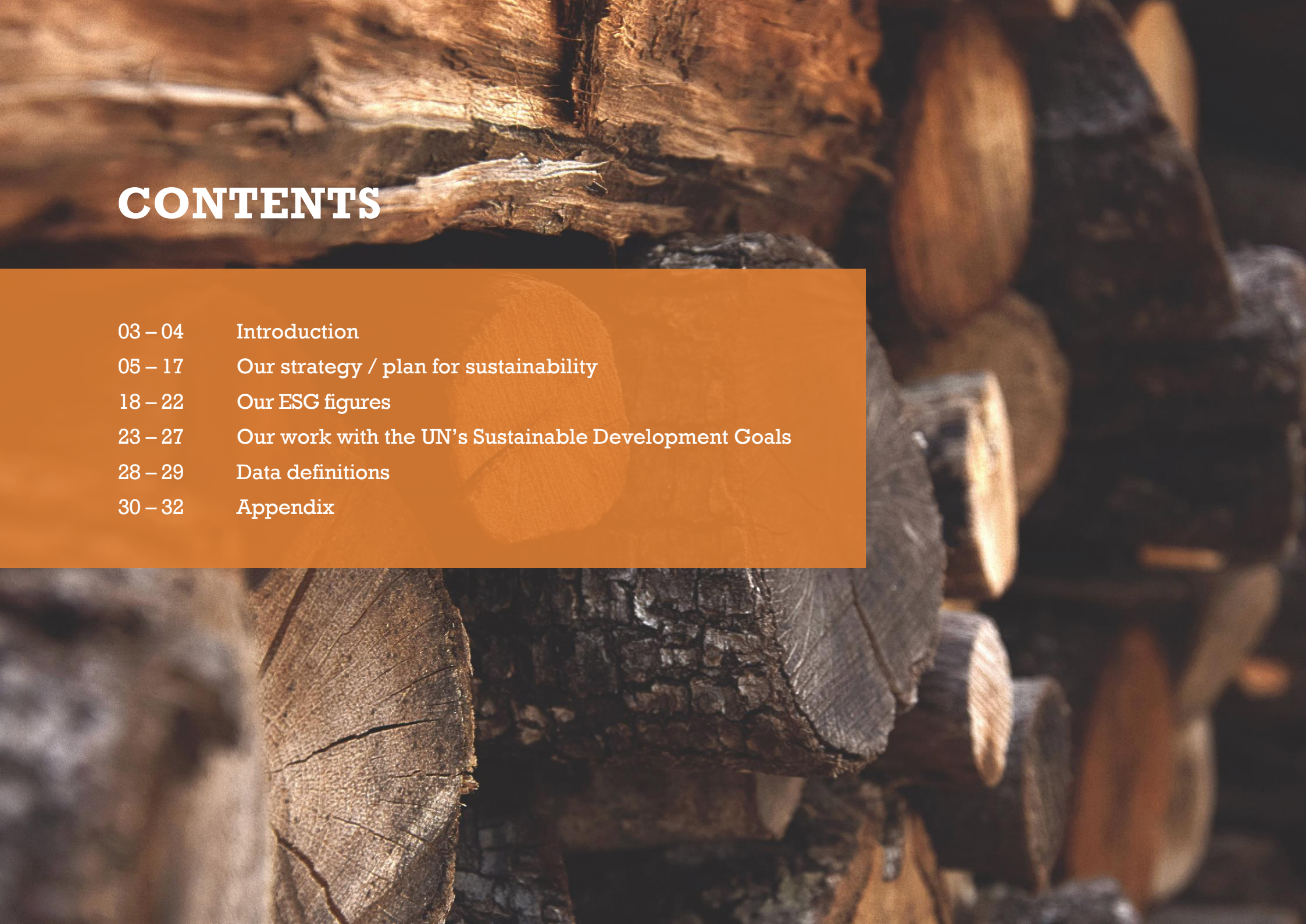
Sustainability report

2022/23

Superwood®

Louisenlund School, Germany.
Award winner of the prestigious BDA Prize Schleswig-Holstein 2023.



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Letter from the CEO

Dear reader

This is Superwood's first sustainability report. Prior to writing this sustainability report, I read some ESG reports from Danish companies, significantly more experienced in this area, more resourceful and larger than us. My admiration of those companies and their reports made me think, that maybe we were better off waiting a while with this one. After all we face no legal demand as we are a rather small company. Neither have we met any actual demands from customers or other stakeholders. So why not wait till we are better prepared, and the actual demands are coming?

We chose to only source certified wood back in 2007

But then again. When we made our first LCA/EPD twenty years ago it was not out of an actual demand. It was not the case when we introduced product specific EPDs for all standard profiles and colors either. Or when we chose to only source certified wood back in 2007. Or when we became Cradle to Cradle® Certified. Or when deciding to support socioeconomic projects – and develop new products out of our discarded wood. Or investing significantly in solar panels. Or…

We take care

We are Superwood because we were founded as a more sustainable and durable alternative back in 2000. We innovate and try harder. And we take care. We believe that wood is the best and most sustainable building material when treated right – our purpose! That is why we release this sustainability report.

Of course, we can improve – we have a plan for that and we also believe that our sustainability stance will lead to business opportunities as the need in the building sector is there and will increase.

Thanks to everyone that shares our values and buys and uses Superwood – and to our employees for believing and putting in a proper sustainability fight well above our weight class.

Hopefully, you will find our sustainability report a relevant and honest first go.

CEO, Ole Dalsgård Nielsen

We believe in wood

We were born out of the desire to create something that did not exist before: a technology and a facility capable of fully impregnating spruce. A durable and more sustainable alternative to traditional vacuum and pressure impregnation. Without heavy metals and with minimal use of impregnating agents. We remain the only ones in the world mastering this technology.

The World's Best Board, both beautiful and durable in every way

Grounded in reality and guided by common sense, we experiment and constantly push the standard for how durable, sustainable, and beautiful our product can become.

Impregnation and Processing of Boards

We have embarked on a lengthy journey to arrive at the point where we stand today. The journey has demanded time, effort, and a significant investment in a specialised technology, providing Superwood with a competitive edge. Presently, we are equipped to handle both the impregnation and processing of boards. Our fully automated processing line manages the board through every stage – from sorting and profiling to impregnation and painting – culminating in packaging and delivery to customers.

We value and protect the environment

We take care of each other and the environment, and we go the extra mile in selection, cutting, splitting, impregnation, profiling, X-ray scanning and sorting, painting, packaging, to sales and service. Only the best and most sustainable is good enough. In a project supported by the Danish Environmental Protection Agency, we collaborate with Danish Technological Institute to develop a fungicide-free impregnation agent. Although Superwood uses an absolute minimum of fungicide, the goal is to combine the unique impregnation process with a resistant modification of the wood without using fungicides.

The Company's Main Activities

The company's purpose is to conduct business in production and sales based on supercritical wood impregnation and wood processing. We specialise in producing sustainable facade solutions. Our products alone offer fully impregnated spruce of a local resource with greatly extended durability.

We invent

We take care of each other

We make an effort

1. Packaging on our products:

a. We recycle the plastic, we receive the raw wood logs in, internally in our production for packaging of our discarded wood.
b. The packaging and straps we buy is made from 98% recycled plastic.
c. Deliveries without packaging is now possible for the customer.

2. Buying paint in 1000-litre cages rather than 20-litre buckets for our colour high runners. Reduction in resources and improved employee welfare by avoiding heavy lifts.

3. Installation of biofuel, utilising all woodchips from our production.

4. Electrical trucks onsite.

5. Planning maintenance of biofuel facility when there is no production, to avoid use of fossil fuelled furnace.

6. Transportation fleet

a. We have a plan to phase out our one remaining fossil fuelled truck in 2024.
b. Process initiated to replace fossil fuelled cars at end of leasing contracts.

