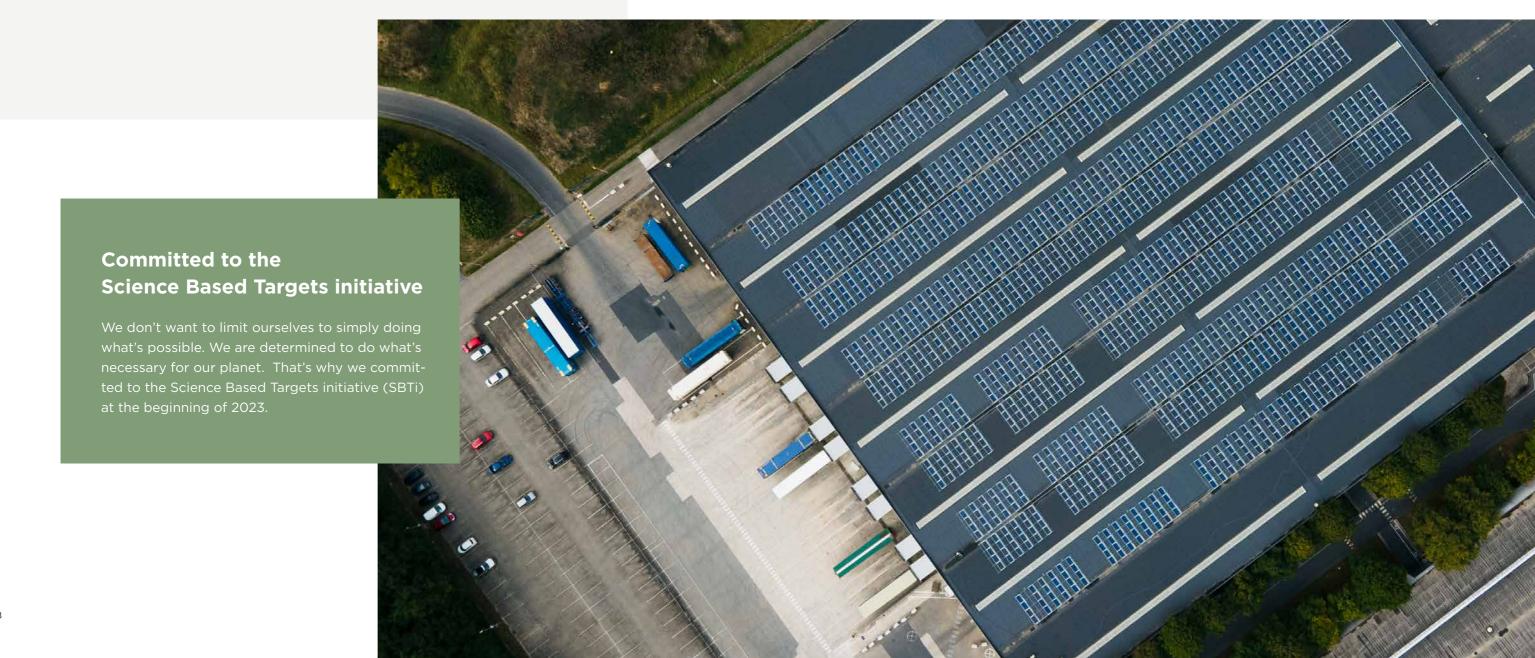
#### **ENERGY**

#### Renewable energy

All our PRO and ULTRA collections produced in our European plants are made with **100% clean electricity**. For example, the solar panels on the roof of our plant in Belgium produce approximately the same amount of energy used by 240 families on a yearly basis.

100%

RENEWABLE
ENERGY
BY 2030



#### **Energy savings**

- ✓ Production speed
  An increase in the speed
  of production reduces the
  energy needed to produce
  1 m² of vinyl flooring.
- ✓ Heat recovery
   The excess heat from gas cleaning processes is recovered and reused via the latest heat recovery technology.

ENERGY REDUCTION IN ALL PLANTS BY 2030





#### WASTE

#### **Reducing waste**

10%

industry average

of flooring is wasted during installation when there's no custom cutting.

Not at Beauflor! Because we fully control the cutting process ourselves, our customers get the exact flooring size they need.

