

# Circular report 2021

**"Circular Sweden brings together the companies that are the driving forces behind the development of circular product and material flows."**

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# Preface

Now is the time to make the change from a linear to a circular economy. "Circular Sweden is a business forum that is the driving force behind the development of circular product and material flows." Many products still have a short lifespan, and Sweden is still far away from a resource-efficient use of materials.

The companies in Circular Sweden are working actively to speed up the development towards a circular economy. In this report we look at the goals these companies have set and how they work to contribute to the development of circular product and material flows. We want to be transparent in our circular work. Our hope is that this report will inspire others and lead to dialog with all the companies and other parties working towards for increased circularity.

The report is based on each member company's own work on the four focus areas that are prioritized in the forum. These are circular design, sustainable consumption, increased availability and use of recycled materials, and circular value chains. The member companies from the recycling business are shown together in this report, since they have common goals and measures.

We see that many parts of the transition to a circular economy are profitable for most companies. The transition strengthens brands, attracts employees and reduces costs. However, in some areas it is more difficult to make the switch to circular product and material flows. To succeed we need better cooperation between companies in the value chains and an even greater focus on circularity-increasing measures from politicians. Long-term and predictable instruments are needed, both in Sweden and in the EU.

For 2030, our goal is for Sweden to be an international role model in circular material flows, an active driver of development globally. The goal is to use products and materials with greater resource-efficiency and without sacrificing economic or qualitative value. Circularity's benefits to the climate will then be well known.

The hope is that Sweden will develop clearer legislation that make it more sustainable for companies to own their waste, take responsibility for their value chains and, more profitably, circulate more and more of their material. Recycled raw materials should be able to compete with new ones and be in high demand. Consumers and purchasers should place high demands on circular products and material flows.

So let's show the outside world that Sweden can succeed in its transition to circularity. One step in these efforts is that our companies demonstrate clearly how we reorganize our operations to create a society without a dependence need for finite raw materials.

Enjoy reading!

**NCC**

**X HOUDINI**

**IKEA**

**blocket**

**Coca-Cola**  
EUROPACIFIC  
PARTNERS

**Electrolux**

**H&M**

**SPENDRUPS** 187

**Axfood**

**white**

**Tarkett**

**ÅTERVINNINGSS  
INDUSTRIERNA**



# The vision of the circular society

A circular economy is one that conserves natural resources in an efficient manner. This enables continued human life and well-being for many generations to come within our planetary limits. In a circular society, products and materials are kept and recreated over and over again, without going to waste. It is a society where we humans live differently, with different everyday lives and different consumption patterns than currently.

Our habits affect the climate, and switching to circular consumption is not only necessary, it can also be easy. It is, simply put, a matter of borrowing, exchanging, renting, sharing, repairing, reusing and consuming recycled and sustainable products. The demand for sustainable products and materials is growing rapidly, particularly among younger consumers. As a company, we have a great responsibility to help improve the environment and reduce greenhouse gas emissions. We must make sustainable consumption the easy choice for consumers.

## Circular Sweden's goals

The goal for 2040 is a society without a great need for new finite resources - a circular society. On the way there, companies and the public sector need to make the switch to circular product and material flows. Together we can actively drive this transition, both nationally and internationally. By 2030, we must have implemented the following measures:

- Halved Sweden's value loss from material flows
- Developed and begun applying circularity measures in the private and public sector
- Achieved consensus and standardization with regards to circularity
- Developed legislation so that companies have ideal conditions to work circularly in their product and material flows
- Increased demand and competitiveness for recycled raw materials
- Increased consumer and retailer requirements for circular products and material flows

# Focus areas

Circular Sweden is a corporate forum that brings together companies and invites businesses, politicians and researchers to discuss the obstacles and opportunities for more circular material flows. The purpose is to drive development and policy around 4 focus areas that have been identified as priority areas for a transition to circular product and material flows:

**Design for  
a circular  
economy**

**Sustainable  
consumption**

**Increased  
availability and  
use of recycled  
materials**

**Circular  
value chains**



# Axfood

*"A leader in good and sustainable food"*

Axfood's strategy for increasing its circular material flows is focused on plastics, packaging and food waste. The plastics strategy includes a number of different objectives, for example all plastic packaging should be recyclable and be made of recycled or renewable materials, and the use of plastics should decrease significantly in the next few years. Axfood also works actively for increased separation at source and reduction of food waste.

GOAL  
1 & 2

DESIGN FOR  
CIRCULAR  
ECONOMICS

GOAL  
1 & 2

SUSTAINABLE  
CONSUMPTION

GOAL  
1 & 3

INCREASED AVAILABILITY  
AND USE OF RECYCLED  
MATERIALS

GOAL  
1 & 3

CIRCULAR  
VALUE CHAINS



## Goal 1 - Reduced and recyclable plastic

- All packaging should be recyclable by 2022
- The use of plastics will be reduced by 25% by 2025
- Only recycled and renewable packaging materials after 2030
- Reduce the use of disposable items in sales and own activities

Currently, a large part of the plastic packaging used in the grocery trade is not usable for materials recycling. In 2019 and 2020, differentiated packaging fees were introduced for plastic and paper packaging.

### ACTIVITIES

- Map the use of plastic
- Contact suppliers
- Improve and/or replace packaging
- Remove disposable items from the product range and internal activities
- Increased internal and external information about our plastics strategy
- Work to increase the share of packaging that can be returned against deposit

### CONDITIONS

- Need for financial incentives
- Need for more far-reaching legislation on deposits on packaging
- Need for new technical solutions for replacing laminate plastic as an alternative to raw materials from forests



## Goal 2 - Cut food waste in half by 2025

Axfood's food waste is currently about 1.3 percent, most of which stems from bread and vegetables.

### ACTIVITIES

- Improved routines for ordering
- Waste-smart sales in stores
- Donate food to charity
- Adapted packaging for reduced food waste

### CONDITIONS

- Need for a national food waste target
- Give national authorities the responsibility for statistics and follow-up





## Goal 3 - Sorting at source with many fractions

Sorting into more fractions in stores and warehouses.

