# SUSTAINABILITY REPORT 2019 FORBOFLOORING SYSTEMS

Creating better environments is more than just a tagline, it is our program which looks ahead for the five next years in which we strive to improve our products and processes to be an integral part of the circular economy, whereby we lower our CO<sub>2</sub> emissions, reduce energy use and increase our use of renewable energy even further. We want our customers to experience the comfort and well being by using our floor coverings in healthy indoor spaces in which people work, live, interact, relax, heal, learn and play. We do so by creating an organization together with our suppliers where we respect human values for our employees and those working in our worldwide supply chain, whereby we subscribe to the Sustainable Development Goals of the United Nations.



# ABOUT THIS REPORT

The 2019 report is our eigth consecutive Sustainability Report and, as previously, is based on GRI's sustainability reporting framework. The report provides a transparent overview of our environmental, social, and economic performance, as defined by the Global Reporting Initiative. We see the compilation of this report not only as a reporting tool, but also as a way to account for our activities, our sustainability program 'creating better environments' and as a support to help us improve our general sustainability performance in every detail.

# THE FLOORING SYSTEMS 2019 SUSTAINABILITY REPORT

This report provides an overview of Forbo Flooring Systems' performance for the 2019 calendar year, in line with our financial reporting cycle. The 2019 financial report is available at https://www.forbo.com/corporate/en-gl/investors. Please feel free to let us know your thoughts about our 2019 Sustainability Report; you can do so by contacting us at contact@forbo.com. Finally, we would like to thank our stakeholders and everyone who helped with the compilation of this report. Your contributions have been invaluable.

# REPORT BOUNDARY

Unless otherwise stated, environmental data published in this report is limited to our 12 floor covering manufacturing sites in the United Kingdom, the Netherlands, Russia, France, and Switzerland, as these entities are considered the most material in terms of environmental impact.

The environmental data in this report does not cover our worldwide sales offices and warehouses in Europe, North and South America, Russia, and Asia/Pacific. Unless otherwise stated, the social and economic information within this report covers all sites and offices worldwide. There have been no changes from the previous reporting period in the scope, boundary, or measurement methods applied in this report.

Unless otherwise stated, Forbo Flooring Systems' building & construction adhesives activity, including its three manufacturing sites, do not form part of this report.

# MESSAGE FROM JEAN-MICHEL WINS

# **EXECUTIVE VICE PRESIDENT FORBO FLOORING SYSTEMS**

In 2019, we have seen governments and trade associations setting out their strategies and policies that focus on future compliancy towards the goals that are set by 2015 Paris Climate Agreement. Also for Flooring Systems 2019 has been a year in which we named the spearheads of our environmental strategy together with a new organizational set-up which allowed for focus with the aim to actually execute as well as to assure our economic performance.

At Flooring Systems we started 2019 with a new set-up of the organization, one that helps all disciplines to focus on what really matters. The work streams were divided into three key processes; "create, make, sell". Creation and manufacturing are the domain of the individual business units Linoleum, Vinyl and Textile (the Building and Construction Adhesives activity already was set-up as a separate business unit). The flooring product groups each are challenged on efficiency, innovation and sustainability. The combination of these factors come together in what we have called: "easyvation"

Easyvation in essence has a customer and end-user focus, meaning that whatever we do we will make it easy for the customer to do business with us, but also looking for those areas were our end user is best served. This is not only a responsibility or our producing business units, but it also requires our four sales regions to be proactive in finding ways to better serve the customer.

Easyvation focuses on the following areas:

<u>Easy to make</u> products produced first time right, for lowest costs and reproducible at various locations with use of

**Easy to do business with** meet globally the market's expectations with products that are easy to explain, obvious in their application for the right price. **Fasy to use** products that are easy to install, easy to

**Easy to use** products that are easy to install, easy to maintain, easy to repair and easy to remove.

reliable raw materials.

**Easy on the eye** make sure that our products are well designed and simply beautiful to see and use. **Easy on the environment** less use of resources, (easy to recycle) and beneficial to health.

I believe that in this way the notion of sustainable entrepreneurship is with the business itself, rather than organized from a central entity in the organization. The advantage is that we can act locally, in the markets that all have specific spearheads as well as in production, where each product category faces specific challenges and should look for the best solution.

In this report you will see that we have succeeded to make advancement in all three product groups. Marmoleum, our linoleum offer can claim to be CO<sub>2</sub> neutral in its cradle to gate production stages. In vinyl we have the largest phthalate free offer in the market and are reaching even lower emission levels. And in textiles, next to promoting both Flotex as a extremely durable, anti-allergy washable carpet, and Coral entrance flooring which keeps the indoor environment cleaner and more hygienic for longer, we achieve higher recycled content by weight within our portfolio.

Challenges do not only lie in design, manufacturing, raw material use and product build-up, we are facing new challenges in reducing our CO<sub>2</sub> and greenhouse gas emissions, reduction in our energy use where we have now moved to almost 100% green electricity and recognize we have an extended product responsibility.

Next to the product itself and taking care of easy and future proof installation methods we aim at extending the use phase of our floor coverings by making them durable and easy to clean and maintain so that occupants are ensured of a healthy indoor environment.

Flooring Systems for as long as I can remember has worked with the 4 R principle of reduce, renewable, reuse and recycle, which today in a popular way is expressed in the circular economy model. In this report you can read how we address the challenges that we are facing as an industry. It is clear that no one can do this just on his own. We need to work together as an industry and as producers. We are proud to be a partner in the European Circular Flooring

Project which works towards a pilot for regaining virgin PVC from used vinyl floor coverings.

I recommend you our 2019 Sustainability report as a means to inform you on our progress.

Sincerely,





# OUR BUSINESS ENVIRONMENT

MARKET DEVELOPMENTS AND TRENDS

Over the year 2019, we faced economic slowdown and weaker demand in many markets. The impact on our business was cushioned by enhancing efficiency through technological improvements. New attractive collections were introduced in all of our in all of our business units which also give us a good basis for the years ahead.

# THE BUSINESS YEAR 2019

We have an attractive high-quality and very diverse product range with a wide assortment of floor installation options and specifications for individual customer segments. Our product portfolio makes it possible for us to work as a reliable partner in all of the main market sectors in which we are capable of supplying our flooring solutions. Our goal is to deliver convincing and professional performance over the entire product range, in all organizational units, and in all markets.

# SALES IMPACTED BY GROWING RELUCTANCE TO INVEST

The European markets showed a mixed trend but on the whole were somewhat weaker. Our core markets – France, the Netherlands, Germany, and Great Britain – remained practically flat year-on-year or trended slightly downwards. Against a backdrop of increasing reluctance to invest substantial projects were postponed, reduced in scale, or else awarded on the criterion of price in a fiercely competitive market. Demand in northern and southern Europe weakened on the whole, despite firm growth in Denmark and Italy. Switzerland, too, saw sales decline. The trend in eastern Europe was positive, especially in Poland, which was a strong growth driver. Russia also reported higher sales, an uptrend that was driven by a new, locally produced luxury vinyl tiles collection and an expanded distribution network in the CIS countries.

The mood was rather subdued in the Americas region, especially in the USA. Demand for projects in the retail sector weakened noticeably, while at the sametime major

projects in school rennovations were either reduced in scale or postponed altogether. Canada reported positive growth owing to the new distribution channels for vinyl floor coverings and textile installations in office premises. Brazil and other smaller markets in South America were restrained.

Most markets in the Asia/Pacific region, with the exception of the main market, China, reported gratifying growth. The sales decline in China was due to a number of factors such as the trade dispute with the USA, a slowdown in the construction industry, and a significant downturn in investment spending in both the private and public sectors. Japan enjoyed double-digit growth in the wake of the Olympic fever. Australia reported solid growth, while South Korea is making steady progress thanks to the expansion of its distribution network and the acquisition of new key accounts.

# VERSATILE INNOVATIONS IN ALL PRODUCT LINES

In the year under review, we launched attractive and highend collections in all product groups, combining trendy designs, varied color palettes and floor-laying options along with new production technologies and special effects that employ sustainable materials.

A new global linoleum collection for sheet material is being offered in five modernized design types and varied, natural color shades featuring different thicknesses and sound absorbing properties. The division is offering another linoleum collection specially designed for trains that meets the latest fire and smoke regulations.



In the vinyl range, we launched a new global sheet collection, whose varied colors, designs, and novel wood and stone effects are produced on a recently installed, high-quality digital printing unit.

In the textile range, the new Flotex collection 'color' a high-tech washable flooring convinced customers. Many of the 90 colors, featuring various designs and new effects, are also available in tile formats or with stronger sound absorbing qualities. The new tufted carpet tile 'Tessera chroma' is manufactured with a novel, more thickly twined yarn; this makes the colors appear softer, while the much higher fiber weight enhances walking comfort. A new needlefelt collection, designed especially for the walls and ceilings of rail coaches, lends itself to very easy installation owing to its to very self-adhesive back. Flexible printable entrance flooring systems allow railway companies more options in terms of colour and designs.

# SOME PRODUCT LINES ARE HOLDING THEIR OWN AMID FIERCER COMPETITION

The individual product lines performed in line with the overall sales trend. Linoleum floorings were more or less flat year-on-year. Most product lines of the versatile and application-specific vinyl flooring collections performed slightly below average. Especially positive to mention are the antistatic high-tech floorings for special industrial or hospital applications and the homogeneous vinyl floorings, which have enjoyed steady growth since being launched in 2017. Textile floorings for the most part also remained flat year-on-year; in some cases they registered a decline. Flotex reported marginal growth.

# INVESTMENTS TO SUPPORT GROWTH

In addition to the numerous initiatives to enhance the product portfolio, we invested in upgrades at various production plants with the aim of developing new products and promoting innovations but also of streamlining production processes. This invariably also involved ecological improvements.

Noteworthy developments included the update of the process control center for linoleum production, new edge cutting machines for vinyl flooring, additional tanks and silos for more efficient processing of incoming raw materials, new laboratory test equipment and expanded laboratory facilities, as well as renewed and expanded digital printing technologies. In addition, we installed various cutting machine facilities for the manufacture of modular flooring in the vinyl and textile floor coverings. In the Netherlands we made a significant expansion to the cross-dock warehouse for modular flooring.

We also invested in digital platforms. The new global online webshop enables existing customers to make real-time searches regarding stock levels, availability, and delivery times and provides a full service combining everything from quote to invoicing, coupled with additional marketing and customer service features. A new customer relationship management system is to be rolled out globally starting from 2019 onwards.

# ORGANIZATIONAL PROFILE

Forbo Flooring Systems has 16 production facilities in seven countries, plus distribution companies in 26 countries. The division has sales offices in Europe, North, Central, and South America as well as Asia/Pacific. The headquarters of the Flooring Systems division is in Assendelft, the Netherlands. The Flooring Systems division includes a building & construction adhesives activity with production facilities in three countries and sales activities concentrated in Europe.

# MARKET SECTORS

Flooring Systems produces floor coverings, building and construction adhesives and leveling compounds for the commercial professional (commercial) market. A part of the product portfolio is also suitable for use in the residential consumer market and is sold via retailers for floor coverings and interior decoration. For the commercial market, Flooring Systems offers a portfolio of both natural linoleum and vinyl resilient floors, as well as a collection of textile floor coverings such as carpet tiles, flocked flooring, and needlefelt. All products have multiple formats and are available in rolls (sheet) and in tile or plank as modular formats. All products in our portfolio are easy to install, and are offered in varieties ranging from dry-back (glue down) to loose lay and click system installation options.

The floor covering collections of Flooring Systems are installed in a wide array of market sectors and applications, ranging from institutional buildings such as government buildings, health care institutions, education facilities and other publicly used utility buildings such as libraries, congress centres and theaters to private commercial buildings like commercial offices, shops, hotels, restaurants and leisure facilities. Special floors are produced for the high-tech industry and IT market segment as well as for transport vehicles such as coaches, railway carriages and ships. For all these market sectors Flooring Systems also manufactures a comprehensive range of textile and ridged aluminum entrance flooring systems making sure that sand, dirt and moisture stay outside resulting in a safe and hygienic indoor environment.

#### **PRODUCTION**

All our 12 floor covering production plants in the United Kingdom, the Netherlands, Russia, France, and Switzerland that are considered most material in terms of their environmental impact and accounted for in this report are ISO-9001 and ISO-14001 certified.

# LINOLEUM AN EVERGREEN, THAT DELIVERS A BONUS TO THE ENVIRONMENT

Flooring Systems leads the world linoleum floor coverings market with its Marmoleum brand and world market share of about 70%. Flooring Systems is universally recognized as the linoleum innovator when it comes to 'creating' the category, providing a versatile floor covering solution in all types of flooring applications, in every market sector worldwide. Linoleum once was the first and only resilient floor covering. Today the product category still enjoys the status of a special category in floor coverings that is so versatiles that it can be used in a large variety of professional market sectors as well as in the residential environment of private dwellings.

Linoleum was invented and produced for the first time in the century before last. At that time linoleum floor coverings were a real innovation in an era where wood, natural stone and carpets were the common floor covering. Linoleum was immediately valued as a hygienic and durable solution for health care institutions, schools and public buildings. In itself it is remarkable that in today's world – where the health care and education environment both have changed so much – it still considers linoleum floor coverings as its preferred solution.

# CO<sub>2</sub> NEUTRAL, CRADLE TO GATE

Forbo's linoleum floors are presented under the brand name Marmoleum®, and offer a remarkable bonus to the environment; every square meter of linoleum sheet produced results in a negative contribution in CO<sub>2</sub> emissions of 4 grams per square meter. The natural raw materials (plants, trees and annual crops) out of which Forbo's linoleum is made, during their lifetime take-up and absorb such an amount of CO<sub>2</sub> that this exceeds the CO<sub>2</sub> emissions during the production process. It results in a CO<sub>2</sub> neutral product (cradle to gate). As such linoleum is making a valuable contribution to the desired outcome of the Paris Climate Agreement and as such in this context is preferred over other resilient floor covering options.

A popular linoleum solution is 'Desktop' Furniture Linoleum which is used as a natural and high-end surfacing material for furniture, cabinets, doors and partition walls. Furniture Linoleum acquires a beautiful natural patina over time and is warm to the touch. In 2019, our Furniture Linoleum sales remained very strong and continued to gain the interest of large international furniture manufacturers and distributors with well-known brands in the industry partly as a result in our participation in prestigious international furniture and design fairs.

Flooring Systems' linoleum is produced in the Netherlands and Scotland. Forbo's key linoleum brands are **Marmoleum®** 

for sheet, tile, and plank options, Marmoleum Click® for floating floors in the residential and semi contract market. Marmoleum sport® for indoor sports floors, Marmoleum ohmex® for anti-static floor panels, Furniture Linoleum - a surfacing material - and Bulletin Board used for pin wall/pinboard applications. A new collection in our linoleum offer is Impressa. This is a linoleum variety of, and alternative for, the popular luxury vinyl tile products. In the case of Impressa a plank shaped floor covering with a linoleum core is finished with a woodprint and wear layer giving an identical look and feel as as vinyl tile, only this time the product content is made of environmentally friendly linoleum of higher environmental value.