Digital printing = less waste

Pioneering with digital printing technology allows us to organize smaller production runs, which results in less waste.

33%

of waste in our Belgian production plant has been reduced thanks to a drastic reduction in line stops and changeover times when going from one design to another. This, in turn, is thanks to better training, optimized machines and high-quality raw materials.

#### Recycling waste streams

**70**%

of our manufacturing waste is recycled by our manufacturing partners. Our objective is to recycle **100% by 2030**.

#### Re-using raw materials

95%

of our liquid waste and PVC paste is recycled and incorporated into new products thanks to internal recycling processes.

STAGE 2 PRODUCTION

#### **PACKAGING**

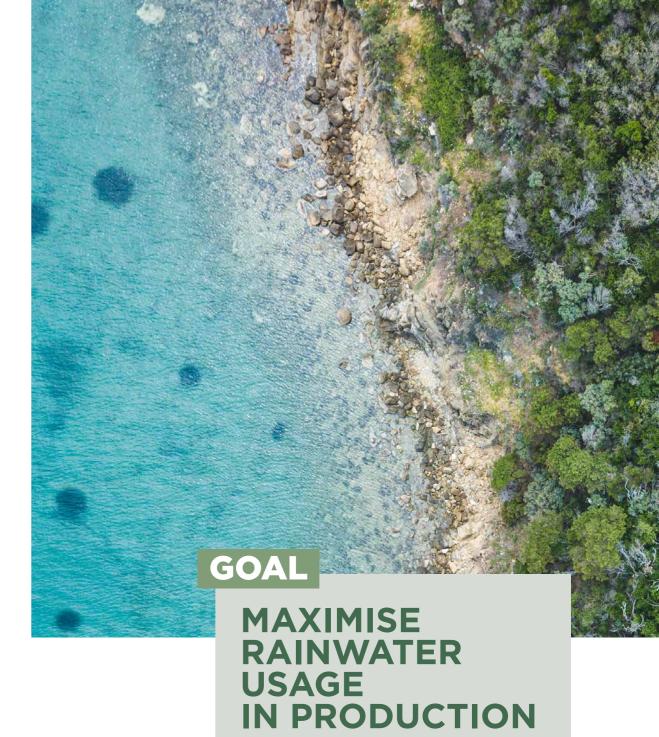
#### Prioritizing eco-friendly materials

Our vinyl is rolled on a tube made from 100% recycled cardboard, held by plugs made from 100% recycled polypropylene and the plastic foil used to protect the roll contains 50% recycled industrial waste.

#### Financing take-back systems

The green dot ('Der Grüne Punkt') is a European network of systems for recycling the packaging materials of consumer goods. This means that we recycle the packaging waste remaining after installation.





#### **WATER**

#### Sourcing water responsibly

Vinyl production requires a limited amount of water for the cooling of cylinders and the rinsing of our water-based inks. The expansion of our facility will allow us to clean and filter the used water before discharging it. What's more, we're also investing in optimal rainwater harvesting for our cooling systems, thereby reducing our overall water consumption.



#### **TRANSPORT**

GOAL

MINIMIZING THE NEED FOR TRANSPORT AND OPTIMIZING ALL REMAINING TRANSPORT ROUTES

## Multimodal transport

Freight transport represents approximately 1% of our carbon footprint. Nonetheless, we always explore new ways to keep our goods off the roads while meeting our clients' delivery expectations.