### ACTIVITIES

Shrink wrap and stretch film from stores are returned by own vehicles.

### CONDITIONS

- A bureaucratizing frivolity principle underway
- Chains that have central management should be able to apply this to all their stores
- Need for more biogas plants and plants for removal of packaging



# Blocket

*"Create a sustainable world, with loads of opportunities for everyone"*

Blocket's purpose is to contribute to a sustainable world where there are plenty of opportunities, for everyone. For Blocket, circular economy is a part of the business concept. Blocket's promise to users is to make sustainable alternatives as comfortable as new ones.

- by producing a product that is helpful, inspiring and effective and where Blocket creates extra value for its users at a reasonable price. By getting more people to choose used products rather than new, we spare the climate and environment and contribute to a more sustainable future. No need to make new products, less is discarded and emissions are reduced. By choosing second-hand, Blocket's users save 0,75 million tons of CO<sub>2</sub> annually.



DESIGN FOR CIRCULAR ECONOMICS



SUSTAINABLE CONSUMPTION



INCREASED AVAILABILITY AND USE OF RECYCLED MATERIALS



CIRCULAR VALUE CHAINS



## Goal 1 - Simplify second-hand trade

Blocket is working actively to change consumption patterns by encouraging consumers to choose pre-loved instead of new. This is achieved mainly by offering a well-developed service with products that lower consumers' barriers to second-hand trade and by producing inspiring and educational content.

### ACTIVITIES

- Constant development of website and platform to make buying and selling second-hand goods as easy as possible.
- Curated content adapted to target groups.
- Continue to facilitate circular consumption by identifying, realizing and making investments in circular business opportunities. Develop collaborations with flexible freight providers for the users of Blocket.
- Highlight the value of buying second-hand - both price and climate benefits.



## Goal 2 - Increase second-hand trade safety

The barriers to buying and selling second-hand are primarily linked to security. A survey conducted by Kantar Sifo for Blocket shows that one out of three is worried about being deceived when buying second-hand, especially with regards to freight. Furthermore, one of four choose not to buy second-hand products since there is no guarantee the product will work. One of two finds it difficult to sell because of buyers who fail to respond / show up. It is therefore essential to offer the most flexible and secure service possible.

### ACTIVITIES

- Active customer safety work (which includes e.g. reviewing regulations, collaborating with authorities and checking the ads of thousands of users daily).
- Development of additional services for secure purchases. For example, purchase contracts free of charge.
- Secure payment solutions when shipping goods to guarantee security for both buyers and sellers.
- Development of second-hand insurance for private buyers.
- Development of ready-made purchase contract templates.



### **Goal 3. Double Blocket's positive environmental and climate impact in the Nordic countries by 2023 by increasing second-hand buying**

The 2020 E-barometer shows an increase in both demand for second-hand products online and trade between private individuals are increasing. Consumers are motivated by a combination of price, supply and sustainability. Very few are driven solely by one of these parameters; they often work in combination. Nearly one in two Swedes traded second-hand at some point in the last year. Seven out of ten Swedes have used Blocket in the past six months, nine out of ten among families with young children. But when buying new products is the norm, there are stigma attached. For example, with regards to Christmas and birthday presents. Some groups in society rarely or never buy second-hand. This needs to change.

Blocket uses innovation to make it possible for consumers to make sustainable choices and consume circularly. Blocket is therefore making efforts to double the positive impact of circular consumption on society, the climate and the environment through its marketplaces in the Nordic countries by 2023. By 2030, waste production will decrease significantly through prevention, reduction, reuse and recycling. By 2030, Blocket will ensure that users have relevant information about and awareness of sustainable development.

#### **ACTIVITIES**

- Continue to promote, develop and communicate to our stakeholders the environmental and climate benefits of second-hand buying, including through participation in the public debate.
- Develop the Begnagnatrapporten, which maps second-hand sales in Sweden.
- Inspire a more sustainable lifestyle and convince Swedes to take good care of what they already have as well as increase the value of used products, for example through our book Bättre begagnat (Better used).
- Nudge users towards buying and selling for the climate, through user-generated co2 data.
- Share user data about search and purchase patterns on Blocket continuously.
- Adapted collaborations with selected sustainable actors, products and services must be mappable to SDG 12.
- Reduce own footprint as a company by switching to more sustainable data solutions.





# Coca-Cola Europacific Partners

*"We will find the most sustainable of offering our drinks"*

Coca-Cola Europacific Partners' (CCEP) new climate strategy Action on Climate Now aims to reduce the group's total greenhouse gas emissions in scope 1, 2 and 3 (base year 2019) by 30 percent<sup>1</sup> by 2030 and then reach net zero by 2040

To reach net zero, CCEP will need to reduce the climate footprint of its packaging, which accounts for the largest share of the company's total emissions. To succeed it is crucial that we ensure that the packaging is part of a circular economy where 100 percent of said packaging is collected, recycled and reused, instead of becoming trash. CCEP has defined four areas for increasing the circularity of packaging and reduce its CO2 emissions.

<sup>1</sup> The 2030 target has been validated by the Science Based Targets Initiative (SBTi) as being in line with the 1.5 degree goal.



DESIGN FOR CIRCULAR ECONOMICS



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CIRCULAR VALUE CHAINS



## Goal 1 - Remove unnecessary materials

Remove all unnecessary and not easily recycled packaging material and optimize the packaging to use as little material as possible.

In 2020, 95 percent of CCEP Sweden's packaging was recyclable.

### ACTIVITIES

- Design packaging with a view to recycle.
- Continuously optimize packaging through so-called lightweighting.
- Challenge the need for each package (including secondary packaging, external packaging and more).



## Goal 2 – The way to zero

Reduce usage of new fossil-based materials by increasing the share of recycled materials and materials made from renewable raw materials in packaging.

At least 50 percent of the materials used in CCEP's PET bottles in all markets must be made of recycled plastic (rPET) by 2023.