7. Installing flower planters with wildflower mix and insect hotels – of course made by the socially responsible enterprise Rât&Godt.

8. Digital marketing strategy: printing less material and expanding the use of QR codes.

9. Walk the talk: collaborating with other Cradle to Cradle® Certified suppliers whenever possible.

10. Installation of solar power cells on all possible rooftops.

11. Replacement to LED lighting throughout the site.

12. Centralised control and automation of lighting on/off schedules.

13. Sorting and selling our discarded wood as a new waste product.

14. Using wood waste as wooden batters rather than buying new material for the same purpose.

15. Reducing the amount of discarded wood by cutting boards into smaller lengths.

16. Sustainable purchasing – for example office supplies and merchandise for customers.

17. Research projects to develop more environmentally friendly impregnation agents.

18. Close collaboration with suppliers to completely avoid spillage and discarded wood in Superwood's production.

Impregnation facility, Superwood Hampen, Denmark.

Eating the elephant piece by piece

Little changes in our everyday life are key to reaching our overall sustainability strategy. Below we've summarised a few of our initiatives.

Sustainability Strategy

Our dream is that the more facade solutions we sell, the better terms we create for our planet. How do we realise that dream?

By continuing to challenge ourselves and our means of production. The Danish building industry accounts for 30% of our national carbon emissions which is why it is pivotal that the solutions we offer for construction have the lowest possible emissions, if not being net zero or net positive. Luckily, biobased materials are forgiving materials when it comes to carbon emissions; in fact, in the lifecycle phases raw material, transport and manufacturing (A1-A3), Superwood has a negative carbon footprint.

The challenge therefore lies with prolonging the lifespan for the facade solution; developing more environmentally friendly impregnating agents; and getting our production closer to net positive.

In 2021, we revised our sustainable strategy and established targets for 2030
We expect that these targets can change several times before 2030, just like technological development and sudden opportunities can clear the path for reaching a target faster or slower. Therefore, we will continue to revise the strategy annually. Knowing it will be a demand soon, we have begun the work with performing a materiality assessment, which will provide the guideline for, what to work with and which data points to report on in the following year. For example, we have yet to work with biodiversity, and being situated near one of the largest forest areas in Denmark, one could argue that this would be a material area to focus some attention. For an overview of our first humble attempt of a materiality assessment, see appendix 1.

The material pyramid for construction
Kg CO_2e/m^2

Where are we now?

Since we began working with the internationally recognised Cradle to Cradle® Products Programme, we have slowly but steady gotten better at documenting, what we do and developing on our strategy. For the first time, we can now report on some of our Scope 1 and Scope 2 emissions and still have a considerable amount of effort ahead of us regarding being able to report on Scope 3.

Suppliers	Superwood	User
Scope 3 Upstream Activities	Scope 1 & Scope 2	Scope 3 Downstream Activities

For Scope 3 upstream, we need to implement a quantity assessment in connection with the procurement of raw materials for our production. For some goods, we already have weight information, such as the wood we receive from our suppliers. Also, we need data on employee transportation and business trips. For Scope 1, we can report on relevant key figures, but acknowledge that we can always improve the quality of our data. For Scope 3 downstream, we also need an efficient system to be able to gather data on and transport of both raw materials and finished goods. As of next accounting year, we are ready to report on waste collected onsite in Hampen.

Where are we now?

We have been working with Environmental Product Declarations since 2002 and have over time gained experience in how our own production affects the environment, i.e., the product stage, including raw materials, transport, and manufacturing. By taking a closer look at the lifecycle stages in the EPD, we have tried to provide an overlook of where there is still work ahead of us, and where we are in fact close to target.

We are ready to work with more accurate transport data rather than estimates, cf. A4. We are currently in dialogue with our transportation suppliers regarding delivering data and are in fact awaiting our customers' response on how they wish to receive the data into their systems. One of our values is "we make an effort" – over the years, we have constructed assembly and maintenance guides which covers use, repair, and refurbishment, and thereby A5-B5. We have begun looking at how to affect C1, which is deconstruction. Our initiatives regarding Design for Disassembly and a take-back-system should hopefully be able to prolong the lifecycle of our product for as long as possible – today, we for example advise customers to use screws instead of nails because it will decrease the risk of cracks in the boards both during the first cycle, but also during deconstruction. As wood is an organic material and Superwood can be disposed of as "regular" wood for outdoor purposes in a municipal waste facility, the assumption is that this will ultimately be the disposal method for Superwood. What we can do is to prolong the life cycle for every individual facade solution for as long as possible. All these efforts will hopefully affect our final impact on the system boundaries.

Product stage			Assembly stage		Use stage							End of life stage				Benefits % loads beyond system boundary
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction demolition	Transport	Waste processing	Disposal	Reuse-recovery – Recycling-potential
										B6	B7		C2	C3	C4	

Source: EPD, Superwood 2022. The highlighted fields illustrate where we are in fact becoming better at accounting for our own footprint and guiding customers as to best handle Superwood as a product in the use stage and end of life stage.

Sustainability Milestones – The history between 1995 and now

When we commissioned EPDs in 2002, it was not because we foresaw that 20 years later it would be a demand in construction legislation. It was simply because we wanted to know what the environmental footprint of our product was. Over time, our production has developed, and we have been able to gather more and more processes in our production in Denmark, which has resulted in gradually improving carbon footprints over time.

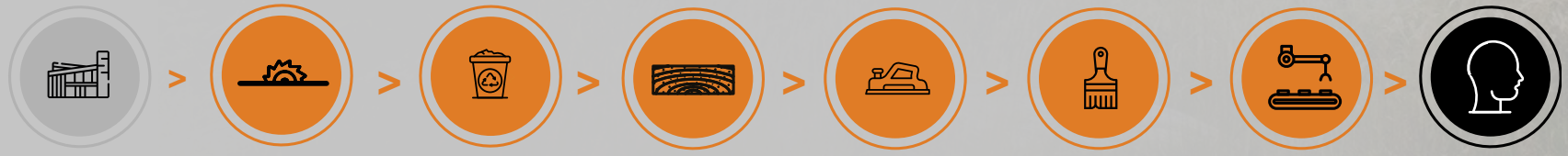
To mention a few highlights, we received the EU Environmental Award for sustainable processes due to our unique treatment back in 2003, have been working with PEFC-certified wood since 2007, and began drafting our first circular strategy in 2017.

2017: Installation of biofuel facility

Our biofuel facility utilises woodchips and provides energy for the production. The plant is supplied with wood shavings from planing and profiling, ensuring that our process heat does not rely on external sources.

2019: Streamlined production in Denmark

In 2019, we consolidated all our production operations in Denmark. This entailed substantial investments in our facility in Hampen, and the significant payoff was gaining complete control over all processes, hence ensuring the quality that we promise our customers. In the journey from sawmill to customer, we now operate from just three locations, thereby significantly minimising our transportation footprint.



Sustainability Milestones – The history between 1995 and now

2021: Cradle to Cradle® Certified

In 2021, we made the decision to pursue certification under the internationally recognised Cradle to Cradle® Certified Version 3.1 program. Cradle to Cradle® aims to challenge the entire paradigm of the disposable culture, inspiring a new approach to design, waste management, and consumption.

The certification represents a commitment to the ultimate goal: achieving Platinum in all categories. Every two years, our products will undergo recertification, requiring us to demonstrate progress. The certification process prompted a reevaluation of our approach to packaging and led to the exploration of innovative uses for our reclaimed boards. Our fully impregnated boards achieved a Gold rating, while our fully impregnated and painted boards attained Bronze. Simultaneously, our unpainted boards achieved Platinum rating in material health, while our painted boards received Bronze.

