

Troldtekt A/S Corporate Social Responsibility

Communication on Progress for the UN 2023

About this report

Welcome to Troldekt's CSR report for 2023. The report is structured according to the EU's overall sustainability reporting standards, ESRS (European Sustainability Reporting Standards).

Troldekt's CSR report for 2023 is the 14th in a series of CSR reports since we joined the UN Global Compact in 2010. All member companies commit to reporting on their CSR progress every year.

This Communication on Progress (CoP) is now conducted as an online questionnaire with questions within the main areas of the Global Compact: Human rights, labour rights, the environment and anti-corruption. Among other things, the questionnaire is intended to make it easier for companies to identify challenges and set goals for their CSR work.

Troldekt has completed the new CoP form, and although it is now voluntary for companies under the UN Global Compact to publish a CSR report, we have chosen to continue

publishing our report to be transparent about our work. The annual CSR reports are a suitable format for providing a nuanced narrative and deeper insight into our CSR efforts to the outside world and to our own employees.

Structured according to new standards

The EU's new European Sustainability Reporting Standards (ESRS) will come into effect during the 2024 financial year. The standards are part of the new Corporate Sustainability Reporting Directive (CSRD).

The European Commission has adopted a total of ten standards for reporting in the areas of Environment, Social and Governance (ESG). There are also two multidisciplinary standards.

The report is based on the 12 overarching standards, but without reporting according to the EU's specific requirements in each standard at this time. Our CSR report thus falls within the four categories of the ESRS standards:

- > General
- > Environment
- > Social
- > Governance

There is also a presentation from Troldekt's Board of Management and highlights from 2023.

Happy reading!



Want to know more?

If you have any questions about the content of this report, please contact Tina Snedker Kristensen, Head of Sustainability and Communications at Troldekt, by phone +45 8747 8124 or email: sustainability@troldekt.dk

Troldekt's CoP can be found at unglobalcompact.org

All of Troldekt's CSR reports from 2010 onwards are available at troldekt.com



A number of forest photos are featured throughout the CSR report. They were all taken by Trolldtekt's own photographer, Tommy Kosior, in one of the Danish forests where the wood for Trolldtekt acoustic panels comes from. Trolldtekt only uses wood from certified forests. This means that all Trolldtekt acoustic panels are either PEFC™ or FSC® certified (FSC®C115450).

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A passion for people and the planet

Troldtekt formulated the objective that motivates us and makes us proud in 2023. To achieve that objective, we will continue to work ambitiously within the areas of environment, social conditions and professional management of our company.

Two years ago, we launched Troldtekt acoustic panels based on a new type of cement from Aalborg Portland. This was groundbreaking because by using FUTURECEM™ instead of traditional cement, we can cut at least a quarter of each acoustic panel's carbon footprint.

We used 925 tonnes of FUTURECEM in 2022; in 2023 we used more than twice that amount – and at the start of 2024 we decided to completely phase out our acoustic panels based on traditional grey cement. We have even taken the first steps towards also replacing part of our white cement, which constitutes the largest part of our production.

This story is an example of how we work continuously and ambitiously with environmental initiatives. We do the same when it comes to our focus on people's well-being. I am thinking of those who benefit from Troldtekt acoustic solutions in buildings all over the world – but also to a great extent of the safety, well-being and development of our own employees.

So it's also natural for us that Troldtekt's new objective is about our passion for both people and the planet. We put our objective and related values in writing in 2023, and you can read more about it in this report.

An extra gear and more resources

2023 was our first full year as part of the Irish Kingspan Group. With its ambitious sustainability programme, Planet Passionate, Kingspan shares



many of the same principles Troldtekt has been working with for more than a decade.

As part of Kingspan, we get an extra gear and more resources to raise the bar even higher. We are now well on our way to implementing the tools and systems that Kingspan provides, and which will help us to improve further for the benefit of people and the planet. ISO certifications will play a key role here too, which is why we initiated the work already in 2023 to achieve two certifications by the end of 2024.