By 2030, all new fossil-based plastic will be replaced by 100 percent recycled or renewable material.

### ACTIVITIES

- In 2020, all CCEP Sweden's PET bottles produced in Jordbro were converted to 100% rPET. This means that 97 percent of the PET used by CCEP Sweden in 2020 was rPET.
- More brands in the Swedish portfolio will be converted to 100 percent rPET in 2021.
- In 2021, Norway, Iceland and the Netherlands will convert to using rPET in their locally produced PET portfolios.
- Ongoing activities to increase the share of recycled material in secondary packaging, such as shrink film for multipack PET.
- Investments in new recycling technology, e.g. recovery by depolymerization

### CONDITIONS

- Increased supply of high-quality recycled materials.
- Increased recycling capacity for mechanical PET recycling.
- Market (and consumer) acceptance of aesthetic changes as materials become more circular (and may get a grayer hue over time). Consumer surveys show that most consumers do not even notice any change, and when they are made aware that the possibly grayer hue is due to the bottle consisting of 100 percent recycled PET, they view this positively.



### Goal 3 - Sell one, collect one

Work to ensure that all packaging is collected, so that the material can be recycled instead of becoming trash or left in the environment.

In 2020, 86 percent of the PET bottles and 89 percent of the cans that were sold on the Swedish market were collected through Returpack. This is a large increase compared with the previous year and is linked to the pandemic and resultant sharp decline in cross-border trade and consumption. This had a positive effect on collection in Sweden.

#### ACTIVITIES

- Support well-designed collection systems in Western Europe to ensure 100% collection of packaging.
- Take advantage of the reach of brands to encourage everyone to recycle.
- Collaborate with partners and customers to make available and raise awareness of the importance of collection and recycling.



### Goal 4 - Refill

Explore packaging-free solutions and refillable alternatives to reduce the amount of package waste and thereby the carbon emissions of the packaging. Package-free solutions offer consumers a different type of drinking experience and play a crucial role in CCEP's aim for zero net.

#### ACTIVITIES

- Investigate how customer and consumer needs can be met with existing solutions and by developing new alternatives.
- Develop the most sustainable beverage containers for each market and different consumption situations where packaging-free products are launched.
- Implement pilot projects with customers in the Swedish market in 2021.



### Goal 5 - Invest and innovate for the future

To accelerate the development towards a circular packaging economy CCEP has teamed up with The Coca-Cola Company to start an innovation center for packaging in parallel with the company's investment in new technology at partner companies. CuRe Technology is an example of this. Through depolymerization CuRe Technology recycles low-quality PET into high-quality PET, which can then be used to manufacture new PET bottles. The recycling technology gives the plastic new life. CCEP has also invested in Innovative Tap Solutions and Lavit in order to explore their packaging-free technologies.



# Electrolux

*"Electrolux strives to develop products, services and business models that are suited to a circular economy."*

Electrolux has stated nine promises covering all our business areas, aiming to achieve carbon neutrality by 2030. Of these promises, one has a particular focus on circularity: Electrolux promises to offer circular solutions and business models.

Here are some examples of what Electrolux has achieved until now by working proactively to offer consumers more circular products that utilize limited resources better:

- 6,800 tons of recycled plastic in 2020 production.
- The dishwashers already use 40% recycled plastic.
- Prototype vacuum cleaner made from 100% recycled and reused materials and components, developed in collaboration with Stena Recycling.
- Pay per cleaned square meter, a new business model for our award-winning robot vacuum cleaner Pure i9 in Sweden.



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SUSTAINABLE CONSUMPTION



INCREASED AVAILABILITY AND USE OF RECYCLED MATERIALS



CIRCULAR VALUE CHAINS





## Goal 1 - Develop and present solutions for EPS-free packaging

We work to eliminate EPS (styrofoam) from our packaging while at the same time reducing the carbon footprint of the packaging and increasing its recyclability.



## Goal 2 - Increase product life by offering service at a fixed price

The first indications show that consumers are more likely to book repair work and service when the price is fixed.

The probability is 80% compared with 50%, indicating a willingness to extend product lifespans.



## Goal 3 - Increased use of recycled materials both in packaging and in products, with a goal of using 50% recycled plastic in our products by 2030

To increase awareness among consumers, methods are being developed to show how much recycled material a product contains.



## Goal 4 - Develop business models for appliances as a service

We currently carry out pilot project in the Nordic countries, offering products as a service for appliances in rental apartments. Rather than buying a product, the landlord pays for the function (cleaning clothes, cleaning dishes, cleaning floors, etc.).

The service involves placing the products in the home, repairing and servicing them. When repair work is needed, discarded products from the local area can be used for spare parts. Over time, we can develop a local "store" with parts and refurbished products that can be used to fix broken products.



# H&M

*"Lead the development towards a fairer, more equal, circular and renewable fashion industry"*

H&M has set a goal of using only recycled and sustainable materials by 2030. To achieve more circular material flows, the H&M Group invests in the production of recycled and sustainable materials and the increased use of these. The H&M Group also works actively to collect, reuse and recycle textiles and to optimize the reuse and recycling of packaging in its value chain.



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INCREASED AVAILABILITY AND USE OF RECYCLED MATERIALS



CIRCULAR VALUE CHAINS



## Objective 1 - Only recycled or sustainably produced materials by 2030

Currently, 64.5 percent of all materials used in H&M's products are recycled or produced sustainably. H&M only uses cotton that is organic, recycled or acquired via the Better Cotton Initiative.

The Group's new goal is for 30% of all materials to be recycled by 2025.