2021: Compensated Carbon Neutral Production

Building on the certification, we conducted a comprehensive assessment of the total carbon emissions for our production in 2020/21 and subsequently offset the remaining emissions. The ultimate goal is to become net positive and thereby avoid having to compensate at all.

Each year, we offset the amount of carbon emissions that we have not yet managed to eliminate from our production process, in 2023 equivalent to 307 tons of carbon on an annual basis. In the period 2020-2023, our carbon emissions are based on the Cradle to Cradle® system and is focused on emissions from our own production, whereas we ourselves have begun to calculate our carbon emissions in the current accounting year and are beginning to account for both Scope 1, scope 2 and Scope 3. We have utilised the United Nations' voluntary offset program, with a focus on investments in wind energy. Moving forward, we wish to invest in our sister company Stiesdal and Sustainable Forestry for compensation purposes, as it aligns closely with the core of our corporation CJ's businesses and livelihood. Until these purposes are approved by the Cradle to Cradle® Products Registry, we will continue to invest in the United Nations' voluntary offset program.

Børnehuset Langdalshuset, Denmark 2022. Expected to be DGNB certified in Platinum.

Sustainability Milestones
– The history between 1995 and now

2022: Embodied GHG emissions in the product must be included in overall sustainability strategy

As of 2021, we began actively working with the embodied GHG emissions of the product and communicating on this in our material. Among others, we report the embodied GHG emissions to our customers on sales documents and on the frontpage of our website. The numbers on our webpage follow sold amounts within the accounting year and are live-updated every 30 minutes. Hence, at the time of writing we have sold corresponding to 2,879,100 kilos of carbon being stored in facade solutions in 2023.

Louisenlund research and learning facility, Germany. Award winner of the prestigious BDA Prize Schleswig-Holstein 2023.

Our customers now receive an overview of the embodied GHG emissions of the product in their invoice. As wood is a natural carbons storage, and our process emits less carbon than the wood storages, the netto result is a carbon uptake in the facades for phase A1-A3.

Follow the CO_2 absorption in Superwood's wooden facades

CO_2 **2,879,100 kg**

The CO_2 absorption is calculated for wooden facades sold in our current financial year, 2023/2024.

Based on Superwood's EPDs, we show the CO_2 uptake for our profiles, on the life cycle phase A1-A3. The wood's natural CO_2 absorption remains in the facade for a longer time thanks to our patented technology.

Sustainability Milestones – The history between 1995 and now

2023: Installation of Solar Power plant and the work with SDG #7, Renewable energy

At the end of 2022, Superwood had solar panels installed in Hampen. We anticipate that this will cover approximately 50% of our annual energy consumption, equivalent to around 1 megawatt, and 422 tons of carbon emissions per year that we can now avoid. The impregnation process itself is highly energy-intensive, accounting for roughly 2 megawatt per year.

The solar panels are a substantial investment that we expect will pay off in the long run. Additionally, we can ensure that a larger portion of the energy we consume stems from renewable sources, on a par with our biofuel facility. The investment is closely connected with our work with Sustainable development Goal #7, and the subgoal 7.2., which involves supplying substantially increased amounts of renewable energy to the global energy supply.

"We are constantly learning from our solar panels
- our production process might adapt depending on
when we can generate the most power,
Ole Dalsgård Nielsen, CEO".

Superwood 2023

2023: Cradle to Cradle® Recertification

As of November 2023, we received our new certificates according to Version 4.0 of the internationally recognized Cradle to Cradle® Certified Products Standard. Following the recent recertification, our fully impregnated and surface-treated products have been upgraded to Silver level, due to the implementation of new, optimized surface treatments. The fully impregnated products maintain their Gold-level status; however, Platinum could not be maintained in the Material Health category due to stricter requirements in V.4.0. The requirements at each level have significantly increased, making it more challenging to progress to the next tier. Therefore, we are more than satisfied with the outcome. Annette Hastrup, CEO of our assessor Vugge til Vugge ApS further states:

"These are truly impressive results for a relatively small company. Superwood is committed and has made a great effort to provide the documentation that is required to meet the new and stricter requirements in Version 4.0 of the C2C Certified Standard. Superwood has managed to retain or advance the certification results. Congratulations!"

Sustainability Milestones – going forward

2024: 50% Renewable Energy target

In 2024, we aim to decrease our emissions from non-renewable energy sources by at least 50% compared to 2022/23. We will partly have accomplished this with the installation of the solar cells which are expected to cover 50% of our consumption. Additionally, we will implement energy optimisation measures in our production processes to reduce the energy requirement per cubic meter of Superwood produced. Through examination of our operations and identification of our primary sources of emissions, it is evident that these areas are pivotal for Superwood. Additionally, we will introduce electric vehicles wherever feasible and applicable, aiming to reduce emissions stemming from non-renewable energy sources.

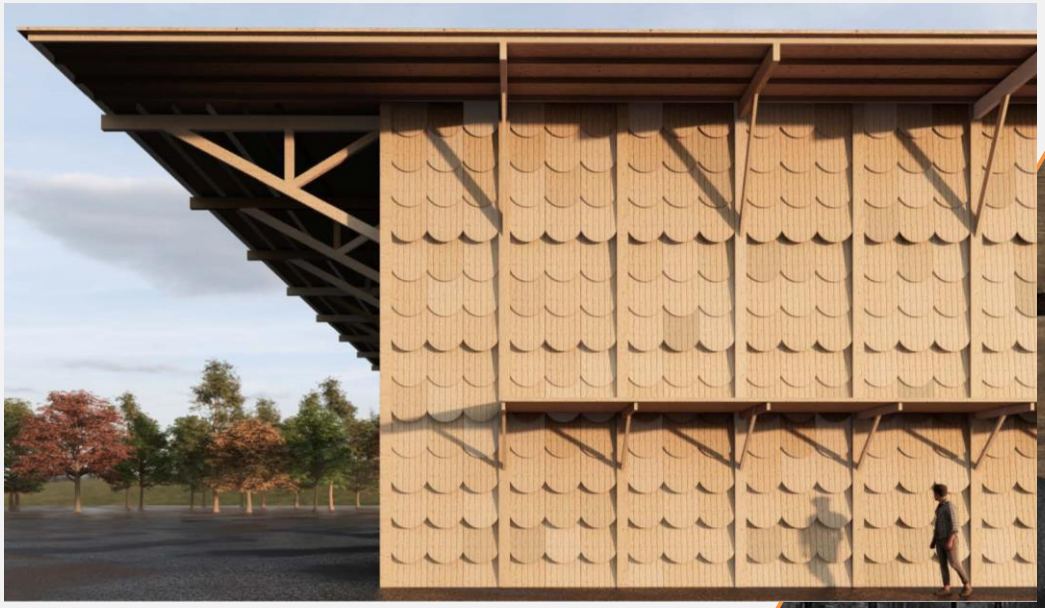
Year	Carbon emissions	Fully impregnated m^3
2018/19	487	14,246
2019/20	487	9,463
2020/21	466	16,572
2021/22	307	17,213
2022/23	307	9,750

*The CO_2e is calculated based on Vugge til Vugge's calculations in connection with our Cradle to Cradle® certification and recertification. The accounting is performed over a 2-year period, which is why we have had to divide the assessments to determine the results on a yearly basis. The assessment's focus on Superwood's own footprint in production and therefore do not account for other indicators in Scope 3 besides water. It is evident that Vugge til Vugge's accounting method embraces more factors than we have been able to account for in our own reporting on Scope 1, 2 and 3.

Sustainability Milestones – going forward

2024: Design for Disassembly

In collaboration with SWECO, we are developing modules for installation on facades. The purpose is to create an outlet for utilising shorter lengths of cladding that would otherwise have been discarded in a design for disassembly. This way, we can upgrade our second-grade material into a premium product. The benefits include less spillage; easier installation; maintenance; service, and the possibility of involving social enterprises in the construction work itself. Currently, we are running a pilot project in partnership with STARK, where potentially 4,200 square meters will be clad with the solution.