# INNOVATIVE VINYL COLLECTIONS

The Flooring Systems' vinyl collections in 2019, again delivered a positive development when it comes to improvements in their overall environmental profile. When PVC is concerned sometimes eyebrows are raised as to how it is made, which raw material have been used? At Flooring Systems chemical safety is of the highest concern. This is why we always have been a frontrunner when it comes to heralding the changes in legislation and why we are always seeking to take a 'compliance plus' position. An example is our dedication towards offering a phthalate free product portfolio. In our endeavor we by now have the largest collection of phthalate free vinyl products in our portfolio.

# EASYVATION IS KEY TO OUR SUSTAINABLE DEVELOPMENT ROADMAP

Vice President BU Vinyl, Coevorden, the Netherlands

"In our new organizational set-up as business unit Vinyl we now take up the responsibility for the "create" and "make" process of our portfolio. This means that responsibilities for design, collection development and innovation are left to us to prioritize and deliver. 'Easyvation' is a key concept in our strategy. In terms of sustainability to me this means: developing easy to recycle product concepts, increasing the recycled content in our overall portfolio, reducing energy (in particular natural gas) consumption and reducing manufacturing waste.

We rightfully pride ourselves on our loose lay portfolio in both sheet tiles and planks. This not only eases the installation but also is future proof as loose lay floors can be easily removed and recycled. We are also looking at various ways to increase the recycled content in all of our products, this is not only done by recipe alterations but also by introducing new production techniques. Micronization is one of the concepts which are promising and which proofs to work in some of the pilots we carried out in 2019.

Energy reduction is a win-win situation for everyone, however with all the low hanging fruit implemented, we now need to look at viable options. Here we need to consider best available technologies for our processes. In making these changes we are sometimes also faced with legislation from local government authorities and permit authorities that not always adapt at the same speed. We have now set up pilots in our Reims and Coevorden production sites and will run an alternative technology program over the coming 3-4 years. The result of this should be a reduction in natural gas and a transition towards electricity.

Finally, a major part in our "continuous improvement" to reduce waste is to convert where possible to digital printing concepts. We therefore have developed a digital roadmap for the business unit in alignment with the division. We now have a 4 meter wide printer installed and comissioned in 2019. We also offer a click system, which is easy to install and can be fitted and cut to size on-site. We will introduce digital capability into our other operations sites over within the current divisional strategy framework.

Our manufacturing sites are modern, run in over 95% on green electricity. In nearly all cases, we use waste material to make the backing of our products. We also transport waste material between our plants for optimal usage. Another method to reduce waste is by using advanced technology and by precision and accuracy. Our increasingly popular Allura luxury vinyl tiles are produced from a 4-meter-wide calandered sheet that is cut to size by ultrasonic knives. This reduces waste offcuts to an absolute minimum and so reduces overall waste streams.

Our vinyl brands comprize **Allura** and **Effekta** for luxury vinyl tiles and planks, **Eternal**® for heterogeneous vinyl, **Sphera**® and **FabScrap**® for homogeneous vinyl, **Step**®

for slip resistant vinyl, **Sarlon®** for acoustic vinyl, **Modul'up®** for loose lay vinyl sheet, **Colorex®** for static dissipative vinyl floors, and **Novilon®** and **Novilux®** for residential applications in vinyl flooring.

# OUR TEXTILE OFFER, HIGH IN RECYCLED CONTENT, EFFECTIVE FOR A HEALTHY INDOOR CLIMATE

Whether in product-type or application, Flooring Systems offers a wide choice of textile floor coverings. For office and leisure applications, our Tessera and Westbond carpet tile collections are presented in a broad range of colors and designs, that allow for mixing and matching. Through this,

# AN EXTRAORDINARY STORY WHERE FLOOR COVERINGS REALLY MAKE A DIFFERENCE

Born with spina bifida and hydrocephalus, seven-year old Noah Wall from Cumbria, suffering from spina bifida, has continued to defy the odds and confound the medical experts. As his needs have changed over time, the family required a new floor covering for their home and therefore opted for Flooring Systems' Flotex Wood flocked flooring, to provide the warmth and comfort required to help with Noah's development.

Noah's mum and full-time carer, Shelly Wall, said: "The most important requirement when it comes to designing spaces for Noah is that the areas need to be suitable for wheelchair use, providing a 1,500 mm clear turning circle. Just as a child would run around the house, Noah wants to go fast in his wheelchair, so when it comes to flooring, it was essential that the material allowed him to move freely. If Noah was left to sit in his wheelchair all day, he could end up with pressure sores, which is why floor time is really important to allow him to stretch and to help him with his digestion. We needed a floor covering that was warm, comfortable, soft and pleasant for him to lay down and play on."

"I know to most people it's just a flooring but to us, it's not just a flooring; it needed to be the right decision for Noah. We noticed a real difference straight away in the kitchen; it was warmer, softer and quieter and when we had visitors around, we found that they would want to stand on the Flotex rather than on the original floor! After the trial, we knew that the flocked floor covering would be the perfect solution for our home."

Looking to create a contemporary home, the unique Flotex Wood range was selected as it brings the allure of a modern wood floor, while dampening sound and providing comfort underfoot. The Reclaimed Pine colourway, which was chosen by Noah, was installed in the sensory room. The touch of colour adds a sense of character to the space where Noah spends a lot of his time, playing, relaxing and learning. What's more, Flotex was also fitted in the hallway, through to the backroom and into the kitchen – all of the spaces that Noah uses most.

Shelly added: "We have been chemical-free in our house for the last two years so the fact that Flotex is approved by Allergy UK was a significant deciding factor for us, providing us with peace of mind that nothing grows within it. Noah's pelvis is tilted, and he has hip dysplasia, so he had been on inhalers and steroids, while being regularly in out and of hospital in the past, but in the last two years since we stopped using cleaning products that contain chemicals, we have not had any of that. And now that the floor covering is both allergen and phthalate free, is a massive bonus for us."

Thanks to its unique construction, the polyamide fibres not only ensure excellent sound absorption properties, they also capture allergens and fine dust from the air, all of which are effortlessly released to standard cleaning appliances, which is why Flotex has been awarded the prestigious Allergy UK Seal of Approval $^{\text{TM}}$ . With the correct cleaning and maintenance regime, it will not harbour dust mites, contributing to a better indoor environment for all.

we can offer customers an extensive choice without having to manage a very large number of individual collections that risk going out of fashion and so going to waste. We use yarns that are upcycled from old fishing nets for a number of our collections. On average we can claim the highest percentage of recycled content by weight going up to as high as 56%.

For high traffic areas, and areas where frequent cleaning and maintenance are needed to ensure a hygienic environment, Flotex is the ideal solution. In those cases we advice our Flotex flocked floor covering. Flotex is a high-density, high-tech product made of millions of fine nylon fibers that are injected into an impermeable vinyl base. Because of this, Flotex can be scrubbed and cleaned with a little detergent and water and dried without effort, ensure maximum use time.

Complementing our textile product offer we have a number of Needlefelt collections which are used in the office and education segment. A special fine-fiber needlefelt is offered for the leisure market.

Coral, our brand for textile entrance flooring systems, combines brush and scraper yarns with moist-absorbing open yarns.

Together, they remove 95% of all dirt and moisture walked into a building before people arrive at the main floor covering. This keeps the building cleaner and more hygienic, and reduces slip accidents. Coral uses various recycled yarns, including recycled aluminum for ridged entrance floors.

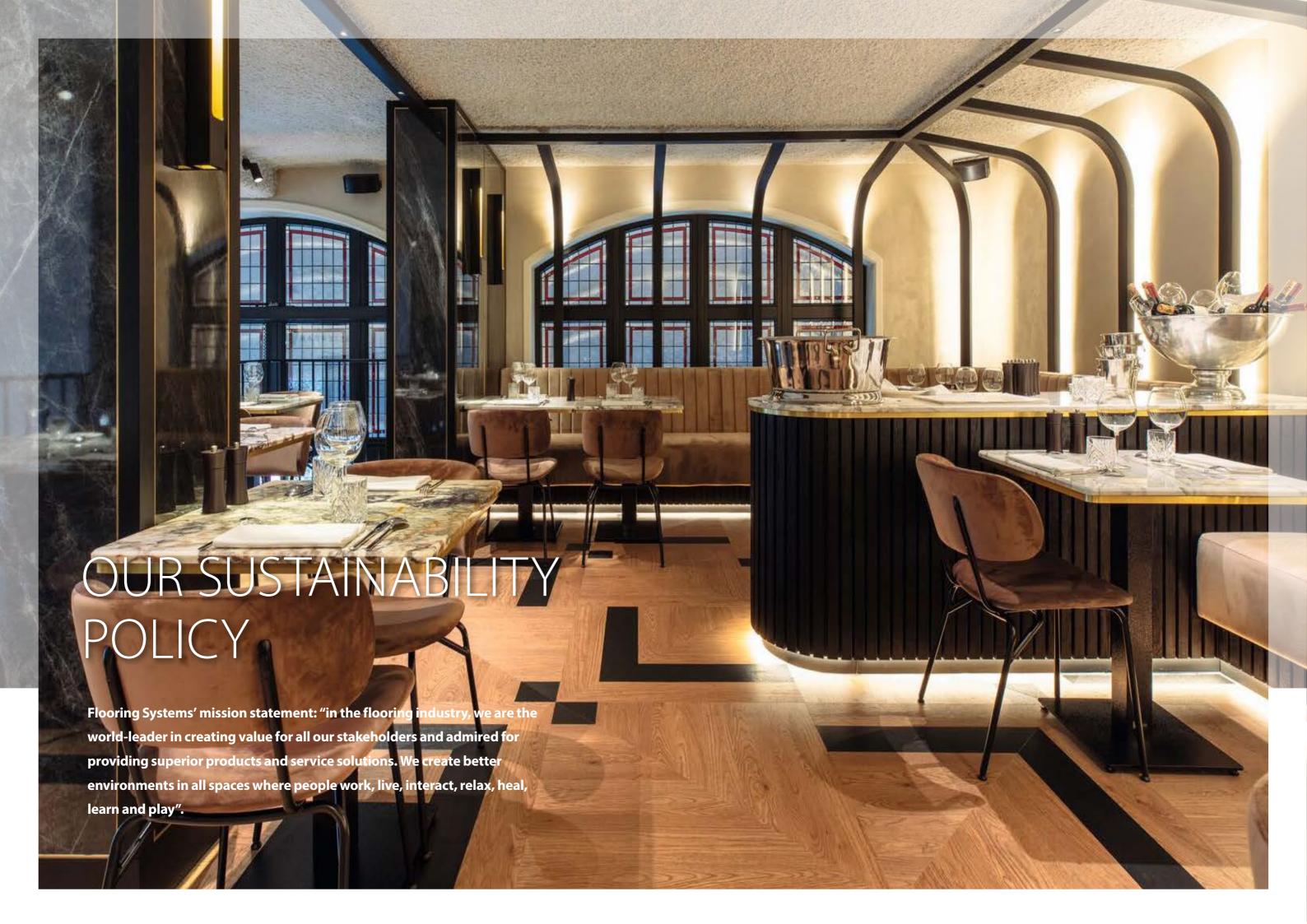
We also produce ridged entrance floors that combine aluminum or bamboo scraper bars with buffed or un-buffed prime rubber and polyamide fiber composite wiper strips. We also offer a click system, which is easy to install and can be fitted and cut to size on-site. The click tiles are strong, durable and an alternative for all those are-as where ridged aluminum strip entrance floors are problematic to install.

Our textile floor covering brands are: **Tessera**® for tufted carpet tiles and planks, **Westbond**® for fusion-bonded carpet tiles, **Flotex**® for flocked flooring in sheet, tile or plank formats, **Forte**® for needlefelt, **Coral**® for textile entrance floors, and **Nuway**® for ridged entrance floors.









# **OUR SUSTAINABILITY POLICY**

Flooring Systems has a long history in designing and producing state of the art floor coverings that are long lasting, functional and sustainable. In fact, our legacy goes back over 150 years, with linoleum the first product to be made by the companies that over time became Forbo and established the Marmoleum® brand.

Linoleum, the original start of our collection of resilient floor covering products, is made from renewable natural raw materials that are fully biodegradable and environmentally friendly, we have effectively been at the forefront of sustainability since the 1860s.

Our Flooring Systems tagline, 'creating better environments,' expresses the awareness, commitment and effort we make to contribute to a better world for people and the environment in which we live. As a company, we are committed to meeting our obligations to future generations. We do this by acting as an environmental responsible company. Forbo underwrites the broad and all-inclusive definition of 'sustainable development' as accepted by the United Nations Commission on Environment and Development in the General Assembly Resolution in 1987, which states that sustainable developments are those that are 'meeting the needs of the present without compromising the ability of future generations to meet their own needs.'

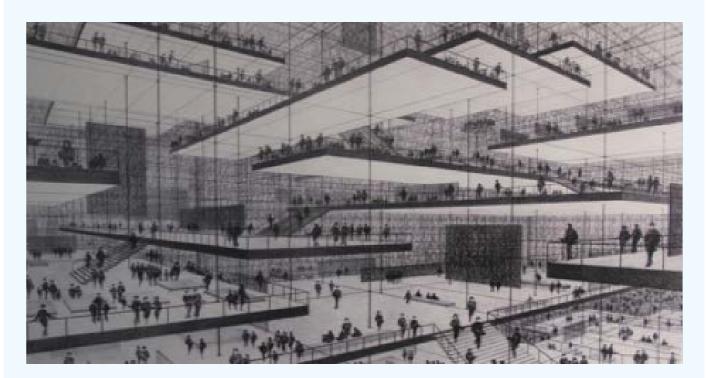
Flooring Systems has issued a Sustainability Policy document since 2009, in which it confirms stewardship towards the environment based on the UN declaration of 1986. The policy includes the notion of the so-called triple bottom line of 'people', 'planet' and 'profit', expanding the traditional reporting framework, taking into account social and environmental performance in addition to financial performance. Under the triple bottom line we have been running various programs and activities. They are:

- people: the social dimension. Flooring Systems has chosen to benchmark the SA8000 standard. The SA8000 standard is based on the conventions of the International Labor Organization (ILO) of United Nations, international human rights standards, national legislation.
- planet: the environmental dimension. Flooring
   Systems is reducing environmental impacts by using the
   4 R's: reduce, renewable, reuse, recycle. These 4 R's are
   still key in setting our yearly improvement targets in the
   business units where our products are produced.
- profit: the economic dimension. The way Flooring
  Systems organizes its position in the market place to
  actively develop its sustainable profile by using its
  economic stability and profitability for continuous
  improvement. Business integrity, risk management and
  risk assessment are an integral part of Forbo's
  organizational processes, and are included in every
  decision-making process.

In the 2019 Flooring Systems' Sustainability Policy document 'people', 'planet' and 'profit' have been aligned with the recently published Sustainable Development Goals of the United Nations as well as with the ratified Paris Climate Agreement, both of which identify the direction and the key actions to be undertaken by nation states and companies alike. Based on this we have defined our strategic direction as follows:

- Transforming the linear economic business model to the circular economy model principles of decreasing material use, resource optimization, increasing the use of recycled material, develop take back programs and recycling possibilities at end of life.
- Contribute to creating better indoor environments and healthier buildings by designing products and collections with a focus on human health, supplying floor coverings that are functional, safe, comfortable and environmental friendly.
- 3. Supporting **social equity** and fair treatment of employees in the supply chain through SA8000.