### ACTIVITIES

- Active support for the Better Cotton Initiative, which teaches farmers how to reduce the use of water and pesticides for cotton cultivation
- New materials included in H&M's collection:
  - Made of air: Inventors of a carbon-negative plastic that contributes to reducing carbon dioxide emissions by locking carbon from the atmosphere in the materials. This means that the process traps more CO<sub>2</sub> than it emits.
  - Naia Renew: A cellulose yarn made from 60% certified wood fiber and 40% recycled plastic from carpet fibers and plastic packaging.
  - Agraloop Biofibre™: Parts of agricultural waste that are transformed into a high-quality natural fiber.
  - Renu polyester™: Recycled polyester made from textile fiber
- Continued investment in research, innovation, start-ups and development through some of the following projects:
  - o Re:newcells Circulose®, material made from 100% reused cellulose-based materials. In 2020, H&M established, in addition to its investments in Re:newcell, H&M, a 5-year partnership to help scale up production and increase the use of more sustainable materials within the H&M Group.
- Worn Again for better separation of blended fibers and for extracting dyes and other polyester and cellulose contaminants
- Infinited fiber: Have tested their technology for creating a circular value chain.



## Goal 2 - Increased recycling of textiles and packaging

- Increased collection, recycling or reuse of textiles. 29,005 tons of textiles were collected for reuse and recycling through the company's Clothes Collection Initiative in 2019, an increase of 16 percent compared to 2018. (The figures for 2020 are not measurable due to Covid-19)
- Use of 100 percent reusable, recyclable or compostable packaging by 2025

### ACTIVITIES

- Testing and development of circular business models in Sweden- Rental, Repair & Remake, Resell via Sellpy on hm.com
- Partnership with I:CO for increased collection and administering old textiles in Sweden, to put them to the best possible use through reuse or recycling
- Majority owner in the second-hand platform Sellpy.



## Goal 3 - Reduced chemical impact in production

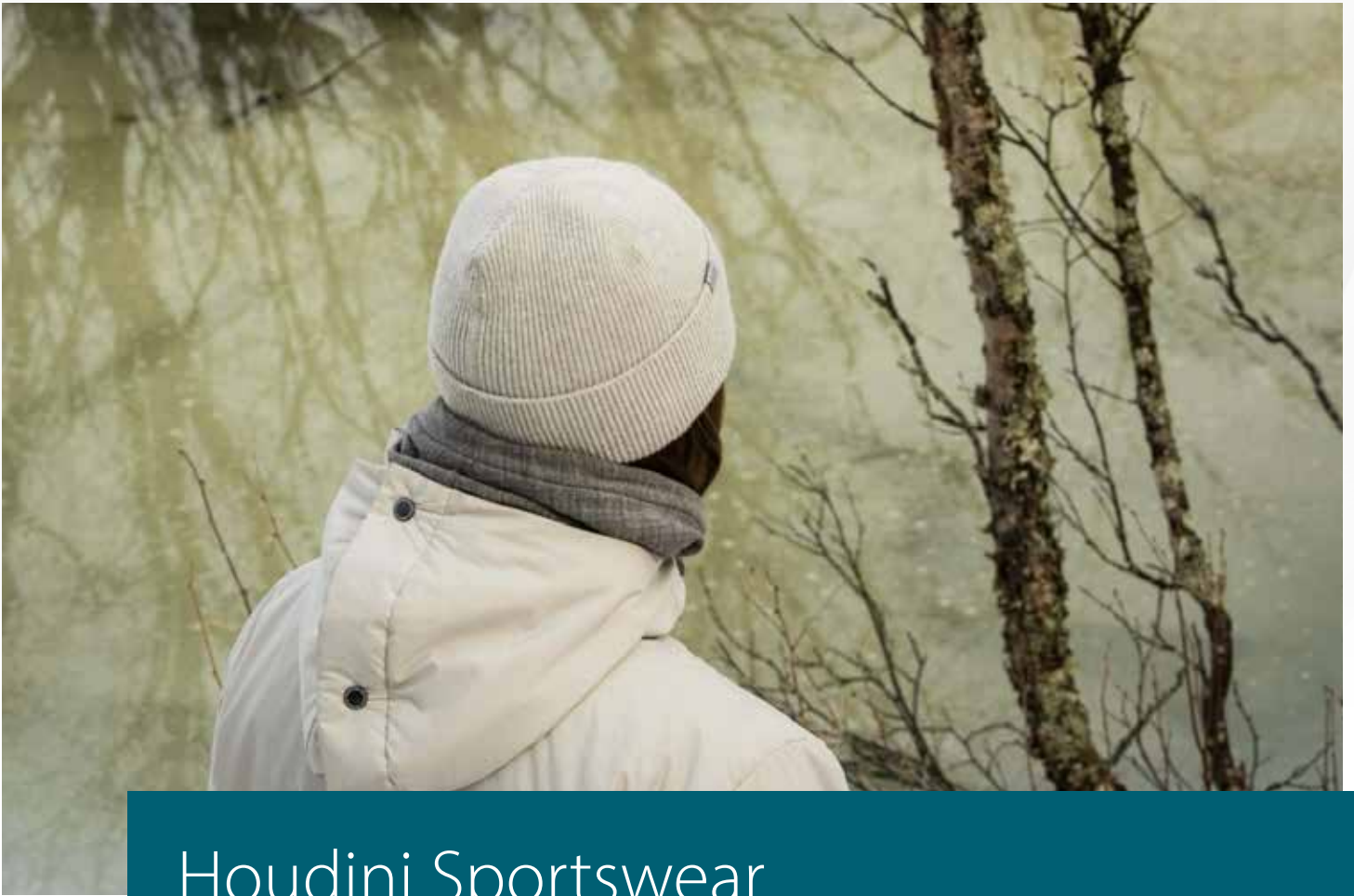
- Complete traceability of chemicals used in the production chain by 2030
- Zero hazardous chemical emissions by 2020
- Clean factories – phasing out of all MRSL chemicals and 100 percent harmonized industrial tools and standards.

Already in 1995, H&M introduced a "Chemical Restrictions List", a list of restricted substances based on the precautionary principle, i.e. a limitation on substances where the degree of hazard was uncertain. It has been continuously updated since then, and all suppliers are required to follow the list, which is stricter than the chemical requirements in both Swedish and European legislation.