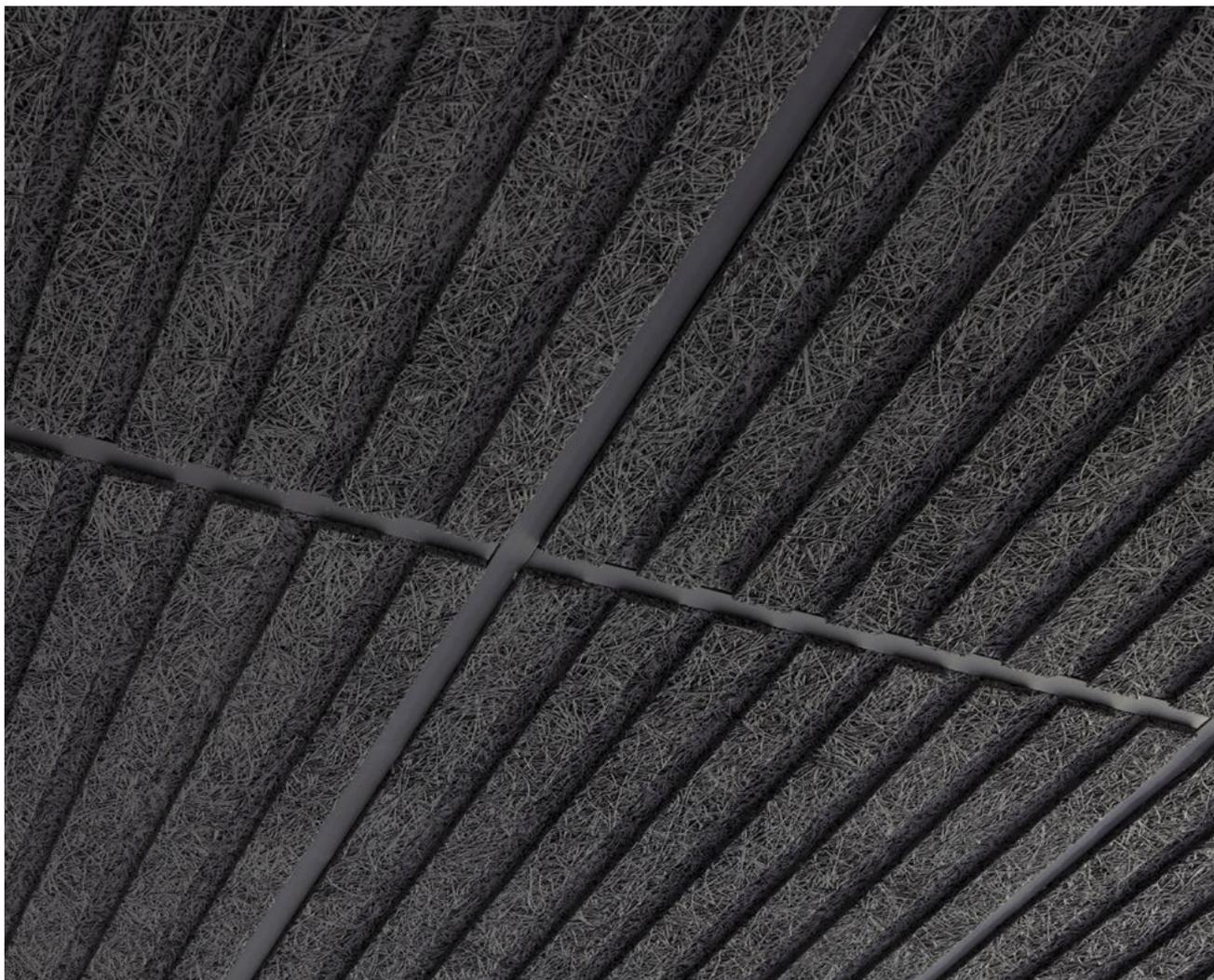
A skilled team is key

Among many other things, we also spent 2023 achieving re-certification within the Cradle to Cradle concept, which has been a holistic framework

for our work in sustainability since 2012. We kept our certification at gold level, even though in three out of five categories we were certified according to the new and more demanding version 4.0.

And over the course of the year, a number of new colleagues came on board. They are now part of the talented team that will continue to be the key to expanding Troldtekt acoustic solutions to even more markets. Driven by a passion for people and the planet.

Michael Heeager Nystrup,
CEO
Troldtekt A/S



Design ceiling with a reduced carbon footprint wins German design award

In 2023, Trolldtekt launched the design solution Trolldtekt tiles T24, which is easy to install and remove without tools or screws. It is possible to obtain this design solution based on the cement type FUTURECEM – and in December 2023, this variant was chosen as the winner of a German Design Award 2024.

Trolldtekt acoustic panels based on FUTURECEM have carbon footprints that are 26 and 38 per cent lower, respectively, than those of Trolldtekt based on grey and white cement, measured throughout the entire life cycle of the panels.