#### **Proximity**

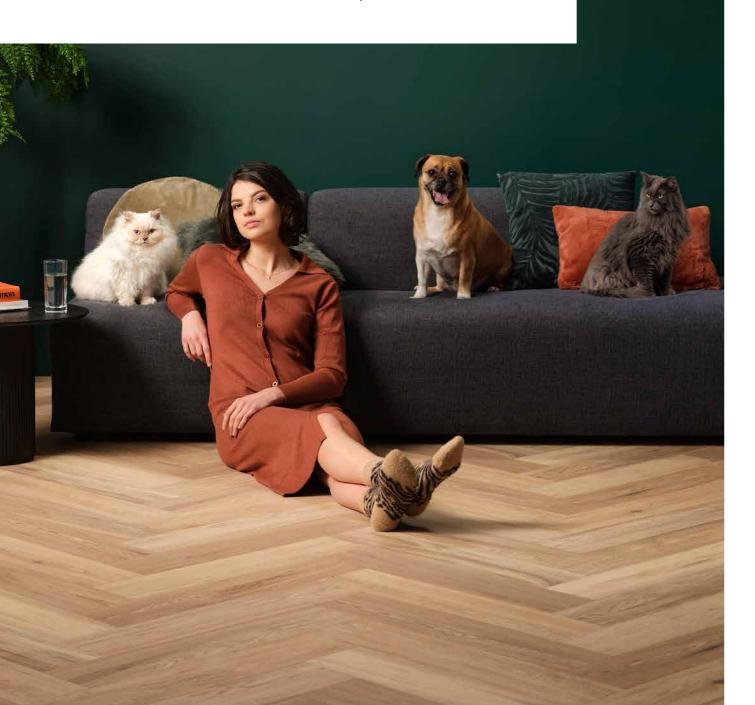
The closer you produce to your customers, the shorter the distances you need to travel to deliver your goods. This simple principle is key in avoiding complex logistic processes and unnecessary kilometers.

#### **Internal logistics**

By revamping our internal logistics with an emphasis on automation, we've successfully increased efficiency, speed and accuracy. Moreover, this results in an overall drop in energy consumption.



We want our customers to enjoy the most durable and healthiest floor coverings available on the market. That may sound like overstretching it, but our vinyl floors already rank among the world's top floors for sustainable use. This achievement is rooted in years of product innovation, smart investments and cross-sectoral experience.



A selection of our actions that culminate in world-class use experiences:

#### Sound absorption

By reducing irritating noises, we can make our homes, offices and public areas more comfortable places to be in. So, we design floors with a special soft foam backing that can easily absorb noises and improve the acoustics of a room.

#### Easy maintenance

Cleaning cushion vinyl is a piece of cake. With minimal water and detergent, the job is done in the blink of an eye, which also means more free time.

#### **Lasting solutions**

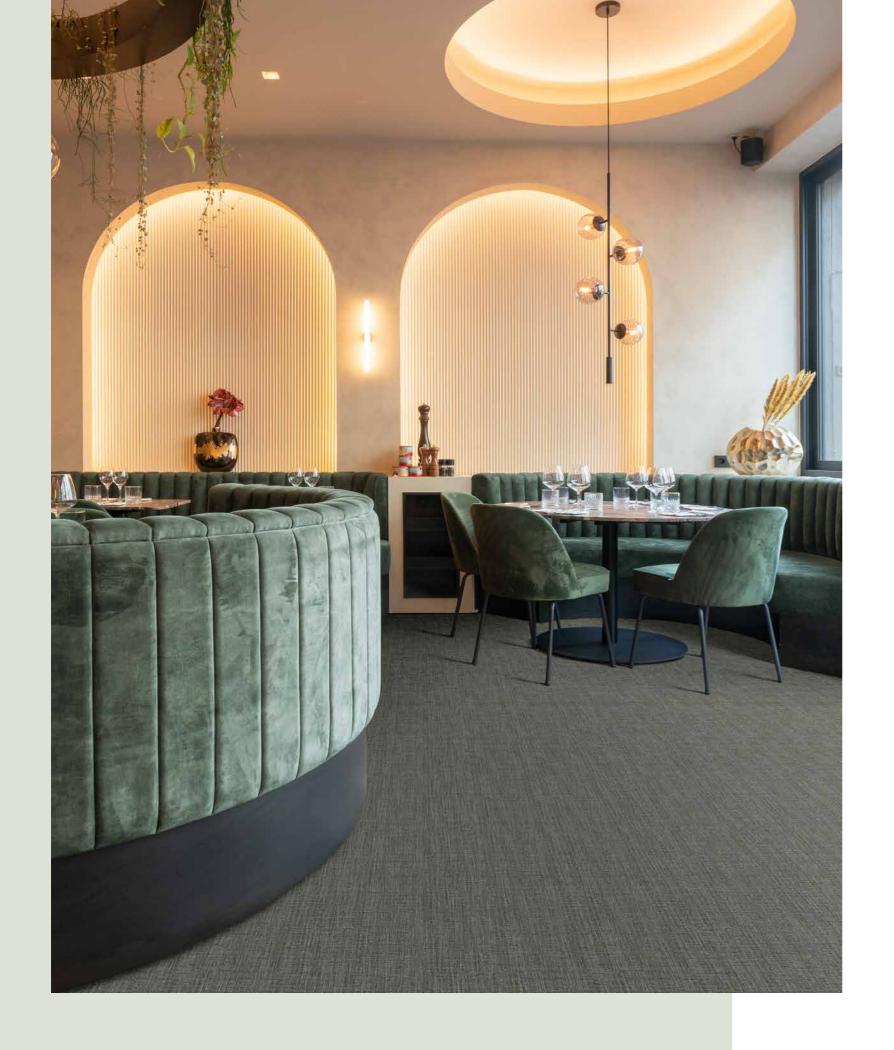
More than 60% of our standard collections are covered with our premium coating – a protective layer that prevents dirt and stains from leaving permanent marks.