### ACTIVITIES

- Continued update of Chemical Restrictions List
- Continued work to ensure that all products are safe to produce and carry, e.g. By eliminating all hazardous emissions to water, ground and air.
- Using the SpinDye® staining process requires less water, chemicals, energy and carbon dioxide than conventional methods.





# Houdini Sportswear

*"Houdini aims to manage a return to nature and to realize its vision of a meaningful life that enriches the individual, society and planet, rather than stressing them."*

Houdini is working to create a circular system where products are long lasting and are used, repaired, reused and finally recycled into new resources. Houdini works actively with circular design and has set a goal of 100 percent circular products, i.e. Made from recycled and recyclable fibers or from renewable and biodegradable fibers by 2022.



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CIRCULAR VALUE CHAINS



## **GOAL 1 – 100% of the products must be circular, i.e. made from recycled and recyclable fibers or from renewable and biodegradable fibers by 2022**

In 2019, 63% of our autumn and winter collections was completely circular. 100% of the fabrics used by Houdini in the spring of 2020 were either recycled, recyclable, renewable, biodegradable or Bluesign certified.

Houdini's policy is to use the purest materials possible and always avoid mixing natural and synthetic fibers. Wool is mixed with other biodegradable fibers, resulting in products that are both recyclable and biodegradable. Synthetic polymers are mixed with other synthetic polymers when required for their function.

### **ACTIVITIES**

- Houdini continues to work with circular design and only uses recycled, recyclable, renewable, biodegradable and Bluesign-certified fibers.
- Work to ensure that raw materials for trimming, dyeing, chemical processing and treatments are recycled or renewable by 2030.



## **GOAL 2 – To extend product lifespan**

Houdini designs for a smaller and more multifunctional wardrobe with products that have a long life span and can be used more frequently and in many different situations. Compared with the western world average of 7-10 times use, for example, the product Power Houdi is used over 1200 times, multiple times per week, in many different situations and with a lifespan of around ten years. To prolong the product lifespans, Houdini also offers services on a rental, subscription and second-hand sales basis.

### **ACTIVITIES**

- Continue to design for a smaller and more multifunctional wardrobe with products that have a long life span and can be used more frequently and in many different situations.
- Continue to offer and develop Houdini's business models for:
  - Clothes rental
  - Second-hand sale of previously owned clothes in stores
  - Help with garment repair
  - Subscription service where customers can share a large wardrobe and change their clothes when needed.



**GOAL 3 – Houdini’s entire production chain will be sustainable by 2030, meaning that not only the company’s own products will be recyclable - all suppliers must also confirm with Houdini’s strict requirements.**

**ACTIVITIES**

- Houdini Hangouts aims for a global reach by guiding, sharing, educating and inspiring users, industry colleagues and other relevant stakeholders to "reconnect with nature", apply circular design principles and incorporate sustainable methods and technologies.



**GOAL 4 – By 2030, 20% of Houdini’s textile fibers must be regenerative or made by waste converted into resources from land, sea and air or industrial symbiosis whereby waste becomes resources.**

“Houdini aims to manage a return to nature and to realize its vision of a meaningful life that enriches the individual, society and planet, rather than stressing them.”

**ACTIVITIES**

- Collaboration projects with partners to enable attractive and regenerative lifestyles will be initiated.
- New business models to enable attractive and regenerative lifestyles will be developed and scaled up.



# IKEA

## *"Circular IKEA 2030"*

IKEA's strategy for increasingly circular material flows is carried out through several focus areas. These include designing all products for a circular life, increasing the range of products containing recycled materials and phasing out products made by disposable plastics. IKEA also works actively to develop new business models that increase product lifespans. For example, this is done by reusing furniture and offering rental and repair services and an expanded range of spare parts.



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CIRCULAR VALUE CHAINS



## GOAL 1 – 100 percent circular products by 2030

Currently, guidelines for circular design principles have been developed.

### ACTIVITIES

- The product range, consisting of over 9,500 products, was mapped in 2020 to identify needs for each product area based on the principles of circular design.
- The assessment of the product range shows that standardized fittings and spare parts, the use of renewable and recycled materials and a recycling-friendly design are key to the extent of a product's circularity.
- Products with gradually increasing circularity are launched continuously in accordance with the 2030 road map.



## GOAL 2 – 100 percent renewable or recycled materials by 2030

Currently, 60 percent of the product range is based on renewable materials and 10 percent on recycled materials.

### ACTIVITIES

- Since 2015, all our cotton has been recycled or sourced from more sustainable sources, mainly from the Better Cotton Initiative (BCI).
- More than 98% of our wood comes from more sustainable sources, FSC-certified and/or recycled.
- Great progress was made in 2020 to increase the proportion of recycled polyester used in our textile range. 83% of the polyester is recycled (PET), and the goal is to reach 100% by 2021.
- All disposable plastic items had been phased out by January 2020.
- Products with gradually increasing circularity are launched continuously in accordance with the 2030 road map.

### CONDITIONS

Standardized definitions and harmonized legislation at a global/EU level are needed to enlarge the market for recycled materials.





## GOAL 3 – To extend product lifespan

Today, development and testing of new business models is being done to develop new ways for customers to extend the lifespan of their products. For example, this is done by using new solutions for acquisition, care and reuse.

### ACTIVITIES

- In the autumn of 2020, the world's first IKEA second-hand store was opened at ReTuna Återbruksgalleria in Eskilstuna. The store is a global innovation pilot store with the aim to explore how to create an attractive, circular and profitable business model.
- Circular Stores will open in all Swedish IKEA department stores by spring 2021. These store will offer for sale salvaged home furnishings from the department stores and second-hand IKEA furniture in need of a new home.
- The initial tests with leasing in Sweden in 2020 will be scaled up in 2021 and focus on corporate customers.
- The efforts to increase the range of spare parts continue.

### CONDITIONS

Need for instruments for increasing the demand for renting, buying second-hand and repairing.