"Our Sustainability Policy which we issue since 2009 confirms our stewardship towards the environment based on the 1986 UN declaration on sustainable development"



# THE FIVE DYNAMICS OF A BUILDING

In the last decade the way functional buildings are designed has changed. Before, there was clear uniformity; a hospital would look like a hospital, treating patients, an office would be designed to be exactly what you would expect from an office, simply a place to work. However today, the functions and design boundaries between these buildings has blurred. Buildings are adopting a variety of identities. 'Modern offices have a larger focus on health and wellbeing, and now not only provide spaces to work, but they also offer areas to relax and to socialise in. Hospitals have become multifunctional with hospitality and retail spaces, and patient care is multi-disciplinary. The Flooring Systems' design team has developed a philosophy around the changing dynamics of a building – and found that floor covering plays a significant role in the total experience of a space. In fact, floors can help to distinguish different spaces or connect the multifunctional spaces together, all the while being functional, decorative, stimulating or supportive to the other architectural elements, depending on the purpose of the space. The five themes express a certain state of a person or an activity taking place within the building, and each scenario has its own unique color dialogue with its genuine identity created by the contrast, intensity and the positioning of colors.

**Receiving:** Welcome to a surprisingly familiar, inviting interior. Entrance, lobby or atrium, natural daylight makes the threshold space bright and engaging. Colors, materials and textures keyed to company image mingle with the basic qualities of the building.

**Moving:** Incidental subliminal clues lead the way. Without even knowing the layout, the flooring acts as a guide. Transitional patterns and textures delineate paths, striking contrasts in color serve as signposts that point visitors in the right direction.

**Connecting:** At the heart of the building, energized spaces invite encounters, connections and exchanges. An open informal atmosphere of inspiring colors, bold textures and eye-catching images encourages spontaneous interactions or stimulate the imagination.

**Concentrating:** Secluded spaces provide privacy and filter out non-essentials. A muted color palette matched with subtle textures soothe the senses and absorb outside noise. Minimising distractions focuses attention on individual projects or intense discussions.

**Recharging:** Calm relaxed environments allow room to breathe and temporarily escape a slower pace to gives pause to reflect and recover inner balance.

In working with these 5 determinations all our collections interconnect and work with coordinated color schemes that are linked to specific areas in a building. This way a healthy, pleasing environment is created, supporting the dynamics of a building.

# MATERIALITY ANALISYS

Effective and ongoing stakeholder engagement is the foundation of both our business and our sustainability reporting initiatives. We engage with our stakeholder groups on an ongoing basis to ensure we maintain our social license to operate both within our operations locations as well as in our marketing and sales organizations. The selection of stakeholders with which we engage, reflects the relevance of those things that have a direct or indirect impact on our everyday business. In particular, we consult local and national government environmental organizations regularly, because of the material impact of our environmental activities. Likewise, the social and economic dimensions of our business mean we talk with unions and organizations related to the floor covering industry. Our stakeholder engagement involves a range of activities:

- Internal stakeholders through regular meetings and surveys and audits
- Customers through customer feedback mechanisms and surveys
- Government (national, state, and local) through representation on committees and other regular contact regarding environmental and safety compliance
- · Environmental non-governmental organizations through meetings, representation on committees, and other regular contact
- Suppliers through regular meetings and audits
- Unions through meetings and representation on committees
- · Communities through representation on committees, open days at our production plants, and involvement with charities and local sponsorship activities
- · Industry and trade associations through meetings, representation on committees, and other regular contacts.

# STAKEHOLDER ENGAGEMENT AND IDENTIFIED MATERIAL ASPECTS **RECONFIRMED FOR 2019**

Reconfirmation of our materiality assessment was conducted in 2019. Focused was on the three pillars of our sustainability document that covers the material aspects of the circular economy, healthy buildings and social equity. For the 2019 report, we repeated the assessment with a broad group of employees from our production locations and sales organizations, a group composed of senior people from relevant disciplines with knowledge of, and access to, data on stakeholder priorities.

#### THE WORKING GROUP:

- Confirmed the sustainability topics that had been identified as specific to Flooring Systems
- Confirmed the main stakeholder groups that had been identified

- Assessed the level of stakeholder concern per sustainability topic for main stakeholder groups based on:
- Data (feedback, complaints, questionnaires, global media)
- Internal or external surveys or interviews
- Own experience
- Assessed the impact on Flooring Systems' success (essential to fulfilling our strategy) for each of the sustainability topics based on previous sustainability reports and Forbo Group and Flooring Systems' principles and strategies.

The following sustainability themes and related topics were confirmed for 2019:

#### PROMOTING HEALTH AND WELL-BEING

- · A positive contribution to the health and well-being of users of our products
- Health, safety, and well-being of our employees
- · Health, safety, and well-being in the supply chain

#### REDUCING ENVIRONMENTAL IMPACT

- Health and safety 'compliance plus' for our operations
- Reducing the environmental footprint of our products
- Employing the '4R's: reduce, renewable, reuse, recycle

#### ORGANIZATIONAL DEVELOPMENT

- Sustainable financial performance
- Learning organization

#### SOCIAL RESPONSIBILITY

- Product transparency
- Social equity and labor rights (SA8000)
- · Working with the community

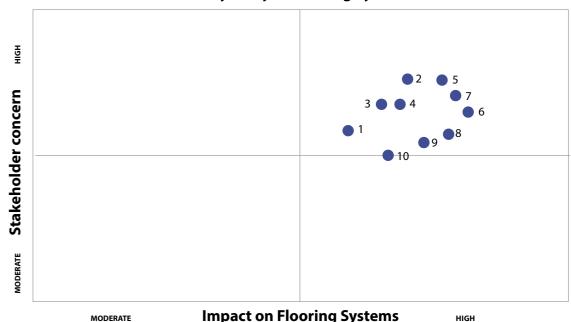


We have identified our material sustainability topics by analyzing the resulting data and assessing the topics that are most important to our stakeholders and to Flooring Systems' business. This analysis will help us to focus our

sustainability strategy and reporting in the coming year and further in the future. This report includes a significant focus on those material issues as mapped in the upper right quadrant of the materiality matrix.

# MATERIALITY MATRIX

# **Materiality analysis Flooring Systems**



- 1. Ensuring that energy use and using renewable energy are a real goal
- 2. Creating new products and product concepts that can be reused at their end of life in a circular loop without as less waste as possible.
- 3. The 4R principle; making sure that a maximum effort is made for all existing products for minimizing waste.
- 4. Making a contribution where possible on the quality of the indoor environment by reducing product emissions, fine dust and allergy triggers through our products.
- 5. Ensuring that products can be cleaned and maintained easy and with minimal effort ensuring maximum performance
- 6. Securing that the company is healthy and strong in order to pursue its strategy
- 7. Creating a culture in which learning is an inseparable part of our daily activity.
- 8. Creating a working place that is safe and healthy.
- Making sure that not only in our factories but in all aspects of our supply chain the basic human rights defined by the United Nations are lived and maintained.
- 10. Actively participating and engaging with the society where our stakeholders live an work.

# **MEMBERSHIPS**

In 2019, Flooring Systems was a member of the following associations:

- European Resilient Flooring Manufacturers' Institute
- European Carpet and Rug Association (ECRA) Multilayer Modular Flooring Association (MMFA) Global Reporting Initiative (GRI)
- Various national industry and trade associations European Committee for Standardization (CEN) through national member committees
- The Floorcovering Committee of the International Organization for Standardization (ISO)

# CONNECTIVITY

The Forbo Group organization and its two divisions are proud that its activities form part of everyday life. Its products and services connect with people in professional and private environments to contribute to their lives.

Where floor coverings are concerned, we create exceptionally good products that go beyond simply feeling nice underfoot. Floor coverings must be robust and functional, while also creating a three-dimensional experience for all senses. As stated in Forbo's Annual Report for 2019: "The group's global reach means that it is close to dynamic markets, making Forbo the first choice as a local partner for customers that have similar global requirements. The quality, longlievity, and performance of our products and systems reflect the quality and stability of our relations with our business partners."

# **AWARDS**

In 2019 Flooring systems received the following product, design and sustainability awards:

# **CHINA**

The 2019 Major Brand Affecting China's Lifestyle in Ten award. This award is presented by the organization committee of Shanghai International Design Week. The jury based the award on Flooring Systems' level of product innovation as well as criteria on aesthetic value, ecological construction and sustainable development.

# FRANCE

Les Trophées du Négoce 2019 for Flotex. This award is aimed at rewarding the manufacturers especially for the originality of their approach and the characteristics of their innovation.

The 2019 Janus Award for Flotex. The French Institute of Design selects goods and services that favor respect for the user and his environment and this award is selective due to high French technical standards especially regarding acoustic characteristics.





# **GERMANY**

*Prüfsiegel für Gesicherte Nachhaligkeit.* The seal for assured sustainability is awarded by the German Institute für Nachhaltigkeit und Ökonomie and awards all aspects of a sustainable enterprize from "A to Z".

# NORWAY

The Eco-Lighthouse Award. Eco-Lighthouse is Norway's most widely used certification scheme for enterprises seeking to document their environmental efforts and demonstrate social responsibility (see Interview on page 23).

# **UNITED STATES**

Marriott Sustainability Achiever 2019 Award under the Marriott Sustainability Assessment Program. Under this program, product materials are evaluated, along with manufacturing practices, distribution, use and disposal.

The Slate School in North Haven, CT, the Slate School using and promotion Marmoleum was awarded Best in Show by The Connecticut Green Building Council.





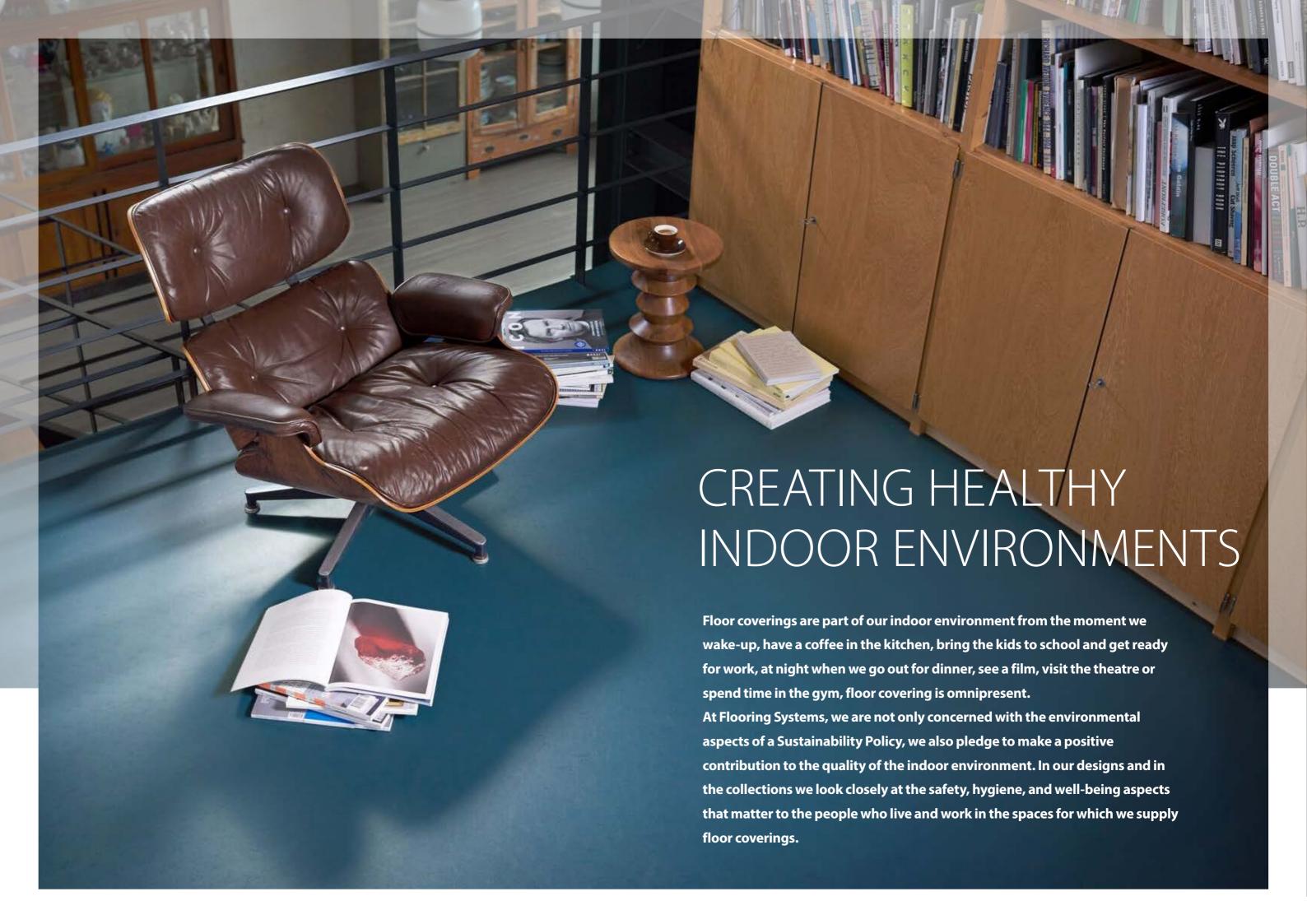
# SEAL FOR ASSURED SUSTAINABILITY

Marketing Manager GAS region, Paderborn, Germany.

"This year we are proud to have been awarded with the seal for 'Assured Sustainability' by the German Institut für Nachhaltigkeit und Ökonomie". Forbo is praised for ist sustainable heritage and ist stewardship in sustainable floor coverings in promoting the linoleum product category. But, as the report writes, this is not why the seal is being awarded. Forbo is exemplary in covering sustainability from A to Z, from 'Arbeitsplatz' (jobs) to 'Zukunftssicherung' (securing the future) and according to the institute's research covers all dimensions of sustainable development. It is interesting that the Institute praises and recognizes the concept of  $CO_2$  neutral linoleum in its cradle to gate production stages, but equaly values Forbo's position in the German society where the social aspects of employee training and further education and the contribution to the local economic position of the comunity by Forbo's loyal attitude towards its employees and local suppliers. A company really can be seen as a sustainable enterprise when next to the environmental dimension the social and financial dimension go hand in hand".







# BETTER INDOOR ENVIRONMENTS

Flooring Systems' tagline 'creating better environments' is linked to our product portfolio and the way it fulfils its function in the finishing materials of the indoor environment.

When choosing floor coverings, the type of floor, the way it looks and feels, its performance, as well as functional aspects such as noise reduction, preventing allergies, capturing fine dust and offering an aesthetic pleasing

atmosphere and comfort, are all part of the performance of a floor in the indoor environment.

'Creating better environments' is part of our vision and part of our promotion of our product portfolio towards our customers and end users and comprises health, saety and well-being. As such our story on how to create a better and healthier environment is something we have been explaining over the past 18 years. Not always an easy story, but one that is backed up by our achievements over time as the acknowledgment of the Eco Lighthouse certification shows.

# A REWARDING RESULT...

General Manager Forbo Flooring AS, Asker, Norway

In January this year, Flooring Systems in Norway received the 'Eco-Lighthouse 2019' award for its efforts within sustainability. "This is a recognition that ranks very high in business and is a result of numerous years of relentless focus on driving sustainability within flooring and making a difference." Norway's General Manager explains:



"The first life cycle assessment (LCA) was initiated by Forbo in the early 90s, followed up by ISO14001 certification in 1995 and the Swan label certification for our linoleum products shortly thereafter. Sustainability was quite a new topic in the building industry twenty years ago, and very challenging to promote. I vividly remember one of my first visits to the oil city Stavanger in Norway where I discussed climate emissions and the negative impact . I did not receive standing ovations for my views on the importance of sustainability, I can assure you."