SWECO Architects

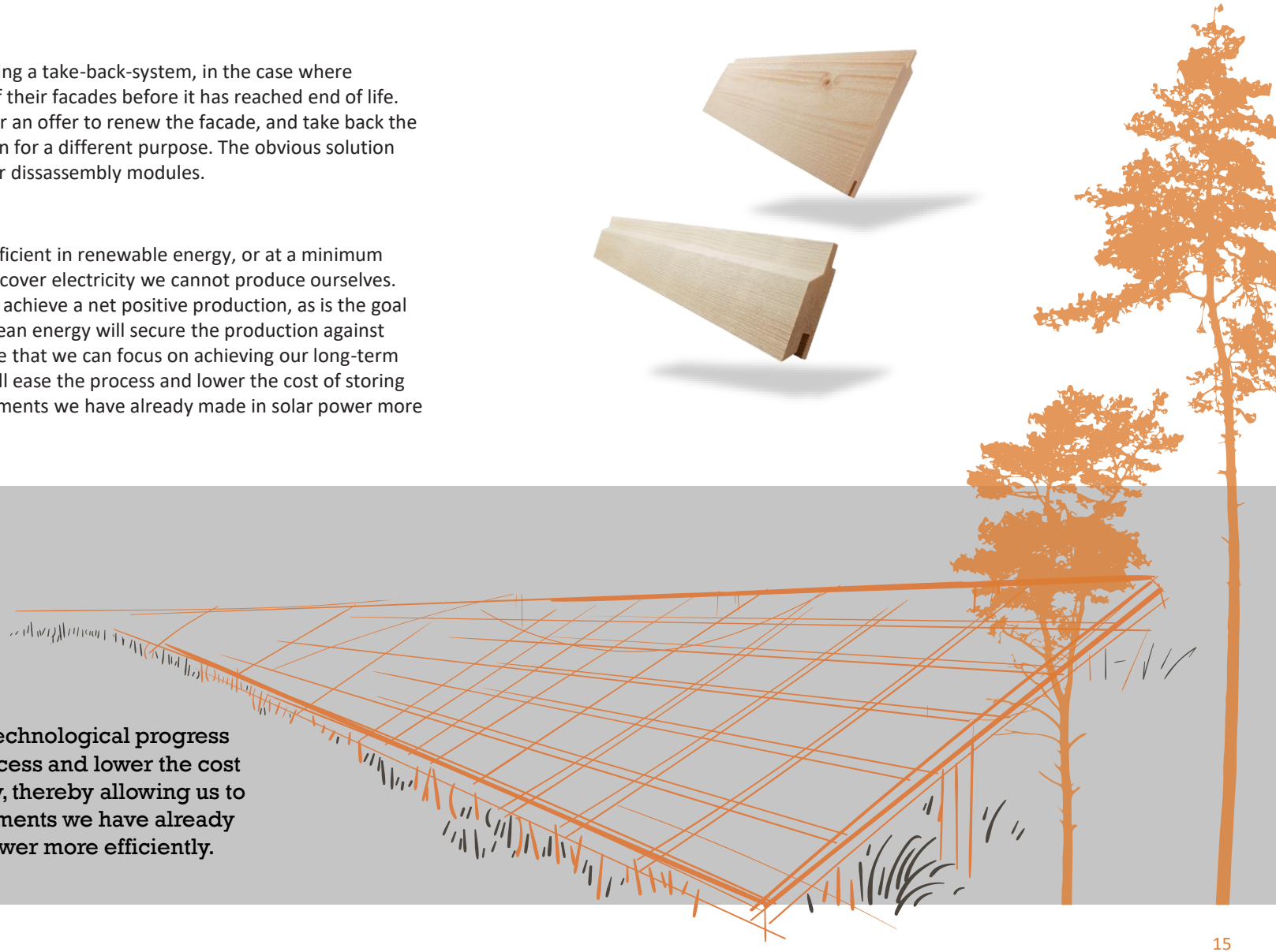
Sustainability Milestones – going forward

2025: Take-back-system

We are currently working with the idea of creating a take-back-system, in the case where customers for example want to change a part of their facades before it has reached end of life. In these cases, we would introduce a discount or an offer to renew the facade, and take back the existing panels, service them and use them again for a different purpose. The obvious solution would be to utilise the panels into our design for dissassembly modules.

2027: 100% renewable energy target

Specifically, by 2027, Superwood will be self-sufficient in renewable energy, or at a minimum have long-term power purchase agreements to cover electricity we cannot produce ourselves. Renewable energy is material for Superwood to achieve a net positive production, as is the goal for 2030. Also, being able to provide our own clean energy will secure the production against conjunctures in energy prizing, which will ensure that we can focus on achieving our long-term goals. We expect that technological progress will ease the process and lower the cost of storing energy, thereby allowing us to utilise the investments we have already made in solar power more efficiently.



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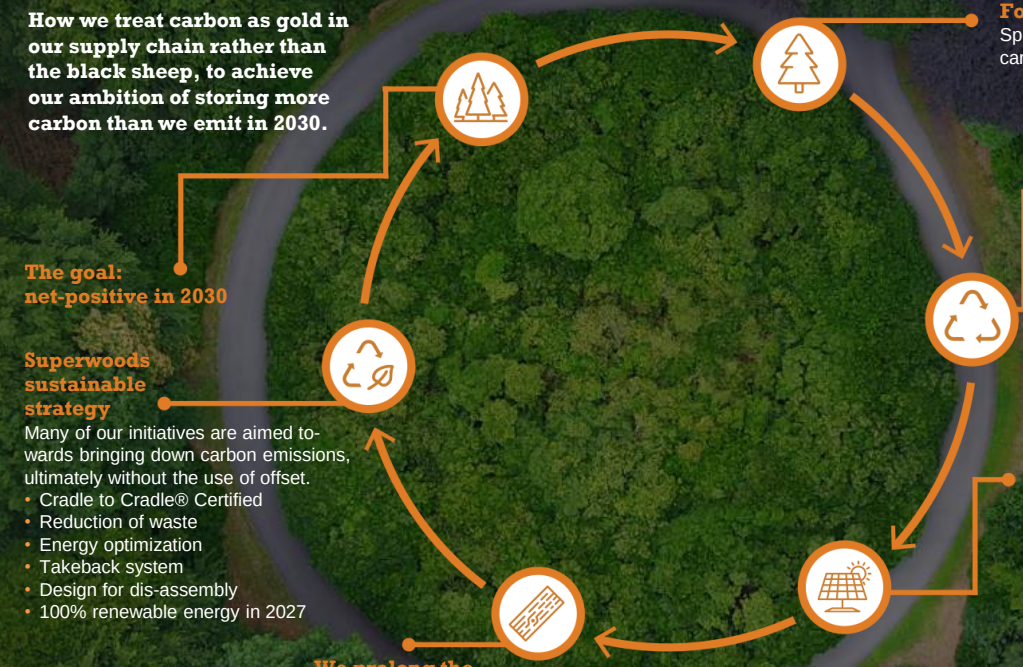
Sustainability Milestones – going forward

2030: Net positive
You can comply, compete, and lead. We want to lead – therefore, we have set an ambitious goal to become net positive in 2030 in Scope 1.

This means that we will absorb more carbon from the atmosphere than we emit. If we reach this target, Superwood would be closer to becoming a truly sustainable business, existing and thriving economically not with a cost for the environment but by supporting the environment. We do not yet have a specific pathway on how to get there. Our targets on renewable energy in 2024 and 2027 would help closing in on having a carbon neutral production. To reach over the net zero cliff there are several solutions. One could be to include other types of wood than Superwood in our take-back-program and thereby keep more facade panels and naturally stored carbon in loop than Superwood produces. Another, and perhaps final solution, could be to introduce carbon storage as part of our sales concept.