## NCC

*"Every generation needs to continue development of the physical environment to meet changes in society. All activities should be carried out as sustainably as possible and have a positive effect on society. By doing this, construction creates a better society for future generations."*

The construction industry has a significant environmental impact. Therefore, the NCC plays an important role in the transition to a more sustainable society. NCC focuses on creating circular material flows in the construction process by prioritizing sustainable products and materials, making it possible to recycle and reuse construction waste and minimizing waste. NCC also works proactively to develop new sustainable products, services and concepts with an aim to make material flows more circular.



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CIRCULAR VALUE CHAINS



## GOAL 1 – Waste reduction

NCC continues to reduce waste. With regards to Group's sales, the proportion of waste has been reduced by 40 percent since 2015. NCC's focus on waste has provided good conditions for collaborating with our suppliers and identifying waste streams that can be made circular. The total amount of waste has decreased by 29 percent compared to 2015, and by 5 percent compared to 2019. The amount of waste by turnover in MSEK decreased from 1.64 tons of waste per MSEK in 2015 to 0.98 tons of waste per MSEK in 2020.

We continue our work to decrease the amount of waste and increasing the sorting rate.

### ACTIVITIES

- Using a life cycle perspective in projects to increase the reuse of materials.
- Traceability of products and their environmental impact
- More sorting of construction waste in pure fractionst



## GOAL 2 – Sustainable products, concepts and services

NCC works proactively to expand its product portfolio with new sustainable products, services and concepts for lowering its environmental impact. For example, flexible buildings and facilities that can be dismantled and reused later future and continuous development of low-energy products with a reduced carbon footprint. NCC contributes to good development in society through its sustainable products, services and methods, for example with products that have a reduced environmental impact from a life cycle perspective, such as NCC Green Asphalt and NCC Machine Sand or solutions for promoting and maintaining biodiversity, such as NCC Kielo, a method to increase biodiversity in NCC's quarries.

### ACTIVITIES

- Continued development of new technical solutions, products and working methods.
- More contact and cooperation with customers to gain a better understanding of customer needs, but also to educate in the area of sustainable solutions and the opportunities that currently exist.

### CONDITIONS

Increased circular design in the value chain is an important condition for increasing the material flow. In construction projects a challenge is being part of a larger value chain and thus being limited in the ability to influence the production of the product. Sometimes NCC has no chance to influence, for example, the design or choice of material.



## GOAL 3 – Increased share of recycled asphalt

There is solid experience with recycling of asphalt, and many techniques have been used and developed over the years to gradually increase the proportion of recycled materials. Asphalt plants can be fixed or mobile, and activities can therefore be moved if necessary to reduce transport. Recycling can also be done on the road using different methods, thereby reducing the proportion of new input materials to a very high degree compared with traditional methods.

### ACTIVITIES

- Process development
- Adaptation of production facilities for recycling
- Product development of asphalt, with a focus on input materials as recycled and renewable aggregates, binders and other additives.



## GOAL 4 – Increased use of return systems such as construction pallets and plastic floors.

We currently have several external initiatives with suppliers to handle pallets and floor spills, for example. In 2020, NCC returned a little over 38,000 pallets in the Byggpall return system. NCC also contributes to research projects in cooperation with other actors for recycling plate glass, concrete, plastic and plaster. The company is also an active partner in strategic innovation initiatives such as Smart Built Environment, InfraSweden2030 and Re: Source.

### ACTIVITIES

- Dissemination of information, increasing knowledge and statistical feedback
- Develop processes to simplify the management of projects, e.g. with regards to return logistics.

### CONDITIONS

Better feedback from suppliers on the number of pallets delivered to the projects.



## GOAL 5 – Increased recycling

NCC has its own digital platform for donating, selling and buying surplus materials between projects internally in the company, NCC Reused. There is much support for internal recycling of materials that can be developed further. Recycling is increasing, but much of it is done locally and outside of established central solutions.

### ACTIVITIES

- To make it possible to reuse materials that are built in today in the future, the information about the products needs to be secured. Using digitization, we can ensure traceability and thereby enable circular solutions in the future.

### CONDITIONS

Challenging logistics and timing. Construction projects are often relatively temporarily located and have tight schedules, which can be an obstacle to recycling.



# Spendrups Brewery

*"Circular use of resources"*

Spendrups' sustainability work has four focus areas: Conversion to Fossil free transformation, Circular and smart resource use, Sustainable drinking culture and Responsible business.

Spendrups is working towards more circular flows both in its energy supply and its packaging. In its Grängesberg brewery, the waste product draff is used as biofuel and biogas from its own wastewater treatment. Spendrup's packaging is included in several circular systems: The deposit system for plastic bottles and cans, via Returpack, recycling of glass and through packaging such as returnable glass and kegs that are returned to the brewery and re-used. Spendrups has been using recycled materials in its packaging for many years and is working to increase the proportion of recycled materials further. Spendrups' goal is to use 100 percent recyclable material by 2025.



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CIRCULAR VALUE CHAINS





## GOAL 1 – Increased self-sufficiency in energy use

Currently, the waste product draff from beer brewing and biogas from the company's wastewater treatment facility are used as biofuel in production in Grängesberg. There have been ongoing investments to increase the utilization rate to 80 percent. The rate in 2020 was about 50 percent.

### ACTIVITIES

In 2020, investments were made to enable the use of a larger amount of fuel and biogas and thereby increase the degree of self-sufficiency. A temporary project carried out in 2020 produced hand disinfectant and surface disinfectants from residual ethanol from the production of non-alcoholic beer. This was delivered to regional health care services, primarily in Dalarna, where these products were in short supply at the beginning of the pandemic.



## GOAL 2 – Increased proportion of recycled materials in packaging

Since 2015, Spendrup's PET bottles have been manufactured from 50 percent recycled PET, and since 2020, the plastic wrap in the multipacks have been made from 100 percent recycled plastic. Since 2019, all plastic glasses sold at festivals etc. are made from 80 percent recycled PET.