## **UP TO 21DB**

THE NOISE OUR
FLOORS CAN
ABSORB TO
MAKE PEOPLE'S
LIVES MORE
COMFORTABLE

## UP TO 25 YEARS

DURABILITY OF OUR FLOORS



## Ensuring healthy workplaces, homes and public areas

It's easy to forget about air as a potential health risk, because we can't really see it. But studies have shown that poor air quality can lead to headaches, respiratory issues and performance impairment. Indeed, the environment in which we spend our time directly impacts us, and we happen to spend most of our time indoors.

Indoor air quality is closely related to emissions of volatile organic compounds (VOCs), which are emitted as harmful gases from certain solids and liquids that contain chemicals: paint, lacquer, glue, cosmetics, building materials, etc. Obviously, less VOCs means better air quality.

A good way to minimize VOCs?

Healthy floors - which happens to be our trademark.



Beauflor flooring solutions have been awarded with well-respected international certificates related to VOC emissions, such as the American FloorScore certificate, the German AgBB label and the French A+ ranking. On a European level, we rank within the E1 class for formaldehyde emissions, the best class possible.

- **✓** FLOORSCORE CERTIFICATE
- / AGBB LABEL
- / A+ RANKING
- ✓ E1 CLASS



We reject our society's built-in wastefulness through hyper disposability. The world needs more sustainable product solutions and that means thinking about ways to let our floors relive after they've served their primary purpose.

### Relive, our program for a circular future

Beauflor's commitment to a sustainable future gave life to the Relive program: a system to **collect, sort and recycle**PVC flooring installation offcuts.
This project has been successfully implemented in the French market, thanks to our partner PAPREC.
Meanwhile, we are pulling out all the stops to roll out Relive in other regions as well.

## RELIVE: 3 REASONS WHY

#### #1 Tailored

Relive is a made-to-measure service.

Beauflor can handle any type of reques

#### #2 Free

Big or small. Many or only a few containers. We collect it all for free.

#### #3 Circular

By giving a second life to materials, we combat resources scarcity together.



## DESIGN FOR CIRCULARITY

Design for circularity is all about **prioritizing sustainability and longevity** at every step of a product's lifecycle: from designing and producing our vinyl floors, to making sure they get regenerated after use. By redesigning our products with a focus on their **circularity**, we aim for a closed-loop product lifecycle, where the materials in our products can continuously be reused, rather than ending up as waste.

This way, we contribute to a more sustainable, circular economy and minimize the overall environmental impact of our vinyl floors.

Make 100% of our products 100% recyclable: our goal is as simple as it is ambitious.

#### **GREENSTEPS**

Through various initiatives, led by a large team of people from different disciplines, we aim to boost the circular performance of vinyl. We call these projects 'Greensteps', because each step contributes to our net-zero goal. Currently, we are focusing on the 4 projects described below. We have already made significant progress and look forward to turning these initiatives into tangible results.