The journey towards circularity.

How we treat carbon as gold in our supply chain rather than the black sheep, to achieve our ambition of storing more carbon than we emit in 2030.



The goal: net-positive in 2030

Superwoods sustainable strategy
Many of our initiatives are aimed towards bringing down carbon emissions, ultimately without the use of offset.
- Cradle to Cradle® Certified
- Reduction of waste
- Energy optimization
- Takeback system
- Design for dis-assembly
- 100% renewable energy in 2027

We prolong the durability of spruce
By fully impregnating spruce we prolong the durability of the wood significantly. Meanwhilewe ensure that the carbon which is naturally storage in the wood, is stored for a longer amount of time.

Forest - a natural carbon storage
Spruce grows in the forests and storages carbon in its entire lifespan.

Waste turns into Superwood's gold
Carbon from industrial processes like brewing is key in Superwoods patented technology
- recycled carbon is used as agent to fully impregnate spruce, which is otherwise not fully impregnable.

Carbon-neutral production
The impregnation takes place in a carbon-neutral production. It is neutral because we have gone through a line of energy optimization processes, have installed solar power panels, and are utilizing our wooden shavings as source of energy. The remaining carbon emissions that we have not yet eliminated are compensated via offset.

Sustainability Milestones – going forward

2050 scenario: 75% reduction in carbon emissions for Scope 3

In Superwood, we believe and know that we must make changes in the industry today, in order to secure our existence in 30 years. Therefore, many of our goals and targets are concerned of the near future. However, as part of our Cradle to Cradle® journey, it is a requirement that we set long-term goals as well.

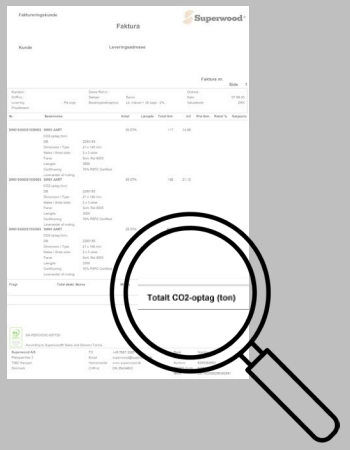
Also, it harmonises with our ambition to lead the sustainability agenda. Therefore, through close collaboration with our suppliers, we will seek to minimise our Scope 3 emissions by 75% in 2050. Specifically, this would require developing/seeking out more environmentally friendly solutions to transportation, paint, and “recipes” for the impregnation agent. It could also involve introducing new business models such as leasing facade solutions, perhaps in connection with a running take-back-solution and our design for disassembly shingles. A first step would be to get the complete overview of our Scope 3 emissions, which is still work in progress.

Fantoftparken, Norway. The construction was classified as Bergen's greenest office building in November 2021, achieving the highest level of BREEAM certification.

ESG Key Performance Indicators

Environment - data	Unit	2022/23	Comment
Scope 1 – direct emissions	tCO_2e	111.9	Fuel vehicles and trucks, as well as heating oil
Scope 2 – indirect emissions	tCO_2e	156.9	Electricity
Scope 3 – other indirect emissions	tCO_2e	2.5	Only water, currently no other Scope 3 values
Total amount of CO_2e-emissions	tCO_2e	271.4	
Renewable energy	%	83%	
Water consumption	m^3	277	
Renewable Energy Certificates	tCO_2e	2,100	UNFCCC-certificate nr. IN-5-282708510-2—2-0-9402 and IN-5-297463122-2-2-0-5439
CO_2e related to larger investments	tCO_2e	18.9	Installation of a 1 MWh solar power plant by the end of 2022
Social - data	**Unit**	**2022/23**	**Comment**
FTE	FTE	29	Parent company (Group 31) - average number of employees
Sick leave	%	2.7%	
Workplace Accidents	number	2	Cases are closed. Absence due to accidents amounts to 3 days in total
Employee turnover	%	30%	
Gender diversity in the organisation	%	13%	
Gender diversity in the direction	%	0% / 100%	Women/men
Gender diversity in management	%	29%	
Diversity policy	Yes/No	Yes	
Health policy	Yes/No	Yes	
Child -and forced labour policy	Yes/No	Yes	
Human rights Policy	Yes/No	Yes	
Governance - data	**Unit**	**2022/23**	**Comment**
Gender diversity in the board	%	0% / 100%	Women/men
Presence at board meetings	%	100	
Whistleblowing system	Yes/No	Yes	Established in may 2023
Anti-corruption policy	Yes/No	Yes	
GDPR Policy	Yes/No	Yes	
Investments in climate and environment	Yes/No	Yes	1 Mwh solar power cells was installed in december 2022
Incentive-pay	Yes/No	No	
Collective agreements	Yes/No	Yes	50%
Working with the SDGs, SBTi's or COP	Yes/No	Yes	The SDGs

The implementation of ESG metrics in the annual reports of Danish companies in the coming years aligns with the work Superwood has undertaken over the years and is consistent with our sustainability strategy and desire for transparency.



Our customers now receive an overview of the embodied GHG emissions of the product in their invoice. As wood is a natural carbons storage, and our process emits less carbon than the wood storages, the netto result is a carbon uptake in the facades for phase A1-A3.

The key figures have been prepared in accordance with the current guidelines on the subject provided by the Danish Business Authority and FSR. For an overview of our politics, code of conducts and certificates see page 32.

ESG

Scope 1, direct emissions

Since 2019, we have had two electrical trucks onsite in Hampen and a biofuel facility since 2017 which provide energy to our production using our wooden saw chips waste. Going through our onsite energy use, it has become apparent that we use quite a lot of fossil fuel, when the expectation was close to nothing.

The two main sources are one diesel truck and a furnace that we keep as a back-up. Hence, we have set specific targets to avoid the use of the backup furnace and schedule maintenance of the bio furnace instead. Also, we are looking into replacing the remaining diesel-truck into a heavier-duty forklift.

We continue our efforts in energy optimisation onsite, in collaboration with the company Intego. Among other measures, we have optimised our recipe, reducing approximately 10 minutes from our energy-intensive impregnation process. This means that per package, we have reduced energy consumption by 4.2%.

Close-up of the board, 2022

Scope 2 – indirect emissions from energy

In 2022, we had green electricity certificates assuring that the electricity used in Superwood would be matched by an equivalent production from renewable energy sources. Even though it is better than nothing, this type of certificate does not contribute to creating a bigger supply of renewable energy sources globally. As a part of our strategy, we therefore chose to install solar power cells on all possible roof surfaces at Superwood. Both to contribute to the global energy mix, cf. Sustainable Development Goal #7 and subgoal 7.2, but also to create a stable energy source for our production in the aftermath of the energy crisis in 2022.

Scope 3 – indirect emissions from our value chain

As of 2023, we have only been able to report on Water within Scope 3 emissions. The target for the next annual report will therefore be to get a more comprehensive overview of our emissions in Scope 3. We consider ourselves to be a dry factory. The only water used in our production is to clean the painting facility between colours. We even have permission to discharge the water into the sewage system. However, the impregnation process does generate “produced water”, which is contaminated with our receipt used to protect the wood against rot and wood-decaying fungus. The produced water is collected in reused painting bins and is picked up by Motas, where it is incinerated at a facility with environmental approval to receive this type of waste.

Year	Amount (litres)
2019	10,920
2020	9,860
2021	14,300
2022	12,260
2023	9,980

Overview of produced amounts of water in our impregnation facility in the period 2019-2023.

ESG

Our local social data

29

Number of full-time employees

10%

Number of flex workers, §56 and job training

10%

Number of part-time employees

21%

Further education

2

Internal workshops

4

School visits in the production

5

Final assignments, bachelor projects etc. involving Superwood

School visit, VIA UNIVERSITY COLLEGE Aarhus, fall 2022.