The German Design Council is behind the German Design Award, and Trolldtekt received it for the category Excellent Product Design – Building and Elements.



6.9% CO₂ reduction

We have reduced our carbon emissions per unit produced by 6.9 per cent since 2020. We emitted 4.3 per cent less CO₂ per unit than the previous year in 2023. These reductions were made in Scope 3, where cement from Aalborg Portland accounts for virtually all of the emissions.

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Doubling FUTURECEM

We increased the amount of low-carbon cement type FUTURECEM by 111 per cent in 2023 compared to the previous year. FUTURECEM still accounted for a small share of our total cement consumption, but now that we have decided to phase out traditional grey cement, we expect a steady increase.

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Gold according to stricter requirements

The range of Troldekt acoustic solutions once again achieved gold after re-certification according to Cradle to Cradle Certified® in autumn 2023. In three out of five categories, Troldekt is certified according to the design concept's new version 4.0, with stricter requirements compared to the previous version 3.1.

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Up to 30% energy reduction

Troldtekt has installed a heat exchanger that utilises waste heat from the production drying process. The pilot project has resulted in a 30 per cent reduction in energy consumption in the sections of the drying oven where the trial was conducted. Our ambition is now to install heat exchangers on more oven sections.

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18 occupational accidents and heightened focus

There were 18 occupational accidents at Troldtekt in 2023, nine of which resulted in a subsequent period of absence. That's too many when the goal is zero accidents. With a number of initiatives and a new Health & Safety coordinator, we have now heightened our focus on creating a safe and secure working environment.

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ISO certifications initiated

We started working towards achieving two ISO certifications by 2024 in 2023: ISO 9001 (quality management) and ISO 45001 (occupational health and safety management). With them, we systemise all core processes and build a solid foundation for future improvements.

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General

We laid the foundations for future growth with responsibility as a core value in 2023. A common purpose, new functions in the organisation and heightened focus on circular products are among the key initiatives.





General

This section addresses issues within the following ESRS standards:

- > General principles
- > General, strategy, governance and materiality disclosure requirements

“ We believe it is important to work holistically with sustainability in all aspects of our business. That's why the Cradle to Cradle design concept is a key part of our business strategy.

A holistic approach to sustainability

Responsibility is at the centre of Troldekt's business activities. As early as 2010, we joined the UN Global Compact, the world's largest corporate social responsibility initiative. Since then, we have worked purposefully every year to make progress, especially with regard to the environment, and reported on our progress in our annual CSR reports.

We believe it is important to work holistically with sustainability in all aspects of our business. That's why the Cradle to Cradle design concept is a key part of our business strategy. The concept's three basic principles are to eliminate waste, transition to renewable energy and support diversity. At Troldekt, this translates into initiatives that benefit the environment, society and business.

We achieved re-certification according to Cradle to Cradle Certified in 2023, with all our cement-bonded wood wool products maintaining overall gold certification – despite stricter requirements in the new version of the certification.

In more than a decade of Cradle to Cradle, we have reached major milestones. Among other things, we have converted our production to renewable energy and launched the first circular economy projects, where Troldekt's production waste creates new value.

We have bold ambitions

By joining the Kingspan Group in 2022, we have the strength to take our work further – and the tools to systemise our CSR work even more. We are also looking forward to the EU's CSRD directive, which will apply to the Kingspan Group with effect from 2024 and Troldekt as an independent business unit from 2025.

We will conduct a double materiality analysis in 2024 to identify where we as a company have the greatest impact on our surroundings and where factors in the world around us have the greatest impact on our business. The analysis will help us to qualify our CSR work and our ambitions for the coming years.

However, we already know that reducing CO₂ emissions in Scope 3 is a core focus for Troldekt in the coming years – just as it is for a large part the construction industry in general. We will therefore continue to have reduction targets over the next few years equivalent to exceeding Denmark's general targets, which are among the most ambitious in the world.

Denmark must reduce its greenhouse gas emissions by 70 per cent compared to 1990 by 2030.

Values are our foundation

We updated Troldekt's core values with the involvement of our employees in 2023. We also defined our objective, which describes what Troldekt was created for – and what makes us proud:

Objective

To utilise the benefits of good acoustics to create a healthy indoor climate with a passion for people and the planet.