### ACTIVITIES

At the beginning of 2020, Spendrups switched to 100 percent recycled plastic in its multipacks sold on the Swedish market. This will result in annual savings of around 200 tons of new plastic and a 50% reduction in our carbon footprint. Spendrups is now looking at the possibility of using recycled materials in the plastic wrap around beverage pallets, so-called stretch film. With regards to PET, Spendrups aims to increase the amount of recycled material. A condition for this is to ensure that the quality of the material in the return system is maintained. Returpack is currently working on investigating the opportunities and limitations around this.

In addition to increasing the amount of recycled material, the company is also working continuously to optimize the amount of material used. In 2021, a project will be implemented to reduce the amount of stretch film used and the weight of crown corks used for the glass bottles will be reduced in 2021, resulting in an annual saving of 20 tons of steel.



## GOAL 3 – Reusable packaging and packaging with recyclable material

In addition to returnable glass and barrels, Spendrups uses recyclable packaging. These account for around 10 percent of the sales volume. Most packaging is included in the bottle deposit system, and cans and PET bottles account for just over 80 percent. The material used in Spendrups' packaging is highly recyclable, up to 97 percent. The goal is to reach 100 percent by 2025, in line with The DLF Plastic Initiative with which Spendrups is affiliated.

### ACTIVITIES

Spendrups continues to work on developing its range of reusable packaging and works to create the conditions necessary to achieve 100 percent material recyclability. Currently, all packaging material can technically be recycled, but the recycling facilities are not built for this.



## **GOAL 4 – Increased recycling rate in the bottle deposit system**

Returpack, of which Sveriges Bryggerier owns 50 percent, aims to increase the recycling rate to 90 percent. A similar goal is found in the EU Directive on Disposable Plastics, with 90 percent recycling of plastic bottles by 2030. The recycling rate in 2020 was 88 percent, slightly higher than previous years (85 percent in 2019). Just over 2 billion cans and bottles were collected.

### **ACTIVITIES**

Returpack works actively to increase collection, and Spendrups stresses the importance of returning in various campaigns, including from the Loka brand.



# Tarkett

*"Use circular economy as a strategy to reduce the use of resources and impact on the climate. Our vision is that all floors should be recyclable and for Tarkett to be a completely circular company"*

By working with sustainable design and recycling that works in practice, Tarkett is a pioneer in circular floors. Tarkett develops products made from recycled and bio-based materials designed for recycling as well as technology for separating and recycling yarn from carpet tiles and methods for removing glue and putty from post-use vinyl floors. Tarkett is also working on developing circular business models for its customers and suppliers.



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## GOAL 1 – Establish a circular economy in the flooring industry

In cooperation with the entire Swedish flooring industry, Tarkett has been collecting installation waste from vinyl floors for more than 20 years, within the framework of GBR Golvåtervinning. In recent years, Tarkett has developed collection systems and technology to also recycle other floor types. Some specific examples from 2020:

### Installation waste

In the Nordic countries, 660 tons of installation waste were collected from vinyl floors. An equivalent of 115,000 square meters of new Tarkett floor was produced from the recycled material, sparing the climate of more than 1,000 tons of CO<sub>2</sub>.

### Technology development

Thanks to proprietary technology, glue and putty can be washed away from post-use vinyl floors, to make them ready for recycling. As specific example of a project is the 10,000 sqm vinyl floor collected during renovation work on IKEA Kungens Kurva. The material was sent to Tarkett's facility in Ronneby, where it was washed and used as new raw material in new floors, including in IKEA Jönköping. By recycling the floor from this project, the climate was spared of around 100 tons of CO<sub>2</sub>.

### Biomaterials

The iQ Natural homogenous vinyl flooring was launched in the spring of 2020 as world's first floor with bio-attributed vinyl. This means that the fossil raw material has been replaced by bio-naphtha through mass balance. The product is recyclable, with 60% lower CO<sub>2</sub> emissions than traditional vinyl floors.

### Carpet tiles

Tarkett's collection of post-use carpet tiles is now underway throughout the Nordic countries. Carpet tiles with PA6 yarn are sent to Tarkett's plant in the Netherlands, where the yarn is separated from the backing and then depolymerized into new yarn.

### Linoleum

In 2020, a recycling system for installation waste from Tarkett's linoleum floor was launched in the Nordic countries. The waste is sent to Tarkett's plant in Italy where it is micronized into raw material for new floors.

### ACTIVITIES

- Increase awareness and knowledge of the existing systems for recycling floor waste in order to increase the utilization rate.
- Advocate clear definitions and correct use of concepts and expressions in sustainability communication, to increase the opportunities in the market for fronting relevant circular demands.
- Ensure the cycles are non-toxic and efficient by developing technology for the identification, tracing and purification of waste products from flooring.
- Develop products that use recycled materials as raw material
- Develop products and technologies that make it easier to disassemble, separate and recycle at the end of life.
- Actively contribute in debates and panel discussions focusing on the transition to a circular economy
- Develop renewable alternatives to the fossil-based raw materials used in polymer based floors



## **GOAL 2 – Achieve 30 percent recycled raw materials by 2030**

Currently, 12 percent of Tarkett's raw materials are recycled, primarily in the form of its own production waste, but also waste from installation, post use floors and production waste from other industries. The remaining raw materials are minerals (mainly lime), fossil-based raw materials and renewable materials (mainly wood).

### **ACTIVITIES**

- Actively look for and increase the amount of waste fractions from other industries, e.g. as lime from waterworks, PVB from discarded windscreens and safety glass and polyamide from discarded fishing nets.
- Significantly increase the amount of recycled raw materials from installation waste and post-use floors by increasing the use of existing collection systems and developing new technologies and processes for recycling in non-toxic cycles.
- Collaborate with customers and suppliers to develop circular business models.





## White Arkitekter

*"Drive the transition to circular architecture by creating new functionality, design and attractive environments from existing resources."*

The building environment and architecture always contribute to the use of resources and its impact on the climate. For the environment, the best thing to do is normally not to consume or build at all, but that does not necessarily mean that it is impossible to create new and attractive environments. Conservation, recycling and more efficient use of materials spare the earth's resources and are one of the most powerful ways to reduce the emission of greenhouse gases.