ESG

Our local social data

In 2023, we commissioned a Human Rights Risk Assessment by the consulting firm Position Green. The assessment conducted by Position Green evaluated our exposure to human rights risks and our management procedures for addressing the identified risks. Our human rights strategy focuses on our own activities in Hampen as well as our activities in our supply chain. As Position Green primarily recommended, addressing gaps in our own activities is our primary focus. However, in 2023 and 2024, we will also formalise our ESG work with our suppliers, for example, through the development of an ESG screening. This will include formalising our ongoing efforts to improve visibility and assess risks surrounding tier 1 and 2 in our supply chain.

Employee welfare

Besides workplace assessments, we have not previously conducted employee satisfaction surveys in Superwood. As part of our Cradle to Cradle® recertification in 2023, our sustainable strategy and practices underwent third-party auditing. In this context, it was recommended that we conduct employee satisfaction surveys to enhance our efforts with employee welfare. Therefore, our intention is to carry out such surveys in 2024.

Gender diversity

Being a supplier for the construction industry, we are aware of the challenges with a general overrepresentation of men. In 2023 we held an internal workshop in Hampen with a focus on gender diversity in the construction industry and discussed the challenges and opportunities for a company such as ours. The production is designed so that both women and men can physically cover all positions. We have no gender politics in relation to new hires, but we are aware to for example de-scribe job announcements in a gender-neutral manner.

Our global social data

In the Human Rights Risk Assessment by Position Green, we scored "low" risk on all parameters related to human rights due to our existing processes and procedures to mitigate human rights risks. In this context, it was recommended that we develop specific policies and management strategies to document our work with securing basic human rights in our value chain. For an overview of the policies, strategy and management strategy see page 32. It will be a focus area going in to 2024.

Supergood: Dyren, Public Park in Copenhagen, 2022.

ESG

The composition of the management

Superwood has since its beginning had Ole Dalsgaard Nielsen as CEO. He has followed the company in adversity and prosperity, as has the board since 2013, where CJ Holding became a part of the ownership. We are aware of the lack of diversity in the board and will keep diversity in mind if a time comes where recruitment for the board is necessary. Regarding gender diversity in the management, representation of women is twice as high as the average in the industry which is around 10%. Of course, the number could still be higher, which we will also keep in mind regarding recruitment.

Working with our supply chain

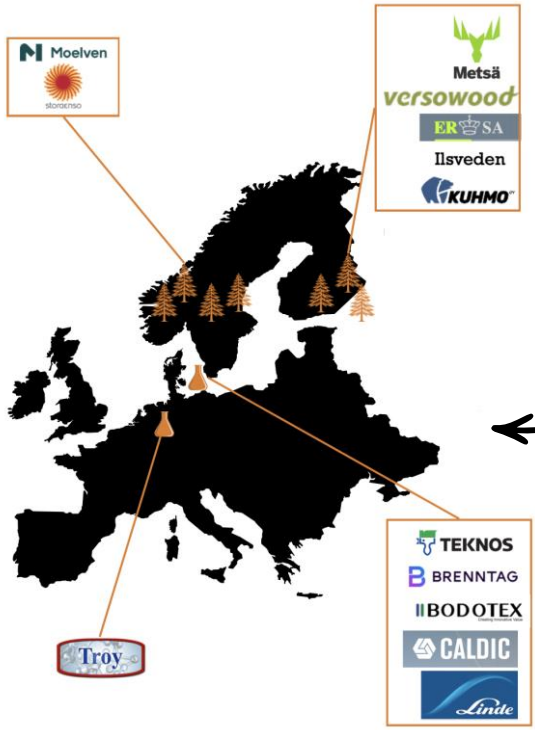
Analysing data

It may seem banal, but we do a lot of groundwork analysing the individual packages of wood we purchase in terms of for example moisture and quality, to ensure a minimum of spillage in the production. All the data we receive in our production is reported back to our suppliers monthly, in order to reduce spillage and control moisture content and improve the quality we introduce into our system.

Politics, Code of Conducts, and whistleblower system

Our work with environmental and social concerns is reflected in our overall strategy; our policies, which is written out as an independent Environmental Policy, and in our Code of Conducts where social concerns are addressed. We have an internal and external Code of Conduct which approaches respectively our colleagues and our suppliers.

When we engage in new collaborations, it is a clear target to have our suppliers sign our external code of conduct. Currently, we are attempting to grasp the full overview of our suppliers and will in 2023/24 run a project to handle our supply chain more efficiently. For now, we have segmented our suppliers in two categories; A) material to the product (which is the categories we work with in the Cradle to Cradle® Certified system), and B) material to Superwood as a production. In first round, our focus will be on the A suppliers, which is the group the targets below are based upon.



The map illustrates an overview of our most material suppliers, limited to, for now, the ones that deliver products that are directly used in our product.

16.6% have received our external COC

Target in 2024: 100%

8.3% have signed our external COC

Target in 2024: 30%

The risk analysis within Human Rights and Environmental concerns by Position Green concluded that no high-risk issues were identified within our industry, nor with the countries our suppliers operate in. Of course, there were areas with room for improvement. Among others, it was recommended that we establish a whistleblower system – it is also a demand as part of our Cradle to Cradle® journey. **Therefore, we have established a whistleblower system and policy in 2023.**

ESG

Working with the Sustainable Development Goals

Each year, we select 4 Sustainable Development Goals – 2 where we excel, and 2 where there is room for improvement. Some goals may be a focal point over several years. This way, we actively contribute to making a difference. We have identified and are working towards specific targets to be as specific as possible in how we contribute to the 2030 agenda.

In 2022, we focused on Sustainable Development Goals #8, #12, #13, and #15. In 2023, we consider our contribution to Sustainable Development Goal #13 as completed and have begun to work with #7 instead.

UN's global goals 2023

#7.2
Before 2030, the renewable energy part in the global energy mix must increase significantly.

#8.4
Decouple economic growth from environmental degradation.

#8.5
Full employment and decent work for all, regardless of gender, age, and disability.

#12.5
Reduce, reuse, recycle.

#12.8
Promote knowledge about sustainable development through collaboration with educational institutions.

#13.3
Build climate adaptation capacity through procurement from sustainable forests.

#15.2
Promote sustainable forest management.

ESG

#7:

The work with Sustainable Development Goal 7 aligns well with the fact that we have installed solar panels on our roofs here in Hampen. We expect them to cover around 50% of our energy consumption from 2023. Furthermore, we are exploring the implementation of measuring units in the areas of our production where it makes the most sense, so that we can use our energy intelligently and in the right ways.

7.2.

Produced renewable energy: we look forward to delivering the stats in 2023/24!
Carbon emissions avoided: we look forward to delivering the stats in 2023/24!

#8

Sustainable Development Goal #8 revolves around creating local jobs in Hampen and establishing a positive local impact. Currently, all activity is conducted through our discarded wood. Additionally, we have established a discount tier system for the sale of our discarded wood with an environmental and socioeconomic incentive structure, which rewards projects with higher discounts based on how "green" or "social" the project is.

8.4.

Number of projects that have either gotten a social economic or environmental discount, hence promoting either green or social economic projects along with using our discarded wood for the project.
Environmental Discount: **7**
Socioeconomic Discount: **2**

8.5.

Number of individuals involved directly in the project "Verdens Næstbedste Bræt": **3**
Communities involved: **2**
Involved employees: **4**
Partnerships forged to reduce waste and to engage in meaningful and sustainable practices: **5**
Number of at-risk youths working with the wood in The Municipality of Silkeborg: **23**

ESG

In relation to goodwill projects, known as Supergood, we favour locally based projects, which also fits with our sustainable strategy and work with the Sustainable Development Goals. One of our close collaborations that started trough Supergood is with Wood by Human Resources. They work with at-risk youth in Silkeborg and are geographically closely situated to Hampen. 23 young men and women are currently working with our products. 200 young people have been through the program Woods by Human Resources since its beginning.