In 2009, I was asked to take on the role as project manager of our newly founded global sustainability initiative, "creating your own better environment". This was a program where all employees were asked to come up with ideas on how to reduce our own footprint and all ideas were welcomed. That really took my engagement to a new level, involving all employees across the globe, running workshops to collaborate and create innovative ideas. A lot of actions were implemented to reduce our footprint, and our goal in 2009 was to reduce our total footprint by 25% in 2015. We ended up reducing our total footprint by 23% and also reducing climate emissions by 38%, so overall, a great success, even more so as we involved all employees.

In Norway, my colleagues and I came up with a lot of great ideas and one of them was to certify our company according to the "Eco-Lighthouse standard". We realized this in 2014 and suddenly we had a complete program that focused on all aspects of sustainability such as health, the environment and safety of our employees. We developed goals and action plans, and everyone was involved. This made it easier to talk about and explain the importance of sustainability to our customers. We could speak about the 4 Rs; reduce, renewable, reuse and recycle in a more genuine and credible way, as we could all relate to it ourselves.

Over the years, we have developed presentations and messages that explain the whole picture of sustainability, helping stakeholders understand what is important. This has transformed our sales representatives into ambassadors and consultants, helping architects, building contractors and purchasing managers understand what a sustainable solution actually is. By regularly participating and lecturing across arenas where sustainability is discussed, we have been able to get closer to our stakeholders and learn from each other. This has been immensely beneficial to our work with sustainability.

For me personally, this journey has been great and I have learned so much from all the people I have met during my twenty years in the industry. I honestly believe in inspiring and motivating stakeholders to embrace environmental leadership, and I am passionate about promoting sustainability and explaining our tagline 'creating better environments'. I believe that we all can make a difference and if we understand how to make good decisions, the results will come over time.

# FLOORING SYSTEMS AND SENTA RESEARCH

To establish the effect of and learn from the experiences resulting from different types of floor coverings in the indoor environment Forbo, together with Senta Sensory Consulting (NL), conducted a study on the sensory experience of indoor spaces when they are furnished with a variation of interior materials and attributes. People were asked to experience 5 different room-sets in one single building. All rooms were identical in their architecture, size and access to exterior lighting, but all furnished with a different type of floor coverings and fitting attributes. The tests where done by candidates using neuro research where brain activity of the test persons was measured when experiencing the different environments. The research turned out that floor coverings and the type of floor that is used, have a proportionally higher effect on the way the atmosphere and quality of an interior space is experienced then other finishing's. Floor coverings, whether in a modern concrete design, a warm homely wood decor, a contemporary all-over design, or comfortable carpet tiles in natural colors literally create the bases for the experience of the quality of the indoor environment

Our research was triggered by the fact that the concept of well-being is today being brought forward in all those locations that hitherto laid more value on the function of the interior rather than the atmosphere that was transmitted. Hospitals, schools, offices today are being equipped with different types of floor coverings – often a combination of textile and resilient floors. Indoor spaces of public buildings have become more diverse and offering a number of functions and activities. A health care environment today often comes with a restaurant, lounges and fitness centers. But also for hospital staff areas, where the relation with the work environment is no longer visible and rather more personal and homely, there often is an alternative flooring solution.

# HEALTHY BUILDINGS AND FEELING GOOD

The Senta research builds on a notion that the quality of the indoor environment is a large factor in determining peoples' health. As we spend some 80-90% of our time indoors one can imagine that this is affecting our health and well-being. Where Senta focused on what one might call 'the softer factors' there are of course hard facts that can be measured such as the quality of the air we breath indoors, the effects of fine dust, allergens and emissions of interior finishing products all play there part in determining how the indoor environment affect our health. Without being regarded as such a floor can help you feel good in various ways:

**Safety and hygiene:** one of the most important functional properties of any floor covering is the level of safety and hygiene a particular floor offers. This were manufactures

like Flooring Systems play an important role by helping you to make the right choice and by producing a portfolio that leave you a choice as well as specific solutions. Non-slip vinyl and textile, floor that keep the dirt and moist outside, floors that are naturally biostatic or conductive flooring for special high-tech applications.

**Good acoustics:** Using the right type of floor coverings can help control and reduce noise, whether it is contact noise from the floor above, or ambient sound created in the space itself. Textile flooring obviously generates lower noise levels than hard floors, but even our resilient floors can be equipped with sound-dampening qualities in their backing or sublayers.

**Comfort:** Floors offer comfort, they merge with the function of the space in which people live and work. They can be warm underfoot and soft to the touch, like is the case with textiles, or they can be resilient and hard facilitating walking, moving traffic and heavy loads.

**Light:** Floor coverings have the capacity to reflect natural light, making spaces feel open and bright. For each of our collections we supply both NCS colour codes as well as light reflection data so that designers can easily mix and match between colours and materials.

**Design:** This is one of the most important factors when it comes to creating a sense of well-being. Floor designs not only express the image and dynamics of a work or living space, design can also be used to make institutional buildings look and feel more like a home. When an age care facility looks like home, people are more likely to feel well. When a school looks fresh and bright, it inspires learning. Workplaces can be designed for concentration or for conversation, and the type of floor covering design you choose can play a major part in creating these spaces. And, as mentioned earlier, design plays an important role in special environments like those for dementia patients.

**Personalization:** Digital printing techniques allow us to make special floor covering productions where design, color and format of the floor can be created according to the customers specifications, this way spaces can be personalized and become a valuable aspect of the indoor environment.

# 5 DYNAMICS OF A BUILDING

In order to have a good understanding of how buildings function and which floor covering products are best suited to use we have developed a specific design theory on helping you understand the dynamics of a building versus its occupants and function. You can read more on our design theory on page 16 of this report.

# HEALTH, WELL-BEING, AND SAFETY OF OUR EMPLOYEES

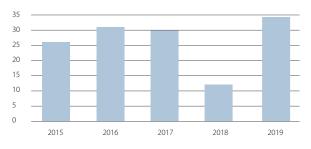
Our Sustainability Policy document, besides looking at the transformation to the circular economy and our contribution to healthy buildings, also is concerned with our labor force and those working in the supply chain. Safety is paramount. While we invest resources to improve our work systems and upgrade equipment, we also recognize that behavioral factors often cause accidents. Attention to sustainable behavioral change is therefore key to our long-term health and safety strategy, and the focus of many of our training programs. All our sites continuously operate safety awareness programs to reduce the number of accidents.

The key indicators of our safety performance are:

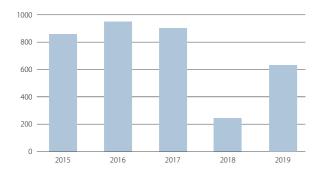
- Lost time accidents
- Lost days injury
- Total accident frequency rate
- · Safety concerns frequency rate

These key performance indicators are measured and reported at all sites every month. The number of lost time accidents increased in 2019, so did the lost days injury rate.

#### LOST TIME ACCIDENTS



#### LOST DAYS INJURY

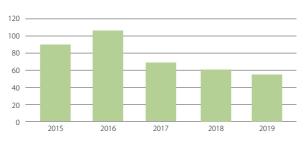


# TOTAL ACCIDENT FREQUENCY RATE

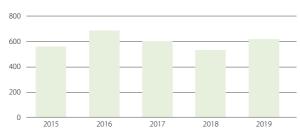
Total accidents are defined as all accidents, including those with no injuries. A safety concern is defined as all reported unsafe situations and near misses. These two indicators are reported to management every month to improve our overall safety performance. The growing safety awareness of our workforce is key to lowering the total accident frequency rate. Again, 2019 shows a continuation of a satisfying trend.

Better reporting of safety concerns also supports a safer working environment. We consider the consolidated reporting of gender-specific data on safety incidents to be immaterial from a safety management point of view in our operations; also because of privacy reasons we therefore do not compile such figures centrally or include them in our divisional figures.

#### TOTAL ACCIDENT FREQUENCY RATE



#### SAFETY CONCERN FREQUENCY RATE



In addition to the safety aspects mentioned above, we also take care of the physical and emotional well-being of our employees by stimulating active working for desk workers, lunchtime walking exercise, and offering organized sports, fitness for all employees, in which we support a discount at local work-out centers. We also promote leisure activities and cultural programs for our employees. These activities are also offered for our pensioners.

# JOINT MANAGEMENT-WORKER HEALTH AND SAFETY COMMITTEES

All our manufacturing sites have joint management and worker health and safety committees that help monitor and advise on health and safety programs in which they are often assisted by external experts. Our sales entities in Europe, Australia, and Russia also have similar committees. Altogether, these committees and their activities covered around 90% of our employees at the end of 2019.



# OFFERING HEALTH **IMPROVEMENT PROGRAMS**

Although it is imperative to have a good absenteeism protocol, prevention and promotion of good and healthy life style is increasingly important too, especially with an aging workforce in our production facilities. We therefore run a number of programs to promote the health and wellbeing of our employees. These may differ per entity and/or country. Some examples of healthy life style programs:

- Stop-smoking programs
- Sponsored fitness activities
- Facilitating sports activities
- · Promoting healthy food
- Sportive staff association activities

Regularly monitoring and reviewing the well-being of our employees:

- Offering regular medical check-ups and assessments for well being
- Employee surveys
- Concerns and grievances reporting procedures

# **CONCERNS AND GRIEVANCES** PROCEDURE

With the rolling out of the SA8000 accountability standard in the Netherlands, France, the United Kingdom, Russia, and Switzerland, at least 85% of our employees and all of our employees in the production entities are now covered by a grievance procedure. This provides a way for employees to

report, anonymously or otherwise, any concerns or examples of non-conformance to the social performance team. The social performance team consists of a balanced representation of worker representatives and management. This team ensures that complaints or non-conformances are dealt with in a timely manner.

SA8000 therefore provides another confidential means of communication that fosters exchanges on issues which are sensitive or hard to express. This approach is only sustainable if every single concern or non-conformance is addressed quickly and systematically. In order to do so, we have implemented a standardized procedure to handle complaints. It is important to note that this SA8000 procedure is not intended to replace other legal committees or procedures. In countries not yet covered by the SA8000 certification, other legal and voluntary procedures are sometimes available that are not covered in this report.

# HEALTH, WELL-BEING, AND SAFETY IN THE SUPPLY CHAIN

We purchase a wide range of raw materials, products, and services to support our business locally, regionally, and globally. These raw materials and products include our principal constituents – linseed oil, gum rosin (for linoleum, PVC dry blend (for vinyl), and nylon yarn (for flocked floor coverings) – as well as other materials and services such as chemicals, fillers, energy, fuels, spare parts, maintenance, logistics, and IT services. Our supply networks encompass various kinds of suppliers from small-scale local service providers to large multinational companies. All substances are compliant to the REACH regulations.

# RESPONSIBLE SOURCING

For Flooring Systems, responsible sourcing means showing true commitment to global responsibility, addressing the concerns of our key stakeholders, complying with regulatory frameworks, adhering to best practices, and managing supply risks. Already in 2012, we launched our supplier requirements program to build further on the sustainability requirements that were already in place. These requirements are an integral part of the contract between Flooring Systems and our suppliers, and require the management and control of:

- · Quality and environment
- Anti-corruption
- Human rights
- Health and safety
- Social accountability (SA8000 standard)
- Financial risk

The requirements related to quality, environment, and responsible sourcing practices are regularly reviewed and

# SOCIAL ACCOUNTABILITY

Flooring Systems expects its business partners to commit to the SA8000 social accountability requirements. We not only require a written commitment; local audits can also form part of our supplier approval procedures. In fact, suppliers in countries with weak labor protection are always monitored via local audits.

We treat the SA8000 standard as the key performance indicator for measuring our progress in responsible sourcing. Our supplier requirements program imposes minimum requirements on our suppliers as a legally binding document. However, our approach also involves close cooperation with individual suppliers. This is realized through meetings, on-site visits, and supplier assessments that involve audits conducted by our purchasers or responsible managers for quality, health and safety.

These assessments ensure that our suppliers properly observe human and labor rights, occupational health and safety requirements, environmental performance goals, and responsible business practices in their daily business. In practice, our responsible sourcing work is implemented by our purchasers, who meet suppliers regularly to discuss related issues. As part of our supplier requirements program, our purchasers also visit our suppliers' production sites to see where the products we use actually come from, and to get a first-hand impression of suppliers' operations.

"We treat the SA8000® standard as the key performance indicator for measuring our progress in responsible sourcing"

# **SUPPLIER ASSESSMENTS** AND AUDITS

In our range of products in resilient and textile floor coverings we have many suppliers for many different ingredients for our products. In particular for linoleum production we are in contact with suppliers from around the world. In addition to conducting regular supplier visits, we evaluate and monitor our suppliers electronically and via audits.

Supplier companies are selected for auditing based on a pre-evaluation of their social and environmental risk profile, taking into account their geographical location, the nature of their own supply chain, the product category, our purchasing power, and the spend volume.

In 2019, all new raw material, packaging, and product suppliers, plus a selection of existing suppliers, were assessed and/or audited in accordance with the supplier requirements program. In 2019, the audits did not reveal any major non-conformances relating to occupational health and safety in particular, as well as working hours, safety procedures, and environmental performance. Audits also indicated that none of the suppliers' own management systems were inadequate.

The conclusions, minor findings and recommendations of all audits each time were reported to the suppliers management involved and, when deemed necessary, discussed with them. None of the non-conformances identified during these audits involved child labor or forced labor. These reports and discussions resulted in corrective action plans, specific schedules for the implementation of the necessary improvements, and agreements on any practical support that the supplier might need to undertake remedial actions.

The progress made on implementing corrective action plans is followed up by our purchasing department and, if it is felt to be appropriate, we conduct a follow-up audit. If we find that a supplier is failing to meet our requirements and expectations, we first offer guidance specifying which issues need to be corrected or improved. The supplier must then take the corrective actions requested by Flooring Systems. During 2019, all the suppliers we assessed either complied directly with our requirements, or did so after taking corrective actions.





# THE CIRCUI AR FCONOMY MODFL

A circular economy is often defined as a system that takes the re-usability of products and raw materials and the use of renewable resources as a starting point and minimizes value loss in the total system and creates value in every link of the life time of the product. In addition, the circular economy requires focus on the design (construction) of the product to allow better reuse, repair in the reuse-phase and recycling of installation and post- consumer waste. In the use-phase, reuse, repairability and/or long lifetime of our products are pre-requisites to create and preservation value for the relevant stakeholders to guarantee possible economical circles to be closed.

In a circular economy there are two loops: one with technical materials and one with bio-based materials. To prevent waste, it is important to keep the two loops separated. As can be seen in the figure that is often used to visualize a circular economy by the Ellen MacArthur Foundation, they both have different strategies. The smaller the circle in figure, the higher the value conservation of the product.