Values

- > Ambitious
- > Trustworthy
- > Responsible

As with other strategic initiatives and other news from everyday life at Troldekt, we use a number of platforms and forums to communicate our values to our employees. We hold regular office meetings for Troldekt's hourly paid employees and town hall meetings for all salaried employees. In both forums, our CEO provides an update on the business and current focus areas.

We also use our internal newsletter, Troldekt Update, and our social intranet, Ziik, to communicate important initiatives and results across departments and national borders. The aim is to ensure an open culture in which all employees are informed about important topics.

Better geared towards responsible growth

We created a strong foundation for continuing our work on the environmental and social aspects of sustainability in 2023.

With regard to the environmental aspect, we decided to insource and expand our skill sets by establishing a dedicated Sustainability Department to sharpen our focus on circular solutions and documentation.

The new department will be in operation in 2024. Two profiles from the construction industry have been recruited: Darma Louise Duus is the new Manager of Circular Solutions, and Pernille Brændstrup Kjær has joined as a new Sustainability Specialist focusing on documentation. The two of them complement the experienced staff who have worked at Troldekt for many years: Sustainability and Communications Manager Tina Snedker Kristensen and DGNB consultant and certified advisor in sustainable building Michael Christensen.

With regard to the social aspect, we established two brand new functions in 2023 to ensure that we continuously improve our employees' working environment, safety, training and development.

Janet Fredensborg started in November 2023 as the new Health & Safety Coordinator, while Line Sakstrup took up the newly created position of Head of People & Development at the start of the year. You can read more about both in the Social section of the CSR report.



"We created a strong foundation for continuing our work on the environmental and social aspects of sustainability in 2023."

Our business model

- Troldekt's objective is to utilise the benefits of good acoustics to create a healthy indoor climate with passion for people and the planet.
- Troldekt has been producing acoustic panels made of cement-bonded wood wool since 1935, and today we are present on a number of markets worldwide. We have our own sales departments in Denmark, Germany, Sweden, Norway and the United Kingdom and Ireland, while in other markets we work with partners.
- We use the same raw materials as almost 90 years ago: Norway spruce from Denmark and cement. With an ambitious approach we continuously optimise products and recipes in an even more sustainable direction.
- All production takes place in Denmark under high-tech conditions focusing on continuously reducing our environmental footprint.
- Troldekt has been part of the Irish Kingspan Group since the spring of 2022, a global leader in high-efficiency insulation and building envelope solutions with a presence in more than 80 countries.



UN Global Compact: CSR based on UN principles

As a signatory to the UN Global Compact, we support – and work in line with – the UN's ten principles, which are divided into four main categories:

- > Human rights
- > Labour rights
- > Environment
- > Anti-corruption



You can read more about how we work specifically with each of the four areas in our CSR report. We report annually to the UN on our progress in these areas.

UN Sustainable Development Goals for a balanced world

The UN member states adopted the 17 Sustainable Development Goals in 2015 to ensure environmental and economic balance the world over. Troldekt supports all 17 goals, but we have decided to focus on the four goals where we can make the biggest difference.



SDG 3: Health and well-being

Troldekt acoustic panels contribute to a healthy indoor climate in buildings. The panels are documented as being free of harmful substances and certified by leading international organisations for indoor climate and material health. These include Danish Indoor Climate Labelling, Allergy UK, Finnish Indoor Air Association and Building Information Foundation RTS, Sundahus, Byggarubedömningen and Der Blaue Engel.



SDG 12: Responsible consumption and production

Troldekt has invested and continues to invest heavily in energy-efficient technology at its factory in Denmark. The electricity for production is based on wind energy via our climate partner agreement with Ørsted. For example, process heat for the drying process in our production comes from biofuel.



SDG 15: Life on land

All of the wood in Troldekt acoustic panels is derived from certified timber from Danish forests, and meets strict requirements regarding biodiversity and the conservation of certain forest areas. In practice, 100 per cent of the timber is PEFC™ certified, and a large proportion is also FSC® certified (FSC®C115450), as it comes from 'double-certified' forests. Finished acoustic panels can only have one of the two certifications and customers are free to choose between PEFC and FSC.



SDG 17: Partnerships for action

In Denmark, Germany and Sweden, Troldekt supports NGOs working to advance the circular economy. We are also represented on committees, in forums and networks that aim to create the best possible framework for sustainability in the construction industry. Among them are a working group on digital material passports under the auspices of the EU committee CEN/TC 350/SC1, which promotes the circular economy in the construction sector, as well as the Technical Committee on Materials Content and Climate Impact at the Council for Sustainable Building.