Supergood: CHART Pavilion, exhibition at Charlottenburg in the summer 2022. Created by three young architect scholars using the World's Next Best Board.

Credit: Joakim Züger 2022

Wooden planters made by Woods by Human Resources

#12:
Sustainable Development Goal 12 for us revolves around recycling resources that would otherwise go to waste – through our project, the World's Second-Best Board, and through collaboration with educational institutions to attain more sustainable knowledge within our production and anchor this knowledge in the local communities.

Around 7% of the wood we buy in is rejected after impregnation because it does not meet our strict quality requirements for the World's Best Board. Every year it amounts to around 200.000 running metres of profiled boards. We have sold and donated 427,7 cubic metres of discarded wood since the project began in 2021.

12.5.
New waste sold: **102,907 metres**
New waste sponsored through Supergood: **54,700 metres**

12.8.
School visits in the production: **4**
Final assignments, bachelor projects etc. involving Superwood: **5**
Newly educated architect scholars using Superwood for a project: **3**
Schools working with the Worlds Second-best board: **2**
Research projects with other companies & universities: **3**

We are currently running two research projects with, among others, Danish Technological Institute. We have developed two alternatives to the existing impregnation agent, SC200, that are free from azoles. Both applications have been sent to the Danish Environmental Agency and are pending approval.

Shelter made by Woods by Human Resources

ESG

#13:
For Sustainable Development Goal 13, we have chosen to focus on target 13.3, which is about strengthening climate resilience in everything we do. We achieve this through the procurement of PEFC-certified wood, which promotes sustainable forestry through third-party verification. This entails planting more trees than are felled, while also considering biodiversity, indigenous people, and local communities.

13.3.
Bought m^3 of PEFC-certified wood: **10,961.**

#15:
Regarding Sustainable Development Goal 15, our focus is on promoting sustainable forest management. In the long term, we aim to contribute to this by establishing a significant amount of forest. Currently, our focus has been on Finland, where, together with our largest supplier, we planted 1 hectare of forest in 2022.

15.2.
Number of packages of wood sold without packaging, where we will plant at tree instead: We look forward to delivering the stats in 2023/24!

Positive Impact Project
One of our positive impact projects revolves around establishing new forest areas on land previously used for agricultural purposes. The scope of the project is to strengthen local water reserves and soil close to either our site in Hampen, Denmark, or with our most material suppliers.

In the future, we will continue to involve employees that are engaged with our suppliers to strengthen corporation and understanding of the resource that is our common ground – sustainable forestry.

ESG

Forest project 2022 with Versowood

- 1 hectare of agroforestry converted into forest
- Trees planted: 4,000
- Carbon stored in the trees over their lifespan
- Number of involved employees: 3
- Positive impacts: soil improvement, water protection & biodiversity benefits

1 hectare of agricultural land was converted to forest near our largest supplier's operation, which was planted with school kids and other customers of our supplier. The idea was to create knowledge about agroforestry, biodiversity, and the upsides of forest such as protection of water reserves.

Our CEO and Supply Chain Manager attended physically in the project, and our Sustainability Manager orchestrated it together with the supplier.

Forest project 2024 with…

We currently wish to engage the local water suppliers and together establish forest on top of the local ground water reserves. Hampen is situated near the local water supply, thereby protecting water reserves from the use of fertilisers in relation to agricultural farming. We would then involve employees in the project in Denmark and make an employee arrangement around the project to plant the trees.

Potential

- 1 hectare of agroforestry converted into forest
- Trees planted: 4,000
- Carbon stored in the trees over their lifespan
- Number of employees involved: 29
- Positive impacts: soil improvement, water protection & biodiversity benefits

Some of these initiatives will continue in 2023/24. To continuously challenge ourselves and continue making positive contributions to sustainable development, we have in 2023 begun working with Sustainable Development Goal #7.

Data foundation and organizational boundaries

CO_2e Emission Factors

CO_2e emissions are calculated based on the GHG Protocol and specific calculations provided by our suppliers, and the calculations are aligned with the guidelines provided by the Danish Business Authority for calculating CO_2e.

Accounting Practices

In calculating CO_2e, the emissions factors provided by utility companies and factors from recognized databases have been utilized, in accordance with the guidelines from the Danish Business Authority. The most recent publicly disclosed emissions factors at the time of preparing the carbon footprint are employed. In cases where an emissions factor is unknown at the time of the report, the previous year's factor is used, and an adjustment to the carbon footprint is made upon the publication of the new emissions factor, following the guidance outlined in the GHG Protocol.

All emissions and figures are presented gross, without adjustments for CO_2e compensation. ESG metrics are compiled and calculated in accordance with the guidelines on ESG taxonomy from the Danish Business Authority and FSR's guidance on ESG reporting as of January 2022. Some ESG metrics from the catalog are not included in this ESG report due to either lack of relevance or data. The reporting year (June 1, 2022, to May 31, 2023) serves as the base year for future reporting.

Consumption Data

Consumption data derives from supplier data and measurement units. Other data is extracted from Superwood’s systems for HR and quality assurance.

Organizational Boundaries
This sustainability report is an account of Superwood A/S, CVR No. 26434602

Scope 2 account of energy consumption applies for the address:
Palsgårdvej 3, 7362 Hampen

Operational Control

The organizational boundary of this report is determined based on the operational control method

Data definitions and explanations

Scope 1
Fuelled vehicles and trucks, as well as heating oil. Emission factors for diesel and gasoline has been utilized.

Scope 2
Electricity data are based on data provided by suppliers and measurement units.

Scope 3
Only water is accounted for in scope 3. Wastewater data is based on data provided by our supplier and measurement units.

Data for Climate Accounting

Calculation data for ESG key performance indicators

Environment – Data

Energy Consumption:
∑ (quantity of fuel type (t) * energy factor per fuel type) per fuel type + (consumed electricity (including renewable energy) (MWh) * 3.6) + (consumed district heating/district cooling including renewable sources for heating/ cooling (GJ))

Renewable Energy Share:
(Renewable energy/energy consumption) * 100

Wastewater:
Sum of all gross water consumption * energy factor

Social – Social Data

Full-time Workforce =
FTEs + Temporary Labor

Gender Diversity =
((Female FTEs + female temporary workers) / (full-time workforce)) * 100

Gender Diversity for Other Management Levels =
((female managers) / (all managers)) * 100

Gender Pay Gap =
Salary statistics are compiled according to the guidance from Statistics Denmark for reporting gender pay gaps

Employee Turnover Rate =
((Voluntary + involuntary departing FTEs) / FTEs) * 100

Sickness Absence =
(Number of sick days for all in-house FTEs during the period) / (total FTEs)

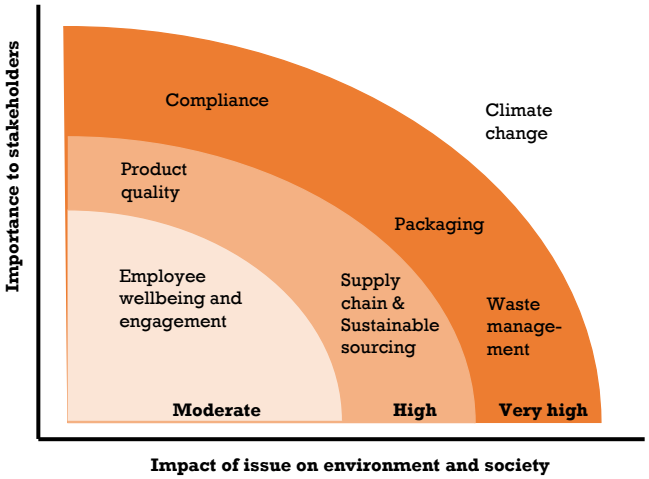
Workplace Accidents:
Number of recorded accidents

Employee Training:
Number of registered training hours

Appendix

Appendix 1: Materiality assessment

The following materiality assessment is based on the Risk Assessment on social and environmental concerns by Position Green combined with what the Management in Superwood considers risks and opportunities in the foreseeable future. Going forward, we will adhere to the method defined in the CSRD-standard.