#### Focus on recyclable backings





Beauflor cushion vinyl with **foam backing** 

Beauflor cushion vinyl with **textile backing** 

√ 100% recyclable

working towards 100% recyclability

#### Focus on adhesive-free installation

We're optimizing our product range for adhesive-free installation:

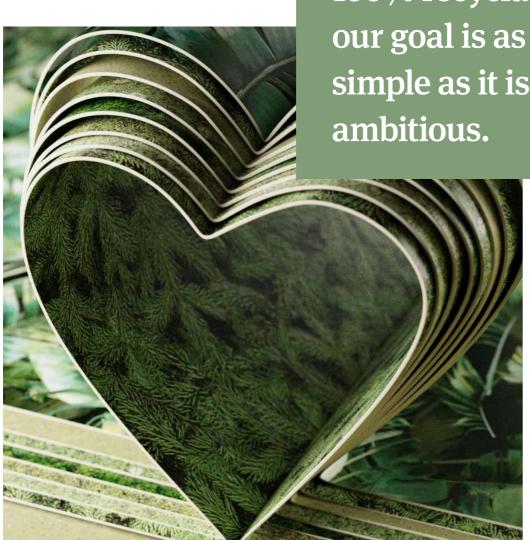
- √ Fast and easy installation
- √ Easy removal and recycling
- √ Better indoor air quality

#### Focus on renewable and recycled content

Innovation projects are focusing on reducing the consumption of virgin fossil-based materials by maximizing the share of renewable and recycled content in our products.

#### Focus on cross-sectoral partnerships

Alone, you can only do so much. That's not a criticism, but a simple fact. Every company has restricted expertise, know-how and experience in certain domains, while resources can't be targeted to do everything at once. So, we continuously collaborate with other companies, recyclers, sectoral organizations, universities, etc. to achieve more.





## Some impactful partnerships in a nutshell

#### #1

#### **Circular Flooring consortium**

#### WHAT?

The European Circular Flooring project aims to establish a circular recycling process for post-consumer PVC floor coverings.

#### WHY?

For PVC products, recycling rates of only 20% have been achieved so far, while a large percentage of the PVC waste is still landfilled or incinerated.

#### HOW?

The consortium is further developing the CreaSolv® Recycling Process to separate PVC resin (from post-consumer floor coverings) from legacy plasticizers (phthalic acid esters) that don't conform to the EU REACH-Directive.

#### OUR CONTRIBUTION

As part of ERFMI, the European trade association representing the interests of the resilient floor covering industry in Europe, our in-house R&D team will analyze the usability of the PVC recyclate resulting from the CreaSolv® Process in our products.

#### #2

#### Circular sustainable flooring (CISUFLO)

#### WHAT?

As an EU Horizon 2020 project, CISUFLO sets up a framework for circular and sustainable floor coverings, while minimizing the environmental impact of the sector. The project will include 6 pilots focusing on manufacturing, sorting, separating and recycling laminate, resilient and carpet floor coverings.

#### WHY?

To support the European Union's transition towards a circular economy. CISUFLO will help to shift approximately 5 billion euros or 12,000 jobs towards the circular economy sector, with the potential to triple these numbers in the longer term.

#### HOW?

**#1** By developing solutions for recycling current floor covering waste streams and thus bringing the materials back into open or closed-loop recycling processes.

**#2** By adapting the composition and manufacturing of current products to enable a higher recycled content.

**#3** By developing, manufacturing and marketing novel flooring products and services that are fully fit for the circular economy.

#### OUR CONTRIBUTION

B.I.G. is one of the 19 core partners of the project and will focus specifically on vinyl floor coverings through Beauflor.



## WHICH CERTIFICATIONS MAKE US STAND OUT



#### **REACH**

Reach is a European Union regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals. The position of BIG floorcoverings, division cushion vinyl is clear; for all of our European legal entities and divisions, all measures are in place in order to ensure REACH compliancy. No harmful substances added, such as formaldehyde; lead; cadmium; mercury or hexavalent chromium.



#### **AgBB**

AgBB (Ausschuss zur gesundheitlichen Bewertung von Bauprodukten) is a committee for health-related evaluation of building products. Beauflor's vinyl products satisfy the stringent emission criteria as stipulated by the renowned DIBt Institute in Berlin.



#### Floorscore®

The most recognized indoor air quality (IAQ) certification standard for hard surface flooring materials, adhesives, and underlayments. Developed by SCS with the Resilient Floor Covering Institute (RFCI), a leading industry trade association of flooring manufacturers and suppliers, it qualifies for many green building schemes including LEED v4, WELL, BREEAM, and CHPS.