Cradle to Cradle: Still gold despite stricter requirements

The range of Trolldtekt acoustic solutions once again achieved gold after re-certification according to Cradle to Cradle Certified in autumn 2023. In three out of five categories, Trolldtekt is certified according to the design concept's new version 4.0.



After a decade of Cradle to Cradle Certified product certification, Trolldtekt advanced from silver to gold in spring 2022. After re-certification in autumn 2023, we still hold the gold certificate, even though the Cradle to Cradle Products Innovation Institute is continuously tightening the requirements for certified products. One of the ways the institute has done so is by launching version 4.0 of the certification.

Trolldtekt chose to recertify three of the five categories according to the new and more demanding version during a transitional period in 2023. These are Material Health, Renewable Energy and Carbon Management and Water & Soil Stewardship. In the other two categories - Material Reutilization and Social Fairness - Trolldtekt products are still certified according to version 3.1. The certification covers the entire range of Trolldtekt cement-bonded wood wool products in natural wood and painted in the standard colours white, grey, black and clay.

Maintained level in four categories

In four out of five of the Cradle to Cradle categories, we remained at the same level in the 2023 re-certification as in 2022. However, we moved from platinum to gold in the Material Health category as a result of the stricter requirements – without changing the overall gold certification.

An example of the stricter requirements is that over 50 per cent of the product (by weight) must be assessed at A or B level. In Trolldtekt's case, wood and limestone are assessed at this high level, but these raw materials account for less than half of the weight.

The step from platinum to gold in Material Health is therefore solely due to the stricter requirements and not changes in the product's ingredients. Trolldtekt moved up two levels in the category in spring 2022 – from silver to platinum. This was a result of using new paint mixes in our production.

Cradle to Cradle scorecard

Tier / Theme	Basic	Bronze	Silver	Gold	Platinum
				✓	
				✓	
				✓	
					✓
				✓	

The table below shows Troldekt's score in connection with the Cradle to Cradle re-certification process in the autumn of 2023.

Troldekt achieved gold level certification in four categories and platinum certification in the fifth category.

Categories with certification according to version 4.0:

- > Material Health
- > Renewable Energy and Carbon Management
- > Water & Soil Stewardship

Categories with certification according to version 3.1:

- > Material Reutilization
- > Social Fairness

On course for version 4.0 in 2025

Cradle to Cradle's version 4.0 sets significantly higher requirements than version 3.1 in all five categories. Instead of staying with the previous version of the standard for as long as possible, we have taken the first big steps with certification to version 4.0 in three categories.

Between now and the next re-certification in 2025, we will work to meet the many new requirements in the last two categories.

Cradle to Cradle Certified overlaps with Kingspan's sustainability programme Planet Passionate on

many fronts. Both are also powerful communication tools with concrete promises to the world at large, which means that Troldekt must show continuous progress in our holistic approach to sustainability.



New set of values stands on a foundation of responsibility

We updated Troldekt's values and formulated a purpose in 2023 that embraces our passion for both people and the planet. We have now created a clear link between our culture, ambitious goals and affiliation with Kingspan.

Ambitious, trustworthy and responsible. These are the three values that we all have in common at Troldekt when we go to work and in our dealings with the world at large.

They are the result of our employees being given the opportunity to share their wishes and opinions in 2023. They also lead to a whole new objective for Troldekt: "We want to utilise the benefits of good acoustics to create a healthy indoor climate with a passion for people and the planet."

CEO Michael Heeager Nystrup elaborates:

"There was a desire among employees to express a unified objective that we are proud of and that defines what we do. We loosened things up a bit in the process and let the employees reflect on our values. We then compiled the input into updated formulations and actual examples that build on Troldekt's strong heritage."

Embracing past and future

The new objective and values help emphasise that Troldekt stands on a foundation of responsibility. That we go to work to make a positive difference for people and the planet.

"It's important that we support the existing culture where social responsibility and sustainability are held dear by all employees. We also need to build a bridge to both our and Kingspan's future ambitions. Kingspan has its Planet Passionate programme, which is fully in line with our passion for people and the planet. And Kingspan is very open and trustworthy when it comes to goals and results. Our new objective and values help put all this into perspective," says Nystrup.

"Troldekt has been at the forefront of responsibility and sustainability from a very early stage. We also want to continue to be a frontrunner, helping to push the other companies in Kingspan forward," he adds.