The bio-based economy is an economy where food or agricultural resources (crops, or residual flows) are used to create materials, but also to make chemicals, fuel or energy. Bio-based materials, therefore, are materials based on renewable resources. Bio-based materials can, however,

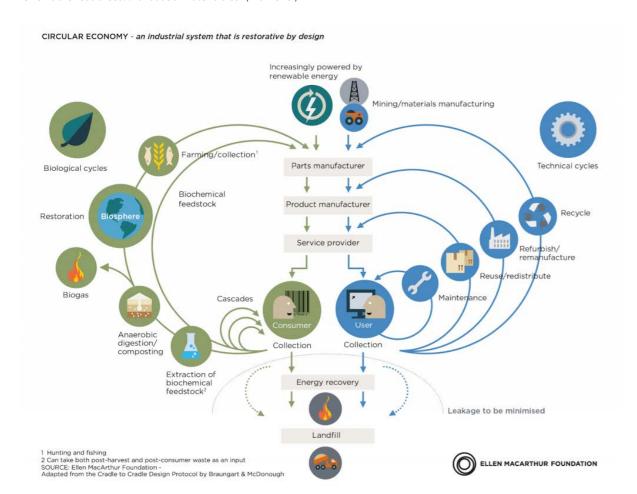
often follow the strategies of the technical material loop as well, considering that bio-based products can also be redesigned, reused, recycled, etc.

# THE ENVIRONMENTAL IMPACT OF OUR PRODUCTS

We also use the life cycle assessment (LCA) methodology as our main standard for measuring our environmental performance. In our LCA calculation of the environmental footprint from cradle to gate, we take two kinds of results into account: the development and production of our floor coverings, and the production of the raw materials. In this, we take into account:

- Any changes in the use of raw materials
- Changes in yields
- · The recycling or reuse of waste
- The energy usage of all our suppliers of those

The results for most of our raw materials has very positively developed over the last years helping to improve our environmental footprint. Main contributors were wood-flour, PVC and plasticizer suppliers. Wood-flour is produced using green electricity generated from biomass or wind and the PVC and plasticizer supplied to all our sites is produced using



# CIRCULAR FCONOMY: **NEW STRATEGY**

To make the shift from a linear economy towards a circular economy, new strategies are needed. In 2019, we worked on revising our sustainability strategy with the main objective 'how to transfer our linear economic business model to the circular economy model principles'. Various workshops were held or participated in, internally as well as externally, with different stakeholders, e.g. production, sales, NGO's, customer, relevant associations, universities, waste companies. In 2020 we will finish the renewal of the strategy. Our ambitions from the workshops are:

- · Produce carbon neutral products
- · Use only renewable energy
- Zero waste company
- Actively contribute to the circular economy
- Ensure ethical and sustainable supply chain management
- All employees are involved in sustainability

# CIRCULAR ECONOMY: **DESIGN AND INNOVATION**

We believe that circular economy starts with the creation of a new product or re-designed products, where new innovative approaches in construction and design are developed together with our stakeholders and customers. This includes possible different business models for the use phase and the end of life of the product.

To measure performance in environmental terms the LCA result is leading in steering towards the best (improved) circular solutions. LCA most often is approached in a way that one looks back, sets a baseline, and then trust that the improvements that are made will have a positive impact. Flooring Systems takes a different view, something that can be seen in the emphasis we place on green design and innovation. Simply put, we recognize that we have to do things differently if we are to achieve our goals of becoming a sustainable and environmental leader.

# **CIRCULAR ECONOMY:** PRODUCTION PHASE

In the production phase the circular economy principles are currently still covered by the 4 R program.

THE 4R's - REDUCE, RENEWABLE, REUSE, RECYCLE

The 4 R principle lies at the heart of our endeavor to reduce our impact on the environment of the products we manufacture as well as during their performance and at the end of life phase. As such they are important indicators in our quest to continuously improve on our sustainable profile linked to the complete life cycle of our products. The four R's help us to consciously point out where

sustainable choices can be made in each of the stages of the life cycle of our products. This already starts in the conception and design phase of a product. In using 'green design' principles concerning the choice and amount of raw materials used in a product and finding alternatives lie at the very start of a sustainable life cycle that minimize the impact on the environment without compromizing on the functionalities and performance during the use phase of the product. As such, already at the starting point we aim to reduce the raw materials required to create the product.

In cases where we have to use raw materials, the preference and goal is to opt for either natural renewable materials, or materials that are both abundantly available but not used for any other primary purpose, such as feeding people or animals. In the production phase, we aim both to not create any waste and to ensure that any waste that is generated is re-used in the composition of the product.

Recycling can be facilitated by identifying other products that could use the waste material generated during the production of the original manufactured good. This can also be taken a step further to include the recycling of left-over material (cut-offs) from flooring installations, and even the post-consumer recycling of old floors that are being re-placed.

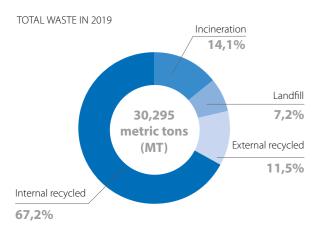
# FMPI OYING THE 4R's: REDUCE

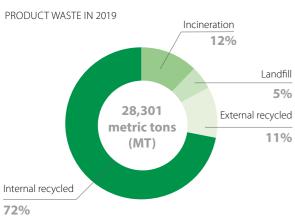
We consider 'reduce' to be the most important within the 4 R principle, as reducing our consumption of materials, energy as well as waste has the biggest impact both environmentally and financially. In particular, reducing the amount of raw materials used and the improvement in waste reduction are the two factors that significantly impact and reduce our overall environmental footprint right down to the end of life phase of our products. Many of our manufacturing sites made a positive contribution in 2019 by reducing raw material use and packaging, and increasing the recycled content of our products.

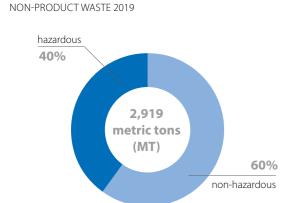
# REDUCE MANUFACTURING WASTE

The main target for all our manufacturing sites is to reduce waste by maximizing yields and maximizing the reuse of product. Most sites began doing this more than 10 years ago. In 2019, the total amount of waste we created decreased compared to 2018. This was mainly caused by better efficiency during manufacturing resulting in less product waste.

If any waste is produced, the strategy is to first maximize reuse and recycling within Flooring Systems and, secondly, to then maximize external recycling. In 2019, we have seen an increase in recycling of the total from 24.3% to 25.6 %. Landfill was slightly higher mainly caused by new regulations concerning incineration.







# ALTERNATIVE ADHESIVE CONSUMPTION

Measured by material weight, the adhesive used to install a floor covering makes a proportionally large contribution to the environmental footprint of one square meter of flooring. In our product we see a growing share of so called loose lay products that require no other adhesives than a tackifier. Examples are our carpet tile offer, our Allura Flex, Ease, Puzzle tile and plank offer as well as our Modul'up portfolio loose lay vinyl sheet offer, all of which will not require any adhesives.

Where adhesives are used as part of the floor covering installation, we are continuously developing and introducing new flooring installation systems at our Forbo Eurocol plants. These are based on new techniques, plus new types of adhesives that improve the installation

sustainability of our floor coverings. In order to do this we take care that our adhesives, primers and leveling compounds show low or no emissions into the indoor air environment of buildings and are in compiance with the EMICODE® EC1PLUS.

The EMICODE® classification system makes it possible to compare and evaluate the emission characteristics of flooring installation products. This trademarkprotected classification system has become the key international quality benchmark for a wide range of product groups. Since EMICODE® was introduced in 1997, more than 4,500 products from all over the world have been awarded the EMICODE® label. It offers consumers, craftspeople, and architects guidance to decide which materials offer maximum security against indoor air pollution, quaranteeing the best health protection and high environmental compatibility. To receive the EMICODE® label, manufacturers need to submit their products for extensive testing at recognized institutions. Based on scientifically determined measurement data, EMICODE® categorizes flooring installation materials, adhesives, and building products into three emission classes: • EMICODE® EC1PLUS, • EMICODE® EC1, • EMICODE® EC2.

Forbo Eurocol produces and sells adhesives, primers, and levelling compounds that comply with EMICODE® EC1PLUS – the highest class. Our levelling compounds also have very low dust emissions. Also see: www.emicode.com/en/, www.forbo.com/eurocol/en-gl and www.forbo.com/flooring/en-us.

# REDUCE ENERGY

Electricity is transformed from various primary energy sources such as coal, oil, natural gas, and wind. We use an energy index to measure our energy consumption per square meter of floor covering produced. This energy index calculates the primary energy consumption for all energy carriers.



Direct energy Oil MJ/m²
 Direct energy gas MJ/m²
 Primary electricity MJ/m²

# FLOORING SYSTEMS' VINYL COLLECTIONS, INNOVATION WITH SUSTAINABILITY IN FOCUS

Director Product Management and Design Vinyl, Flooring Systems, Coevorden, the Netherlands

"In our strategy definition for the next 4-5 years a lot of attention is given to a range of different sustainability goals. But also in product innovation and planned new introductions Forbo's business unit Vinyl is putting a lot of sustainability aspects into their thinking.

Never before did we have a larger amount of developments for products that can be loose laid without the use of a full spread adhesive and which allow for a very quick installation and eventually, a quick removal after use. This is a key part of the strategy because it answers customer demands and prepares for a more circular economy. It also allows future end-of-life guarantees for take back schemes initiated by the factory. The focus in development was mainly on developing new modular 'easyvation' products, but our unique heavy traffic loose lay products called Modul'up saw a significant growth in 2019 and confirm our strategic direction.

A particular production related goal is to decrease the dependency on gas in the Dutch operation. The investigation is in full execution and other projects to reduce energy use per m2 are ongoing as well. In 2019, a large project has been finished successfully to improve product quality together with a substantial reduction of emissions for our main vinyl collections such as Eternal, Step, Allura as well as others.

Finally there is a high ambition on reducing scrap creation on site, next to higher usage of scrap in the products where possible without influencing performance of the product. This development is fully on track and more and more recycled product is being reused in our vinyl products and we are preparing for take back programs as well.

We have seen an almost equal level in our energy consumption over the years 2015 to 2019. This is actually a good result considering higher volumes sold and our gradual shift in sales from consumer towards more commercial products. On average, commercial product has a higher square meter weight, which in turn requires more energy to produce. Considering the combined weight throughput in our manufacturing sites we managed to reduce our average energy consumption by implementing better monitoring systems and energy saving programs.

# REDUCE ENERGY IN TRANSPORTATION TO THE CUSTOMER

One of our goals when it comes to logistics is to continuously create more efficient transport flows: between plants; from plants to our overseas distribution centers; from our overseas distribution centers to our end-customers. To enable better and increased cross docking of our products in boxes the warehouse capacity in Assendelft was extended.

# **ENERGY SAVINGS CREATE WIN-WIN SITUATION**

General Manager Forbo-Giubiasco SA, Giubiasco, Switzerland

"For over five years now we have been participating in the Energy Model of the Energy Agency of the Swiss Private Sector (EnAW) to see in what way we could save and reduce energy usage in our production process. Here in Giubiasco we manufacture Colorex, a nonporous, electrostatic dissipative, easy-care, high-tech vinyl flooring, that is used in cleanrooms, data centres and healthcare and high-tech industrial environments. The process requires a relative high amount of thermal energy. Together with EnAW we conducted a 'pinch analysis', which makes it possible to accurately determine and economically exploit a company full CO<sub>2</sub> and energy saving potential. For our factory insulation is the magic word, not only pipes, but the entire press-machine has been insulated from the outside so that all the heat remains inside the process. We are not only saving energy, also our CO<sub>2</sub> emission has gone down by 50%. In addition we started the use of district heating. The only incineration plant for municipal waste in the Canton of Ticino is located one kilometer from the Giubiasco operating site. We were one of the first firms to get involved in promoting the development of local remote power and we now heat the entire building with district heating and waste heat from our production processes. Calculations have shown that this enables us to economize some 150,000 liters of oil per year. That annual figure is now as much as 170,000 liters. We still cannot dispense with oil, however, as the thermal oil needed for our processes cannot be heated up by district heating. Under the target agreement drawn up with the EnAW, Forbo-Giubiasco SA also benefits from the refund of the CO<sub>2</sub> tax. Yet for us it is not just about financial incentives. Involvement in the building of the district heating system was largely influenced by sustainability considerations.

In this case, 'more efficient' means combining different products in one truck so that, in total, fewer trucks are used. Using cross-dock locations in Assendelft (NL), Reims (F) and Ripley (UK) combining these product flows improves overall lead times and reliability, and makes it easier to plan full trucks with more frequent deliveries. Combining different products in one truck also means that the customer receives (and therefore has to handle) one Flooring Systems delivery instead of several by different trucks.

From our main cross-dock center in Assendelft, shipping containers to the ports of Rotterdam or Antwerp by barge instead of truck is preferred to optimize CO<sub>2</sub> emissions.

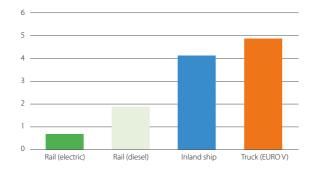
# GREEN DEAL CIRCULAR PROCUREMENT

During 2019, Flooring Systems was taking part in the Dutch program the Green Deal Circular Procurement, in which public and pri-vate organizations work together to professionalize and scale up circular procurement in the Netherlands. One of our programs is to reduce  $CO_2$  emissions of transport by changing from trucks to rail transport. This program was successfully in starting in 2019 transport by rail from our Coevorden plant to our Swedish warehouses. Rail transport in general has much lower  $CO_2$  emissions than truck transport but the tracks to the Swedish warehouses are not only electrified but also in the countries that are passed through the railways are using renewable electricity, e.g. solar, water, wind.

Renewable electricity railways:

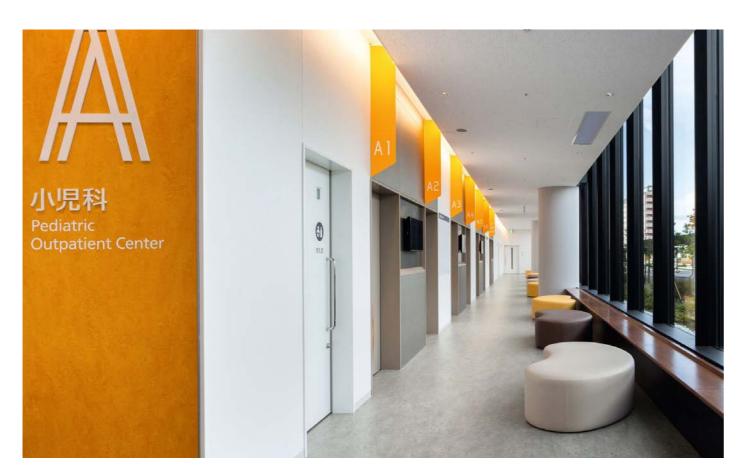
- NS The Netherlands: 100%
- DB Germany: 60%
- DSB Denmark: 50%
- SJ Sweden: 100%

TONS OF CO<sub>2</sub>



# EMPLOYING THE 4R's: RENEWABLE

Using truly renewable materials that can be harvested from annual crops or those that are abundantly available without harming the environment are preferred in all cases. For our linoleum portfolio linseed, jute, rosin and also wood flour are derived from renewable crops and sustained forestry.