Based on the materiality assessment model, we have elaborated on risks and opportunities for Superwood in the foreseeable future.

Risk	Description	Risk type	Impact Potential	Time Horizon	Risk Mitigating measures
Compliance	Compliance with certificates, ESRS, CSRD, EUTR, waste management and chemical law and regulation	Compliance	High	Short (0-5 years)	Ensure compliance at all times through investment in capacity and employees
Unpredictable access to raw materials and energy	Physical climate risk in the form of increasing droughts, storm and extreme precipitation levels in the Nordic region. The market balance in the entire value chain is disturbed as a result of supply side shock in the raw materials market. Increased risk of forest fires in the Nordic region. Unpredictable outbreaks of pests and fungus.	Climate change	Low	Short	Centralised and competent purchasing organisation with presence in a large geographical area. Instal-lation of solar power plant onsite to produce our own power on top of our bio-fuel-furnace which already uses our wood-chipwaste as energy source.
Breach of Environmental & Human Rights Policy internally and in supply chain	Risk of breach on Human Rights Policy, Environmental law and regulation, and behaviour in gene-ral that could damage Superwood's reputation	Supply chain & Sustainable sourcing	High	Short	Close collaboration with suppliers and annual visits to ensure mutual compli-ance of guidelines
Packaging	The use of packaging is a necessing to deliver and protect a quality product during transportation. The material is currently made of recycled plastic with a relatively high carbon footprint. EU's exten-ded producer responsibility sets additional demands to Superwood in this regard in 2024.	Packaging	High	Medium (5-10 years)	Continue to search the market for the most sustainable alternatives. Ensuring compliance with new regulation in 2024. Awaiting development of new materials and suffi-cient amounts of it to match pricing and demand.
Waste handling of the product	Superwood is disposed as outdoor wood on recycling facilities at end-of-use – and is therefore incinerated for bioenergy.	Waste management	High	Short	Prolong the circuit as long as possible through take-back-system and modular concepts to use both dis-carded wood in production and at end-of-life stage most efficiently
Healthy work-environment	A consecuence of bad reputation would be lower succes with recruitment and retention of employees.	Employee satisfaction and recruitement	High	Short	Ensure that Superwood, also in the future, is an attractive workplace. Satisfaction surveys, investment in marketing and execution of sustain-able strategy.
Supply of raw material	Climate change can narrow the area from which we source our materials, thereby lowering the supply	Climate change	Low	Long	Continuously search the market for new business partners who can deliver both in terms of quality and technology.

Appendix

Opportunity	Description	Opportunity type	Impact Potential	Time Horizon	Financial Impact
Compliance increased energy efficiency in own production	Technology developments make it possible to increase the utilisation of resources in production processes. This applies to both biofuel energy and renewable energy. When we report on Scope 1, 2 and 3, we also want to improve our results.	Compliance	High	Short (0-5 years)	Lower production costs. Income from sale of surplus heat and woodchips.
New regulations and improved infrastructure enable increasingly sustainable transport	Increasing demand toward more sustainable transportation of goods require collaboration with suppliers that can both deliver data on existing transportation methods, and also offer sustainable means of transportation in the future	Supply chain & sustainable sourcing	Low	Short	Increased costs linked to transportation until the market for sustainable transportation reaches demand
Increased demand for wood-based products and materials	Stricter requirements and expectations for more sustainable construction. Increased demand for raw materials that replace fossil fuels (e.g. fuel, plastics etc.).	Compliance	Low	Short	Expected growth in revenue due to increased demand on biobased products for the construction industry.
Rising temperatures	A more moist and warmer climate requires more robust materials for the construction industry. A warmer climate improves growth conditions for spruce, which is the only material used for Superwood's technology.	Climate changes	High	Long (10-30 years)	A rising supply of Scandinavian spruce. Superwood can continue to offer supercritical impregnated spruce, which upgrades the durability significantly meanwhile utilising a resource which is abundant in the Scandinavian nature.
Restrictions on imported wood	War and political unrest in relation to Ukraine has due to ban of Russian Sibirian larch left an open position in the market for high-end very durable wood in countries such as Germany.	Supply chain & Sustainable sourcing	Low	Short	Less competition from foreign companies. Increased market share.

Overview of politics, partnerships, and certificates

	Name	Description	Read more on page	Link
Policies and COCs	Environmental Policy	A summary of our environmental policies to ensure that our company and our suppliers operate in accordance with the subject areas of our Sustainability Strategy	22	https://www.superwood.dk/downloads/policies-code-of-conducts/
	Supplier COC	Covers our Human Rights Policy Internally in Superwood	22	https://www.superwood.dk/downloads/policies-code-of-conducts/
	Internal COC	Covers our Human Rights Policy Externally in Superwood	22	https://www.superwood.dk/downloads/policies-code-of-conducts/
	Whistleblower Policy	How Superwood operates its whistleblower program and thereby avoid potentially irregularities or unlawful acts/conduct from going unreported	22	https://www.superwood.dk/downloads/policies-code-of-conducts/
	Privacy Policy	Description of how we handle contact information		https://www.superwood.dk/downloads/policies-code-of-conducts/
Certificates, declarations, and awards	Cradle to Cradle®	Check out our rating in the internationally recognised Cradle to Cradle® Certified Products Programme	10	https://www.superwood.dk/downloads/dokumenteret-baeredygtighed/
	Eco-Product	Eco-Product assessment of Superwood's unique wood preservative method		https://www.superwood.no/downloads/dokumentert-baerekraft-no/
	Sundahus	See our rating in Sundahus, which helps provide an overview of conscious material choices		https://www.superwood.se/downloads/dokumenterad-haallbarhet/
	PEFC	We are PEFC-certified, thus contributing to the promotion of sustainable forest management	26	https://www.superwood.dk/downloads/dokumenteret-baeredygtighed/
	EPDs	The Environmental Product Declaration displays, among other things, the exact carbon footprint of Superwood	8	https://www.superwood.dk/downloads/dokumenteret-baeredygtighed/
	EU Environmental Award	Certificate of the EU Environmental Award in the category of 'Cleaner Technology', 2002	9	https://www.superwood.dk/downloads/dokumenteret-baeredygtighed/
Partnerships and memberships	The Upcycl	Our discarded wood is part of the assortment in these material banks. Here, they stand alongside other new waste or upcycled materials, enticing both individuals and businesses.		https://www.superwood.dk/2-sortering/
	Råt&godt			https://www.superwood.dk/2-sortering/
	Genbyg			https://www.superwood.dk/2-sortering/
	GENWOOD	At Stark, our discarded wood has taken on a new life under the name Genwood. Here, the product is sold alongside other items in their stores.		https://www.superwood.dk/2-sortering/ https://www.stark.dk/genwood-sw12-medium-aart-2-27-x-145-mm-umalet-1200-mm?id=1420-02714540120
	NORTHSIDE	The partnership with NORTHSIDE allows us to develop sustainable solutions for festivals – built using discarded Superwood.		https://northside.dk/nyheder/northside-x-superwood/
	Woods by Human Ressources	With our discarded wood, we can support the positive community that Human Results offers to improving the daily lives of several young people.	25	https://kooperationen.dk/projekter/rummelig-genstart/interviews-og-cases/

Designed by Roesgaard

Superwood®

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