White's overall goal states that all projects will be carbon neutral or negative by 2030. A crucial strategy to achieve this goal is to modify the architecture to be more circular. To do this successfully requires a new attitude throughout the industry, existing technology must be seen as an asset before we create something new.



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CIRCULAR VALUE CHAINS



## GOAL 1 – We create architecture from the existing

The point of departure is to focus on preserving existing environments, buildings and products and to create new function, design and attractive environments based on that. Currently, 25% of our assignments are focused on transforming and recycling.

### ACTIVITIES

- Increase the proportion of projects with a focus on transformation, recycling and re-design.
- Increase the proportion of products that are reused, recycled or re-designed.
- Implement the "architect's recycling methodology" in our design and continue developing tools for digital design.
- Further develop model for life cycle and carbon calculations for renovation and recycling.
- Drive change and influence by highlighting good examples such as:
  - Selma Lagerlöf Center, Gothenburg, with 92% of its furnishings recycled.
  - Kv Hugin, Uppsala, estimated to save SEK 180 million and reduce CO<sub>2</sub> emissions by 3,800 tons.

### CONDITIONS

- Increased demand for environments and buildings using reused or recycled material.
- Economic instruments to stimulate building with recycled instead of new materials.
- Stricter requirements for reused or recycled materials, e.g. in procurement or building standards.



## GOAL 2 - We create architecture with low carbon emissions, efficient use of materials and a circular approach.

We can streamline the use of resources by creating an architecture that adapts over time, with flexible, general solutions to facilitate rebuilding, shared use and varied types of businesses. We are in a great position to influence the choice of materials. Currently, 21% of our projects use wooden frame, a steadily increasing figure.

### ACTIVITIES

- The carbon emissions of materials will be decreased by 50% by 2030.
- Choose products with long service life, which can be disassembled and repaired.
- Develop design methodology to optimize the amount of materials and reduce waste.
- Increase the use of wood and other renewable or recycled raw materials.
- Carry out life cycle and climate analyses for our projects.

### CONDITIONS

- Increased range of construction products made by recycled raw materials.
- Stricter requirements for reused or recycled materials, e.g. in procurement or building standards.



## **GOAL 3 - We create architecture that contributes to a circular society and sustainable lifestyle.**

The foundation for a more circular economy is laid in early stages of the planning of cities and communities. This creates the necessary conditions for an efficient and circular flow of resources and the possibility for circular construction and service that support sustainable living and consumption.

### **ACTIVITIES**

- Plan for services that contribute to the sharing economy and sustainable consumption, such as shared bicycles, recycling workshops, cultivation.
- Design detailed plans that enable wood construction, recycling of materials and renewable energy, such as solar energy.
- Propose joint use of energy and recycling of waste and water.

### **CONDITIONS**

- Municipalities need to have clear goals and be a driving force for the transition.



## **GOAL 4 - We invest in services, research and innovations that drive the development of a circular architecture.**

The industry needs to develop new processes and knowledge, and digital tools will create new opportunities. We can drive the design process in new ways, expand our role in the projects and develop new services. We can drive true change by performing development projects together with customers and other stakeholders.

### **ACTIVITIES**

- Our 2023 R&D program is focused on circular architecture.
- We will have completed a 100% circular project in-house by 2023.
- Through the White Research Lab, we conduct research and strategic collaborations such as:
  - Would Wood: 3D printing of new products from wood scraps
  - CC Build, Center for circular construction
- We are developing tools and innovations such as Re-Capture: 3D scanning of buildings for mapping their recycling potential.
- We offer new services such as Process Management for recycling and Re-design of buildings and interiors.



# Återvinningsindustrierna

*"Create circular flows of materials"*

Återvinningsindustrierna (ÅI) is an industry organization focused on increasing circular material flows by working for increased and improved recycling in Sweden. The companies are developing new methods and technology for increasing their recycling rates for many types of material. The recycling industries are working actively to increase the use of recycled materials and to the manufacturing companies' needs. By uniting more than 60 recycling companies, the recycling industries can drive the development of new standards for recycled materials and work to change regulations in a more circular direction, for example.



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## **GOAL 1 – Increased collection, sorting and technology development for highly resource efficient recycling by 2040**

Currently the collection, sorting and material recycling stages all have tremendous potential. But it is still difficult to collect, sort and recycle materials for which there is no market demand.

### **ACTIVITIES**

- Develop new technological solutions and offers that make available and enable an increased demand for recycled materials.
- Develop strategies more sorting and material recycling for a variety of relevant materials with targets for 2025, 2030 and 2040.

### **CONDITIONS**

- New policy instruments that provide increased incentives to choose recycled raw materials.



## **GOAL 2 – New standards for recycled materials (developed in collaboration with different industries) by 2025**

There are already many standards for recycled materials, but more must be developed, not least a standard for recycled plastics, and use must become more extensive to facilitate circular flows of materials.

### **ACTIVITIES**

- Develop new standards for recycled materials in cooperation with different industries

### **CONDITIONS**

- A widespread demand for and interest in the development and use of standards for recycled materials among industry players besides recycling companies.





## **GOAL 3 – Deliver construction materials with specified properties to customers who wish to buy recycled raw materials by 2022**

Large amounts of soil and excavated masses are currently transported to landfills, rather than being recycled in facilities locally. The market for crushing aggregate from construction and demolition is still unpredictable, making it difficult to increase the use of quality-assured recycled raw materials.

### **ACTIVITIES**

- Develop circular business models to increase reuse and recycling of excavated mass, building and demolition materials.
- Minimize transport and increase the reuse and recycling of mass by reviewing waste legislation and its application, to give greater consideration to how the mass will be used.
- Expand collaboration with authorities to increase the recycling of mass at the regional level.

### **CONDITIONS**

- Clarified rules for sorting waste to increase reuse and recycling of excavated material, building and demolition materials, not least concerning what should not be classified as waste.
- Customer requirements must be harmonized with the standards, and there must be tighter sorting requirements.



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