#### E1

E1 means that the level of formaldehyde is inferior to 0.1ppm (=  $0.12 \text{ mg/m}^3$  of air)



#### **ERFMI**

ERFMI (European Resilient Flooring Manufacturer Institute) has prepared EU wide Life Cycle Assessment of a broad range of flooring types and specifications. From this study, a series of Life Cycle Analysis data sheets have been produced, called EPD's (Environment Product Declaration). Beauflor is an active member of ERFMI.



#### Ortho-phthalates free

All our vinyl sheet products are produced without plasticizers that contain significant impurities. This means that we only use other non-phtalate plasticizers, such as DOTP. We produce with known virgin raw materials from trustworthy vendors throughout the world and therefore we guarantee a 100% ortho-phthalate-free flooring worldwide.



#### **EcoVadis**

The EcoVadis rating covers a wide range of non-financial management systems, including environmental, labor & human rights, ethics and sustainable procurement impacts. EcoVadis, the world's most trusted provider of corporate sustainability ratings, assesses a company's commitments, policies, actions, and results on these 4 topics. Beaulieu International Group, the group to which Beauflor belongs, has achieved a bronze EcoVadis medal for its global operations and 29 factories. This reward underlines our group's valued actions and reliability in the field of sustainable business operations.



#### BREEAM

BREEAM is one of the world's leading rating systems to measure sustainability and environmental performance of new and existing buildings. Beauflor products, which hold high ratings, positively contribute to a building's overall score.



#### Green A+ label

All our Beauflor products carry the green A+ label, the highest accolade awarded by the French authorities.



#### VinylPlus®

VinylPlus\* is the voluntary commitment to sustainable development of the European PVC industry, working to improve the sustainability performance of PVC. PVC can be recycled multiple times, and VinylPlus\* works to do just this! Beauflor is an active member of Vinylplus\*.



#### **FDES**

An FDES (Fiche de Déclaration Environnementale et Sanitaire) is a standardized document that shows the results of a product's life cycle analysis as well as health information, used to calculate the environmental and health performance of an eco-designbuilding. This is also known as an EPD (Environmental Product Declaration). All our ranges are covered by an FDES - or EPD - which enables our customers to assess the environmental impact of our products and to our engineers, to set eco-design targets according to objective criteria.



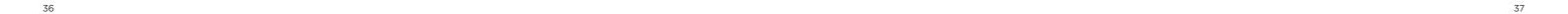
#### ISO 14001

ISO 14001 certification means that the industrial site complies with all the environmental standards, measures all environmental impacts and is committed to continuously improve its environmental performance. Beauflor's Slovenian plant is ISO 14001 certified.



#### ISO 9001

The most widely used standard for quality control worldwide. The goal of the quality management system is to keep the organization focused on continuous improvement in order to increase customer satisfaction. Beauflor industrial sites are ISO 9001 certified.



### WHO HAS OUR BACK

In the world of material and flooring solutions, **Beaulieu**International Group is synonymous with innovation, sustainability
and a relentless pursuit of successful collaboration with customers,
partners and employees.

At B.I.G. our purpose is unequivocal: we are here to shape sustainable living. From pioneering **sustainable materials** and **eco-friendly processes** to redefining what's possible in flooring and materials, we lead the way in **inspiring the spaces where people live and work**.

Within the range of flooring solutions, Beauflor has become a worldwide reference for vinyl flooring.

Being part of a resilient group allows us to focus on what we do best: building long-term partnerships, creating 100%-customizable designs, offering strong digital services and supporting our customers with a down-to-earth attitude.



38 39



**TURNOVER** 

### 2.4 billion euro





**EMPLOYEES** 4900

**UNIQUE CUSTOMERS** 18500

**ACTIVE IN** 150 countries





**CUSHION VINYL DISTRIBUTION** 

100+ million m<sup>2</sup> a year

**FACILITIES** 



offices





**FOUNDED IN** 1959



**HEADQUARTERS IN** Waregem Belgium







B.I.G. Floorcoverings nv Rijksweg 442 8710 Wielsbeke - Belgium T +32 (0)56 67 66 11 info@beauflor.com