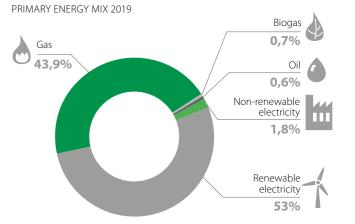


# RENEWABLE RAW MATERIALS

Better yields, more recycling and reuse resulted in a slight decrease in the overall amount of raw materials used in 2019. The relative share of the various raw materials changed compared to 2018 because of an improved reporting system that better defines renewable recycled raw material. The capacity to renew also applies to energy use, our performance is registered below:

tons
48,485
120,599
7,575
20,230
tons
6,363
207

our carbon footprint by reducing the amount of  $\mathrm{CO}_2$  we emit into the environment. We continue to believe that limiting environmental impact at source is far better than offsetting.



# RENEWABLE ENERGY

In line with better efficiency and energy savings, the energy consumption measured in gigajoule (GJ), was a little lower than in 2018. In the mix, the volume of the renewable sustainable energy consumption remained the same share.

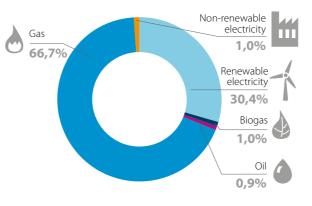
Renewable electricity	357,672 GJ
Non-renewable electricity	12,040 GJ
Gas	783,229 GJ
Biogas	12,098 GJ
Diesel	10,360 GJ

# EMPLOYING THE 4R'S: REUSE AND RECYCLING

Forbo defines reuse as 'waste that, after reprocessing, can be fed back as a raw material into the same manufacturing processes.' Our definition of recycling is 'material diverted from the waste stream during a manufacturing process that is sent to a third party for them to use as a raw material.' That third party can be another Forbo operations site or external recyclers.

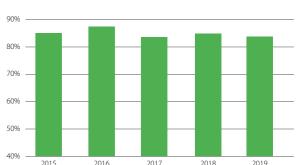
Also in 2019 we found ourselves needing again to take measures to increase product reuse for our production lines. We have therefore invested in equipment that makes it possible to reuse more production waste.





We have an ongoing policy of obtaining electricity from renewable sources. In 2019, we continued our pilot using biogas in one of our manufacturing sites, Bamber Bridge. In 2019, renewables accounted for 54% of all the energy consumed in our manufacturing facilities, almost equal to our 2018 consumption. This in turn is helping us to reduce

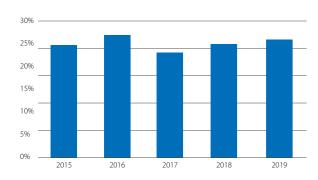
# % REUSED AND RECYCLED PRODUCT WASTE



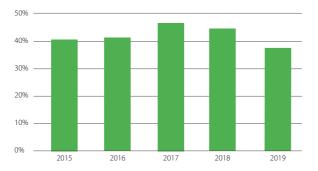
In 2019, the weighted average amount of recycled and reused content in our products was almost 27%. This is positive in every respect. Linoleum has long contained the most reused and recycled material of all resilient floor coverings. In 2019, our focus on reusing and recycling waste

led to very good results by again increasing the recycled content in our Marmoleum, Allura and Eternal product ranges. We have a broad portfolio of products that contain recycled content.

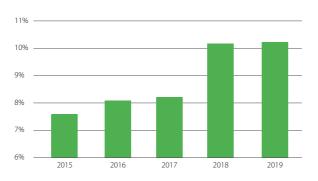
#### % RECYCLED AND REUSE IN FLOORING SYSTEMS



#### CARPET - % RECYCLED AND REUSED

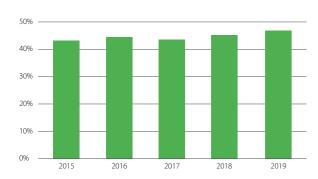


VINYL - % RECYCLED AND REUSED

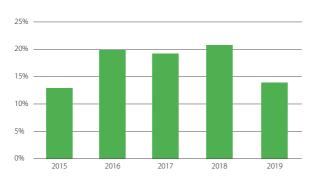


# REUSED AND RECYCLED MATERIAL PER PRODUCT LINES

LINOLEUM - % RECYCLED AND REUSED



ENTRANCE FLOORING SYSTEMS - % RECYCLED AND REUSED



# REPEATING THE MESSAGE REALLY HELPS

#### Segment Manager Education, Assendelft, The Netherlands

"In the Netherlands linoleum is widely used for education buildings where it is liked for its color and design offer and functional performance. But there also is a growing environmental awareness where it comes to saving energy and changing to natural energy resources people are also more conscious about the use of materials and their environmental impact. This is a wide concern about the composition of the material its contribution to  $CO_2$  emissions and what happens with the product at the end-of-life stage. The score of linoleum on al these points in comparison with alternative floor covering solutions for many school boards is a convincing argument to make a choice for linoleum. Years ago, we started with promoting our take back scheme for installation waste which is working really well for linoleum, as all that we need to do is shred to cuts and add them to the base of our virgin linoleum as we produce it in our factory in Assendelft. Repetition works! We notice that more and more schools are interested in the whole picture. By the way, it actually works so well that we are now also considering take back schemes of cutting waste for schools that have opted for a vinyl floor covering, also these cuts can be recycled in our vinyl production plant."

# CIRCULAR ECONOMY: POST-INSTALLATION WASTE RECYCLING AND TAKE-BACK PROGRAMS

Over the last years, manufacturers have begun to pay significant attention to post-industrial waste. They have invested heavily to reduce, reuse, and recycle waste generated in the manufacturing. So far, installation waste was not often considered as a potential resource. Given that we already invest in internal recycling solutions – plus the increasing cost of raw materials – we are now turning our attention to taking back installation waste for reuse. Installation waste can account for up to 6% of an installation. Moreover, from a recycling perspective, it is as good to process as post-industrial waste because we know what is in it and it is clean and safe to use. The difficulty has always lain in creating a sustainable logistics infrastructure to make the collection of post-installation waste economically viable. Flooring Systems is participating in installationwaste take-back programs. We have schemes for vinyl in Sweden and France, and for all linoleum, carpet and vinyl in the UK and the Netherlands.

Collected and recycled installation waste in 2019:

- 30 tons of linoleum in the Netherlands
- 36 tons of vinyl in Sweden
- 6 tons of vinyl in France
- 10 tons of linoleum in the UK
- 5 tons of Carpet in the UK
- 5 tons of vinyl in the UK

# POST-CONSUMER WASTE

Post-consumer waste is an even greater challenge to recycle. Not collection and transport is a challenge but also selection and processing is very difficult. Flooring Systems is participating in different European programs for enabling recycling of post-consumer vinyl floor coverings. The main program is in the French market. For this program in France we are selling loose-lay acoustic vinyl that uses a tackifier adhesive solution that enables 'clean' post-consumer recycling. This is because using a tackifier means there will be no traces of glue on the back of the tiles should you remove them in the future.

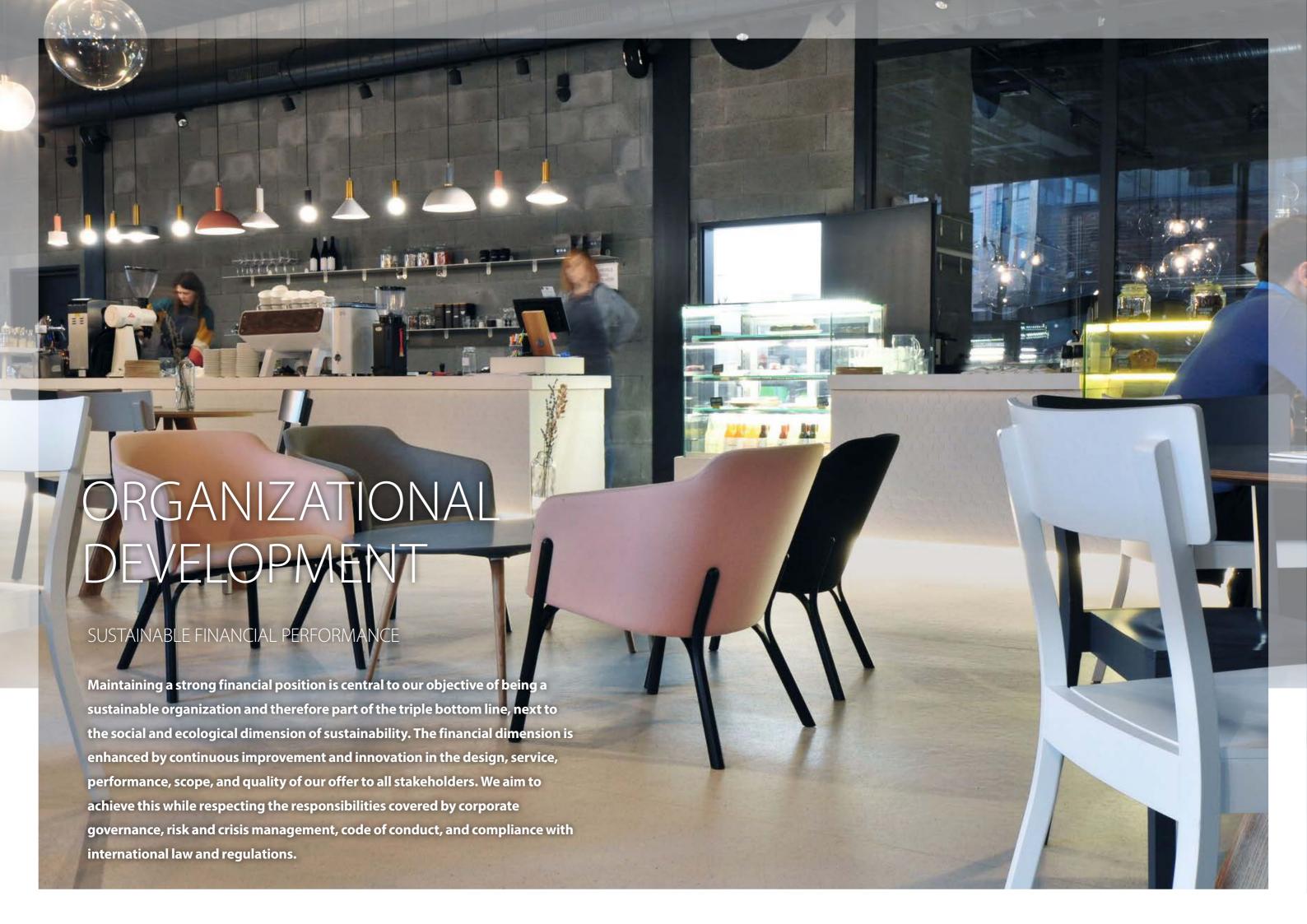
# CIRCULAR FLOORING PROJECT

Flooring Systems is an active participant in the EU funded Circular Flooring Project which, together with the Fraunhofer Institute and other partners, aims at developing a pilot of the proven vinyl dissolution concept developed by the Fraunhofer Institute that enabled the recycling of post-consumer vinyl waste into virgin PVC granules. Testing will last for a three year period, and when successful results in a blueprint for post-consumer vinyl floor covering recycling on an industrial scale.









# **BUSINESS INTEGRITY**

Flooring Systems insists on integrity, honesty, and equality in all aspects of our business and we seek the same from those with whom we do business, directly and indirectly. No employee may directly or indirectly offer, pay, solicit or accept a bribe or other such payment that may be construed as such, in any form. Forbo's Code of Conduct applies to all our employees and clearly stipulates that the company will not engage in or tolerate any questionable or corrupt business practices. The Code of Conduct is part of Forbo's education program and is a mandatory training for all relevant employees.

# RISK MANAGEMENT

Risk management and risk assessment are an integral part of Forbo's organizational processes, and are included in every decision-making process. Periodically, financial and hazard risks are identified and assessed internally or by third parties. Once risks have been identified and assessed, we manage the risk by applying techniques that fall under one or more of the following major categories:

- Avoidance (eliminate)
- Reduction (mitigate)
- Sharing (outsource or insure)
- Retention (accept and budget

# RISK ASSESSMENT

Forbo Group conducts an annual risk assessment that analyses all the business areas within the company for the divisions. The assessment covers internal controls and business risk, and includes targeted questions concerning fraud and corruption and is supported by independent third party assessment. An additional and more focused risk assessment devoted entirely to fraud and corruption, is conducted annually with key executives and senior management. This risk assessment addresses corruption in business areas on a materiality basis.

Linoleum with its zero carbon footprint (cradle to gate) helps to reduce CO<sub>2</sub> emissions in the building and construction sector

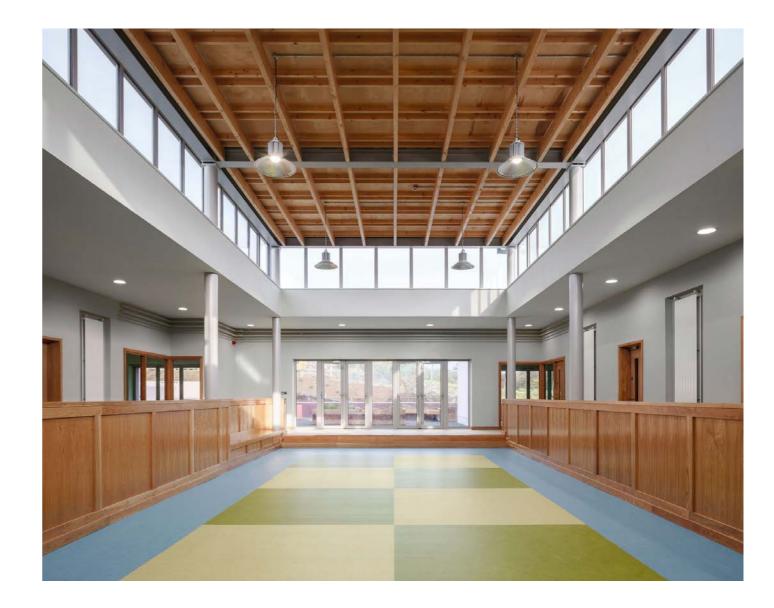
# RISK AND OPPORTUNITIES DUE TO CLIMATE CHANGE

Due to the energy-intensive nature of the operations in our supply chain, we are subject to risks related to climate change and to costs related to energy and climate regulations. Global efforts to combat climate change also present certain strategic opportunities for Flooring Systems. Our linoleum products are based on renewable materials with a zero-carbon footprint, which helps our customers and society at large to reduce CO<sub>2</sub> emissions by providing a favorable alternative to floor coverings based on fossil fuels and non-renewable materials.

The European Union (EU) is pursuing its climate targets through a combination of financial incentives and regulations. The EU countries are also required to support renewable energy sources such as wind, solar and biomass to reach the EU's green energy targets. The EU's Emissions Trading System (ETS) is a cornerstone of the EU's efforts to combat climate change, and a key tool for the cost-effective reduction of industrial greenhouse gas emissions. The ETS in effect imposes a cost on Flooring Systems' CO<sub>2</sub> emissions within the EU, and indirectly increases energy generation costs for our electricity suppliers and the cost of our raw materials. Flooring Systems' environmental footprint reduction programs during the last 10 years has helped us reduce our energy and raw material consumption. This is both sustainable with respect to the environment and reduces our CO<sub>2</sub> emission and related taxation costs. We plan to further reduce the CO<sub>2</sub> emission of our entire product portfolio as integral part of our newly developed circular economy strategy program.

# **OUR ECONOMIC PERFORMANCE**

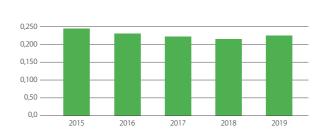
Significant indicators covering the generation and distribution of value, plus the organization's total capitalization, with breakdowns in debt and equity can be found in Forbo's Annual Report 2019: www.forbo.com/investors



# TOTAL DIRECT CO<sub>2</sub> EMISSION FROM MANUFACTURING

The CO<sub>2</sub> emission on our manufacturing sites is almost one-to-one related to energy used during manufacturing. Almost all this energy is produced with natural gas. In 2015, we started an energy savings program with focus on CO<sub>2</sub> reduction. Energy savings were realized by efficiency improvement, investing in innovative processes and partly changing to bio-based gas. We are targeting an reduction of 20% in 2025 compared to 2019.

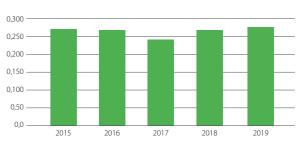
KG CO<sub>3</sub>-EMISSION PER KG RAW MATERIALS PROCESSED



# TOTAL DIRECT AND INDIRECT GREENHOUSE GASES "CRADLE TO GATE"

Total greenhouse gas emissions are calculated using life cycle analysis (LCA) for the production stage from 'cradle to gate' for all of our products. This includes the entire chain from raw material extraction and processing, transportation to the manufacturing site, manufacturing and finishing the product to the point it is ready to ship to our customers.

AVERAGE KG CO, PER KG PRODUCED PRODUCT





# **EMPLOYEE TRAINING**

The division-wide annual performance review provides a starting point and an appraisal for training. In this appraisal, individual training requirements are matched with the training needs indicated in the Flooring Systems strategy as well as any legal training requirements that are in place. Flooring Systems operates a wide range of training formats, from management development to the enhancement of factory floor skills. For specialist training, our employees can attend seminars and conferences, or follow one of the educational courses offered by expert institutions and learning centers. Finally, on-the-job training for our production and warehousing operators includes:

- Site and company introduction
- Hazard identification, control, and risk assessment
- Job safety analysis
- Job-specific training

Several local and international training programs are in place. A selection of these programs held in 2019:

- Forbo (Group) leadership and management courses
- Forbo (Group) anti-corruption, competition law compliance and IT security training
- Divisional Flooring Systems sales training programs
- Divisional Forbo Academy product/segment training programs/meetings
- Induction training: introduction to Flooring Systems and its portfolio

The development of learning and training programs is evaluated every year, with improvements implemented whenever we see opportunities to do so.

# E-LEARNING USAGE IN 2019

- 1,759 Flooring Systems' users accessed our learning management system
- 3,060 completions were made Usage of e-learning is world wide and has increased by over 70% in 2019.

# CODE OF CONDUCT E-LEARNING

The Forbo Code of Conduct 'full program' e-learning module is part of the introduction program for new employees. A refresher program was rolled-out in 2019.

# ANTI-CORRUPTION E-LEARNING

This existing program which is repeated bi-annually for all relevant employees was completed in 2019 for all new employees that belong to the target group.

# **COMPETITION LAW E-LEARNING**

A new bi-annual online compliance training program on competition law for all relevant employees was rolled-out to new members of the defined target group in 2019.

# IT SECURITY E-LEARNING

The IT security training program was further rolled-out in 2019 and has been added to the introduction program for new employees.

# SA8000 E-LEARNING

The SA8000 e-learning module was developed to improve our understanding of the SA8000 standard, its peoplefocused management system, and to help answer questions. People are our most valuable asset and this standard and module are centered on our employees and how we treat them within the workplace. At sites with SA8000 certification in France, The Netherlands, Russia and the UK this module is part of the induction program for all employees.

# 'HEALTHY BUILDINGS' E-LEARNING

The 'healthy buildings' e-learning module provides information on our ambition and commitment to make a positive contribution to the quality of the indoor environment and our focus on the health and well-being of the individual. The module was rolled-out in the past and is now part of the introduction program for new employees in marketing and sales.

# PRODUCT KNOWLEDGE E-LEARNING

The majority of product e-learning modules completed, dealt with the new Marmoleum Marbled, Eternal project vinyl and Flotex flocked flooring collections.

# NEW E-LEARNING DEVELOPMENT **SOFTWARE**

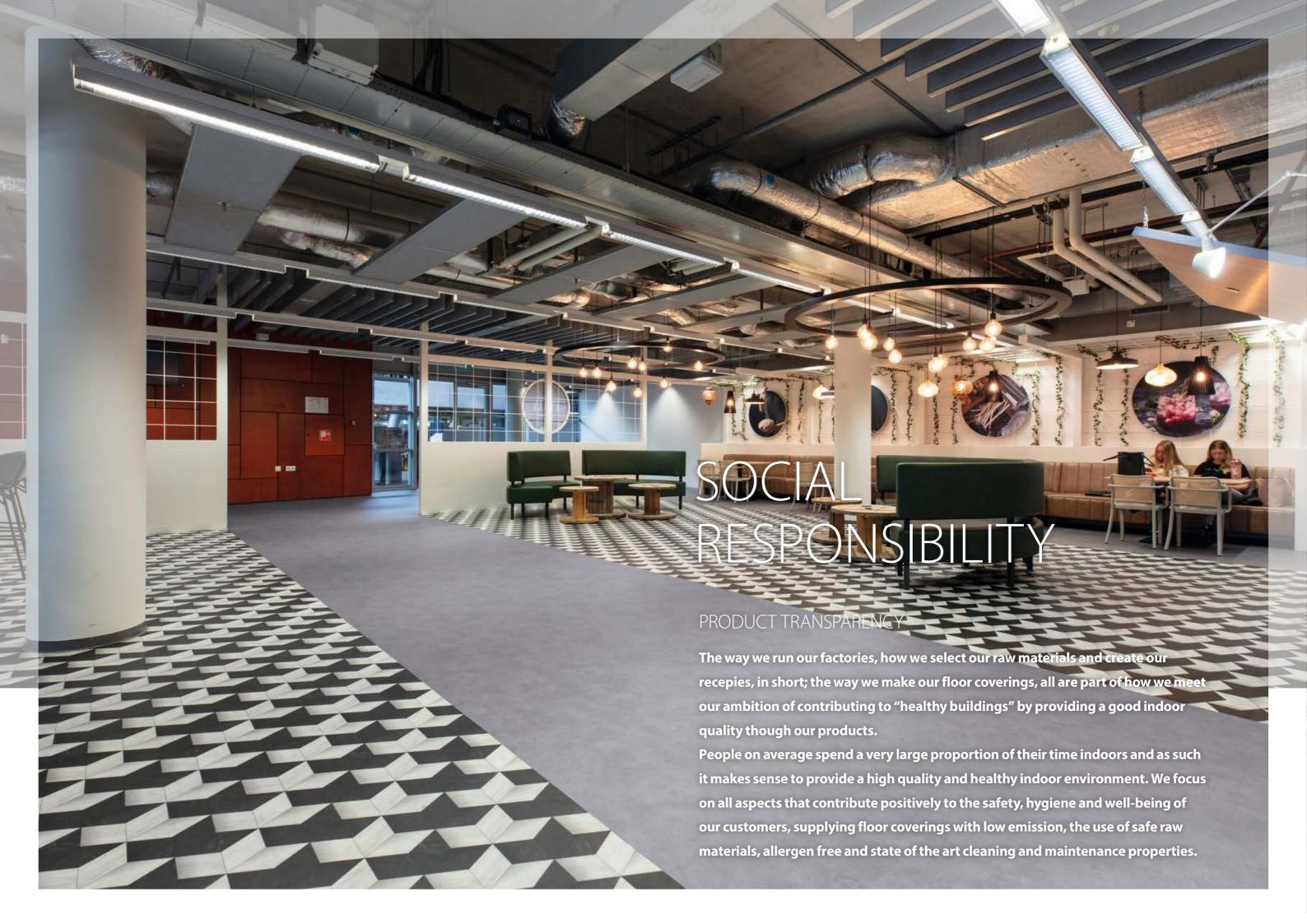
At the end of 2019, a new e-learning development software was implemented. The software is intuitive and easy to use which also allows for quick translations and adaptations where applicable. The first two modules that were developed with this tool are the new Allura luxury vinyl tile collection module and the STEP strategy execution process e-learning module. Both modules are further rolled-out in

# **FUTURE ORIENTATION**

In the Flooring Systems strategy, the people objectives include programs to:

- Continuously improve and standardize knowledge and skills in the division, as well as
- reducing time to knowledge for new employees, with focus on sales

The new Flooring Systems training academy set-up as defined in 2018 came into force in 2019 with identified knowledge levels and education programs of existing and new modules.



# RAW MATERIAL SAFETY AND CHEMICAL SAFETY

Ensuring the safety of our products starts with the purchase of raw materials and their subsequent processing and manufacture. We only use raw materials that have been specifically approved for purpose in our production, and we always check their safety and legal compliance. In this, we follow relevant legislation including the European Union's REACH regulations and building regulations. These regulations have been designed to protect public health and the environment by comprehensively identifying the safety properties of chemical substances and determining how chemicals can be used safely.

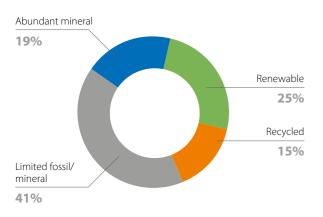
Six years ago, we have started our "compliance-plus" program in relation to chemical safety by starting to limit and stop the use of all regulated substances. For this reason we have adapted our raw material policy not only limited to forbidden the use of category 1a and 1b regulated chemical substances, but also category 2 (suspicious chemical substances). We oblige our suppliers to comply with our requirements related to our raw material policy.

One of the results of this policy is the change to nonphthalate plasticizers in all our vinyl and textile products, another one is that all our products now have low to very low VOC emissions. Flooring Systems is committed to pursue this policy in the years to come to always guarantee safe products to our customers.

# RAW MATERIALS SCARCITY

Depletion of resources is an important topic in the circular economy. Using natural resources which renew themselves and that can be harvested as annual crops are the preferred solution by far. The linoleum portfolio is made from natural resources and has a CO<sub>2</sub> neutral footprint when its cradle to gate stages are concerned. The breakdown of all our raw materials used for our products is shown below.

BREAKDOWN OF RAW MATERIALS USED 2019





# LIFE CYCLE ASSESSMENT; TRANSPARENT INFORMATION ON SUSTAINABLE PERFORMANCE

We use life cycle assessment (LCA) to identify and continuously improve our sustainability performance. But while we perform our LCA calculations to international standards, we also believe that the element of human health and ecology should also feature in this assessment. In 2000, Flooring Systems was the first global floor covering company to commit to providing information about eco-toxicity and human toxicity impacts in our LCAs. In 2019, we remained the only flooring company in the world to include these impacts in our environmental product declarations. We use the internationally recognized USEtox method to calculate and assess our products' toxicity performance.

# **ENVIRONMENTAL PRODUCT** DECLARATION

An environmental product declaration (EPD) presents quantified environmental data about a product. It is based on information from a life cycle assessment. The following life cycle stages are assessed:

- Production stage (raw material extraction, transportation to manufacturing, and manufacturing)
- Transporting manufactured goods from factory gate to user
- Installation stage
- Use stage
- End-of-life stage

# UN GLOBAL COMPACT PRINCIPLES

Human rights	Page
<b>Principle 1:</b> Businesses should support and respect the protection of internationally proclaimed human rights.	26-27
Principle 2: Businesses should make sure that they are not complicit in human rights abuses.	26-27
Labor	
<b>Principle 3:</b> Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	26-27
<b>Principle 4:</b> Businesses should support the elimination of all forms of forced and compulsory labor.	26-27
Principle 5: Businesses should support the effective abolition of child labor.	26-27
<b>Principle 6:</b> Businesses should support the elimination of discrimination in respect of employment and occupation.	26-27
Environment	
<b>Principle 7:</b> Businesses should support a precautionary approach to environmental challenges.	30-38, 47-48
<b>Principle 8:</b> Businesses should undertake initiatives to promote greater environmental responsibility.	30-38, 47-48
<b>Principle 9:</b> Businesses should encourage the development and diffusion of environmentally friendly technologies.	30-38, 47-48
Anti-corruption	
<b>Principle 10:</b> Businesses should work against corruption in all its forms, including extortion and bribery.	26, 27, 43, 48, 55

An EPD communicates verifiable, accurate, and nonmisleading environmental information for products and their applications, is third-party verified, and follows a uniform and internationally standardized format. EPDs are in increasing demand from architects and planners as they can be directly incorporated into sustainable building design tools, such as carrying out a building life cycle assessment. Flooring Systems continues to publish thirdparty certified EPDs for its individual floor covering products. By the end of 2019, 41 Flooring Systems products had been EPD certificated and published. All the LCA calculations were third-party verified by UL Environment. www.forbo-flooring.com/epd.

Our EPDs are based on the so-called product category rules (PCR) set out in the EN-15804, EN-16810 and ISO-14025 standards. Product category rules define how to conduct a life cycle assessment for a product group and what data to include in the resulting report, thereby supporting scientifically based fair choices and stimulating the potential for market-driven continuous environmental improvement. In principle, the benchmark when using EPDs to compare products is the contribution they make to the environmental performance of a building. As a result, using EPD information to compare environmental performance with that of alternative floor covering products reflects a product's use in a building and the impact it has on the building.

# SOCIAL EQUITY AND LABOR RIGHTS

Corporate sustainability starts with a company's value system and a principled approach to doing business. This means operating in ways that, at a minimum, meet fundamental responsibilities in the areas of human rights, labor, environment, and anti-corruption. Responsible businesses enact the same values and principles wherever they have a presence and know that good practices in one area do not offset harm in another. Supporting the UN global compact principles, Flooring Systems supports the 10 principles of the UN Global Compact, a United Nations initiative to encourage businesses worldwide to embed responsibility into business operations. We respect and promote these principles throughout our operations. The table above lists the 10 principles and specifies where information on them can be found in this report.

# **WORKING WITH THE COMMUNITY**

We believe it is good business practice to build meaningful, long-term relationships with employees, customers, suppliers, and communities. This is, and always has been, the founding principle of our commitment to social equity. Flooring Systems plays an active role in the communities in which we operate. We conduct a stakeholder and impact assessment analysis at all our operations as part of environmental management, in accordance with ISO-14001. The fact that this management system is third-partycertified ensures improvement and development programs are ongoing.

Through proactive engagement, we support local economies and contribute to the social fabric. Flooring Systems understands that in order to operate in our communities, we must minimize any potential negative impact of our operations. We do this by operating transparently and communicating clearly with these communities, mitigating our environmental impacts where possible, monitoring our environmental performance, and engaging in community consultation.

All our production units register and monitor complaints received from stakeholders in relation to that unit's environmental performance. This forms an integral part of their respective environmental management systems.

# REIMS (FRANCE) HELPING UNEMPLOYED PEOPLE TO GET A JOB

Over the past 16 years, Flooring Systems in Reims has given unemployed people the opportunity to train as professional floor installers. This takes place during various sessions in an 18-month, work-linked apprenticeship training program. The program is open to people of all ages. Trainees receive a testimonial at the end of each session, and finishing the complete training course qualifies them for the title of 'floor installer.' This is the only title for this type of skill that is recognized by both the French state and the building industry.

# ASSENDELFT (NETHERLANDS) HELPING DISABLED PEOPLE TO **GET A JOB**

De Bolder produces and supplies customers with tens of thousands of square meters of Forbo Quickfit every year. Forbo Quickfit are MDF panels that are produced from

natural raw materials and which can be recycled easily. De Bolder is a sheltered workshop, one of 90 in the Netherlands. As such, it enables physically or mentally disabled residents of the community of Texel to get a job, something they cannot get at a regular company as they are too expensive to employ without subsidies.

Separately, we support a regional 'zero' waste project that involves supplying jute cut offs from the beginning and end of a production run from our linoleum factory in Assendelft. The jute cloth, which would normally be qualified as waste, as it cannot be recycled, is now being used to make durable multi-use carrier bags that provide an alternative to one-way plastic bags. The jute bags have become fashionable items that, bearing the logos of the stores that offer them, are seen as 'want to have, want to (re)use' items for daily use. The initiative for free-of-charge jute carrier bags is to be extended to fairs and exhibitions.

# VARIOUS SUPPORT MVO PARTNERSHIP

MVO stands for 'Responsible Communal Entrepreneurship', a movement supported by the Dutch government which promotes joint initiatives between businesses and the local community or charities and foundations. Various initiatives

have been developed, from conducting masterclass sessions in linoleum cutting, the Zaandam regional theater community to make it possible for the elderly to visit the theatre and instructing Médicins Sans Frontières on installation techniques for operation theatre flooring.

# COEVORDEN (NETHERLANDS) **EDUCATION AND ENTREPRENEURSHIP PROGRAM**

Forbo Novilon BV is continuing its support and engagement in a regional program in Coevorden to help alleviate unemployment in the region. As part of the education program, pupils visit the factory to learn about the town's industrial capabilities and the working environment inside a modern production plant. Together with the province of Drenthe and the regional community three information sessions were set-up to discuss the opportunities for the circular economy opportunities in the





# **CHARITY**

Flooring Systems wants to make a sustainable contribution to improving people's quality of life. We therefore support various charity projects with products, expertise, and financial contributions. The focus is on small, locally initiated projects and partnerships that are carried out locally by our sales and marketing organizations and the business units where the local factories support the local community. Most of the support in delivered 'in kind' where it concerns donations of floor covering material for local community facilities such as sports, culture, and community buildings. In addition to this, some special charitable support activities in 2019 deserve a mention:

# **OUTWARD BOUND (UK)**

Flooring Systems in the UK continued its long-standing sponsorship of the Outward Bound Trust. This educational charity helps young people in the UK to discover their potential by placing them in challenging yet supportive outdoor environments far away from home.

# RONALD MCDONALD HOUSE (NETHERLANDS, SWEDEN)

The Ronald McDonald House provides support and housing for families with sick children. Flooring Systems continued its ongoing support with donations in kind and financial contributions in the Netherlands and Sweden.

# CHILDRENS CANCER ORGANIZATION (NORWAY)

In Norway, Flooring Systems supported the children cancer organization as part of their national community engagement.

# SANITATION AND WATER PROJECT (BANGLADESH)

Bangladesh and the Indian state of West Bengal together form the historic former state of Bengal, a distinct geographical and ethno-linguistic region in South Asia. Jute is an important crop for the farmers in this region, and the fibers of the jute plant are spun into yarn and woven into cloth locally; they are also used as

backing for our linoleum products. Clean drinking water and good sanitation are essential for good health and preventing the spread of disease.

Nine years ago, we started a project with our local supplier, Janata jute mills, to give everyone who works in the mill a domestic toilet, a water well for drinking water, and in some cases both. Janata made all the local arrangements, such as hiring a contractor and inspecting the potential installation sites, and completed the installations.

# AUSTRALIAN BUSH FIRE SUPPORT

Marketing Manager Australia and New Zealand, Sidney, Australia

One of the largest environmental impacts of 2019 took place in Australia, where the unprecedented bush-fires left no doubt that climate change is really happening and can become dangerous literally within hours of our houses and living environment. Flooring Systems' Marketing Manager for Australia and New Zealand tells us what it was like and how it impacted private and business lives.

"Australia recently experienced record dry periods with higher than average temperatures resulting in a catastrophic 2019 bushfire season. Bushfires burnt 186,000 square kilometres across the country and twenty percent of Australian native bushland was severely impacted. Almost six thousand buildings were destroyed, thirty-four people perished and over one billion animals were killed with many of the impacted species endangered. Many agree, climate change is having a direct effect on our climate extremes and we are taking action where we can. Flooring Systems Australia contributed to three charities that directly helped those suffering from the effects of the recent bush fires.

#### RED CROSS AUSTRALIA

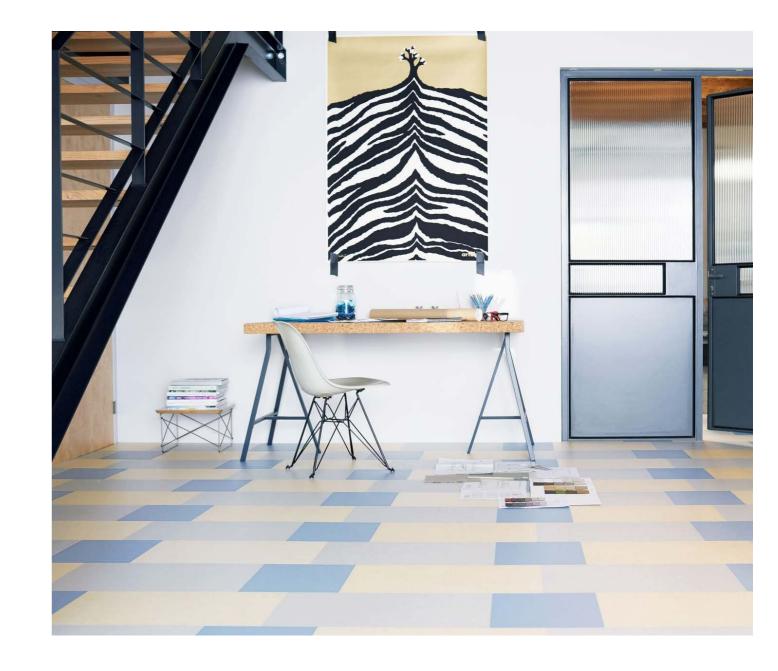
Red Cross Australia provides relief to those in need in times of crisis and disaster. Funds donated to bush fire victims are being used to provide shelter for those who lost homes, food, clothing and medical care services for impacted individuals and communities.

#### WIRES (WILDLIFE, INFORMATION, RESCUE AND EDUCATIONAL SERVICE)

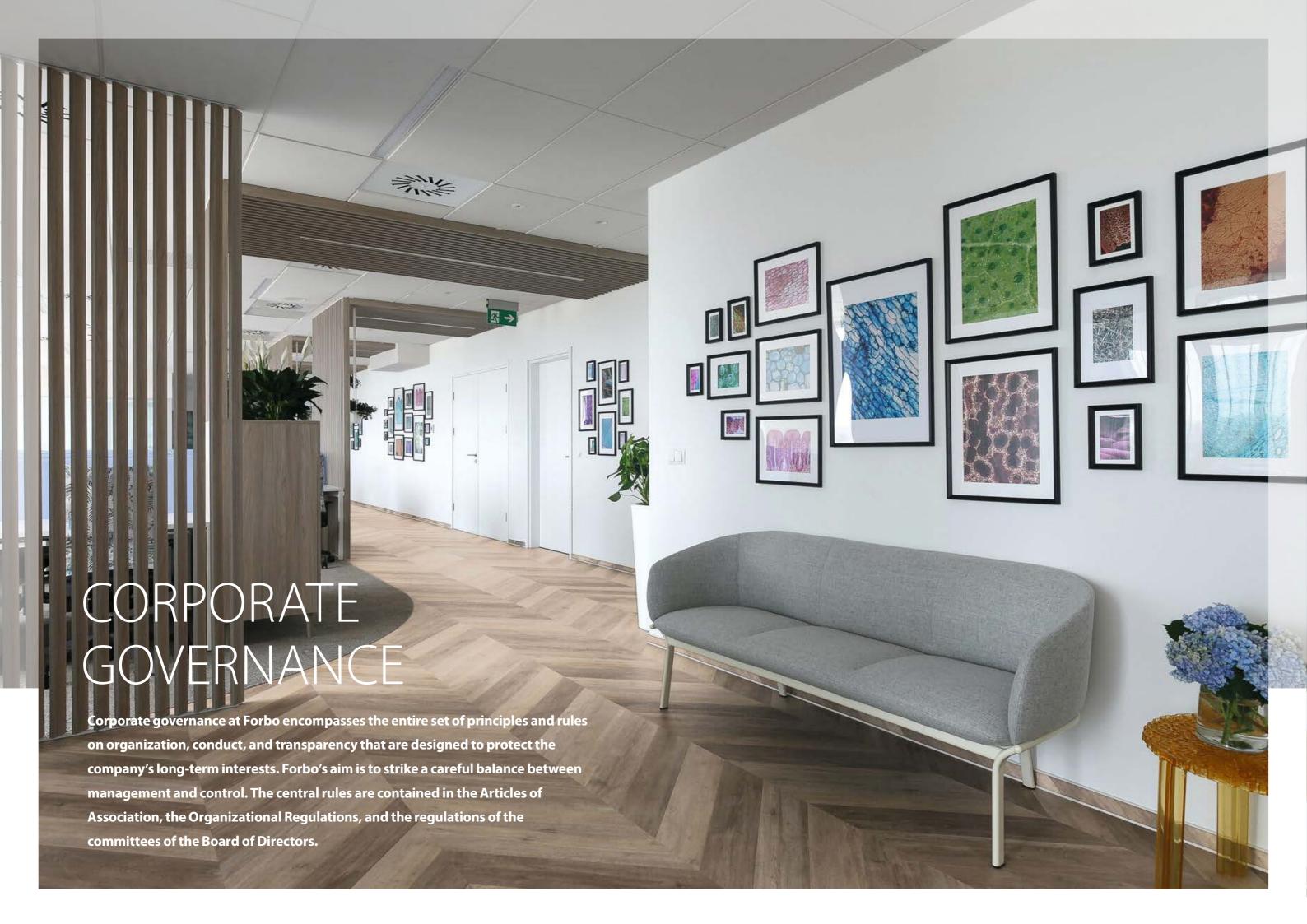
WIRES wildlife rescue is the largest wildlife rescue and rehabilitation charity in Australia. It is a non-profit organization providing rescue and rehabilitation for all native Australian fauna. All animal rescuers and carers are volunteers. WIRES has been operating since 1985. WIRES core focus is on the rescue, care and release of injured native wildlife. Funds ensure native animals are well enough to be released back into their natural environment. Habit loss and injury have meant WIRES has been inundated with native animals and will take some time to recover.

#### TREE PLANTING WITH THE CNCF - AUSTRALIA

In early 2019 prior to the bushfire season, Flooring Systems Australia partnered with the Carbon Neutral Charitable Fund (CNCF) in Australia to help fund an ongoing native tree and shrub planting program that restores Australia's biodiversity. Every m2 of Marmoleum flooring sold in Australia directly contributes to planting in areas previously damaged by land clearing and degradation. The CNCF is a non-profit organization that carefully selects native species that support natural ecosystems and wildlife, creating habitats that are more resilient to Australia's climate. In 2019, our first year of the program, we contributed to the planting of over 6,000 native trees. The CNCF tree planting program is just one way in which we are making a positive impact in Australia.



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The following information is set out in line with the Directive on Information relating to Corporate Governance (Directive on Corporate Governance 'DCG') and the relevant publications of the SIX Swiss Exchange. The Forbo corporate governance report is available on our corporate website www.forbo.com/en/investors

# ORGANIZATION OF SUSTAINABILITY

Sustainability is one of the policies that governs our operations within Flooring Systems. Our Sustainability Policy document, which is endorsed by the Flooring Systems Executive Vice President, sets out the triple bottom line under which we strike a balance between the environmental, social, and economic aspects of sustainability, as described in this report. Our manufacturing plants comply with ISO-9001, ISO-14001 and SA 8000 and our sales organizations comply with ISO-9001. As part of this, they are obliged to continually raise their sustainable performance by formulating annual programs for improvement. Goalsetting and improvement are measured internally by our quality assurance director for the division.

The four business units, which have the leading role in the development of new collections and products, all have a clear directive to improve on the sustainable aspects of our products as part of a continuous process. This process is monitored by the Flooring Systems Divisional Board who, together with the Executive Vice President Flooring Systems, the Vice President Business Development and internal stakeholders, approve the release of new collections. As a division we also set goals for our R&D departments regarding product improvement programs based on the three fundamentals of our Sustainability Policy.

# CODE OF CONDUCT

Throughout the reporting year, we maintained our efforts to further develop our conscious awareness of what we do. We did this by again repeating and reinforcing awareness of the contents of the Code of Conduct (by means of an e-learning module), competition law, and anti-corruption principles, and through the uncompromising implementation of the risk management process.

The Forbo Code of Conduct sets out our most important business principles and basic values. It is central to the way we protect and develop our reputation. It is founded on the principles of integrity, transparency, and fairness, and describes how we are to behave. It not only ensures compliance with the applicable laws and regulations wherever we do business, it also goes beyond compliance by demonstrating our commitment to acting ethically and with integrity in every situation, while at the same time respecting people's rights as individuals. We expect this of every single employee, everywhere, every day. We also

expect this of all our business partners. High standards in our relationships are the foundation for lasting success.

# CORE VALUES

Forbo Group culture is embedded in the Forbo Way to Win values program. This covers the entire organization and has been developed by the senior management of the two Forbo divisions and Forbo headquarters. The program has been rolled out within the organization and today forms part of the induction program for new employees at Flooring Systems. In the Forbo Way to Win, we have defined three core values that each encompass three guiding principles:



#### NSPIRING

- Developing ideas and seizing opportunities
- · Knowing what matters and focusing on it
- Raising enthusiasm and convincing others



# DARING

- Taking bold and decisive action
- Giving our all with power and passion
- · Achieving goals with determination and stamina



#### CARING

- Challenging and encouraging oneself and others
- Taking responsibility and making a difference
- · Leading by example to shared success

# ORGANIZATIONAL STRUCTURE

Our flooring products are divided into product categories that include linoleum, project vinyl, cushion vinyl, acoustic vinyl, luxury vinyl tiles, entrance flooring systems, flocked flooring, carpet tiles, and needlefelt.

The development and production of the product portfolio is managed in four separate business units: Linoleum, Vinyl, Textile and Building and Construction Adhesives. The sales and marketing organizations are divided in 4 regions: North Central Europe, Southern Countries, North America and Asia/Pacific. Business units and sales regions work together in a matrix structure and are supported by a number of central functions such as Finance, IT, Global Procurement, Logistics, Quality, and Business Development.

The processes and strategy is developed according to the principles of 'creating products, making products and selling products'. Creation and production lies within the responsibility of the individual business units, whilst sales and marketing are the responsibility of the sales regions. Each one of the sales organizations defines the product mix for the country or region it represents in a dialogue with the business units. The focus is to sell a segment-oriented product portfolio worldwide, with local adaptations.

#### MANAGEMENT TEAM

The Flooring Systems management is headed by Jean-Michel Wins as Executive Vice President. There are Vice Presidents for the four busines units and the four sales regions. Further more there are Vice Presidents for Finance and IT, for Business Development as well as a Director for Global Procurement, Global Logistics and