Having a life in everyday life

Now it's about bringing the new values to life in the everyday lives of all our colleagues. Our set of values is a theme at joint meetings, and all managers at the factory in Troldekte have put them into action in a series of videos for colleagues in production.

"Objectives and values shouldn't just be fancy words hanging in a glass frame in the CEO's office. They should be a beacon that develops and motivates us. That makes managers and other colleagues stop and raise their hands if something in everyday life goes against what we want to stand for," says Michael Heeager Nystrup.

Our objective and core values

Troldekt has defined an objective that describes what we are here for – and what makes us proud:

Utilise the benefits of good acoustics to create a healthy indoor environment with passion for people and planet.

We can achieve our objective through our three values:



Ambitious

We want to stay relevant and keep challenging ourselves to develop better solutions. We set ambitious goals and have the courage to pursue them.



Trustworthy

We stand by our word and keep our promises. We pride ourselves on being a trustworthy brand and we communicate openly about our solutions and business practices.



Responsible

We are proud of our continuous efforts to contribute to a better future for people and the planet.



Environment

Troldtekt works continuously to reduce our overall environmental and climate footprint from the production of acoustic panels. New initiatives must also promote the circular economy.



For example, FSC requires that dead trees remain in the forest, that tall stumps and five old trees per hectare are left standing, and that parts of the certified forest are completely untouched. This allows for richer animal and insect life and is in line with UN Sustainable Development Goal 15 on 'Life on Land'.



Environment

This section addresses issues within the following ESRS standards:

- E1** Climate change
- E2** Pollution
- E3** Water and marine resources
- E4** Biodiversity and ecosystems
- E5** Resource use and circular economy

“
In recent years, we
have approached 100
per cent carbon
neutral energy

Scope 1: Low CO₂ emissions despite gas backup

Troldtekt aims to use only renewable energy sources in our production, and in recent years we have approached 100 per cent carbon neutral energy. This is mainly due to our biomass boilers, which provide heat for processes and buildings by burning wood chips. The waste wood and bark that come from our production are converted into wood chips via a supplier.

However, the share of renewable energy in production fell to 94.5 per cent in 2023 (97.7 per cent in 2022). We consider this fall to be temporary, as it is due to a period of maintenance on our bioboiler. As a result, we had to use our backup boiler, which runs on natural gas, for part of the year. There is therefore also an increase in carbon emissions in Scope 1 in 2023, which still represents a minimal part – 1 per cent – of the total carbon footprint of Troldtekt acoustic panels.

Although natural gas is considered a sustainable energy source in the EU taxonomy, Troldtekt wants to minimise its use. As you can read in the article on page 27, a new electrostatic filter in the bio-boiler will come with a number of advantages.

Troldtekt conducted a groundbreaking pilot project in 2023 that investigated the potential to reduce energy consumption in the drying process by recycling part of the waste heat from the drying ovens. By installing a heat exchanger on selected oven sections, we have managed to reduce energy consumption in selected sections of the drying oven by 30 per cent.

The initiative is supported by the Danish Energy Agency and developed in collaboration with Nordic Green Solutions and Rokkedahl Energi, and Troldtekt is now investigating various ways of applying our findings to the rest of production. Read more about this in the article on page 27.

Scope 2: Precise measurements to save electricity

All the electricity that Troldtekt uses in its production comes from certified wind farms through our status as an Ørsted Energy Partner. Even though this means the electricity is carbon neutral, we are continuously looking for energy savings, and in 2023 Troldtekt began work on a detailed measurement of the company's energy consumption.

Together with seven other companies in the Kingspan Group, Troldtekt began building an Energy Management System (EMS) that will enable us to

identify future savings through much more detailed consumption measurements. You can read more about the project on page 27.

Troldtekt also began analysing the potential for installing solar cells on the company's buildings in 2023, with a view to having a project ready in 2024.

Scope 3: Increased share of cement with lower footprint

Ninety-nine per cent of the carbon footprint of a Troldtekt acoustic panel is found in Scope 3, and this covers primarily our purchase of cement from Aalborg Portland. 2023 was the year Troldtekt took the next major step towards further reducing the carbon footprint of cement, the binder that makes our acoustic panels robust and durable. We did so by increasing the proportion of acoustic panels based on the cement type FUTURECEM, which has a lower carbon footprint than traditional cement.

At the same time, thanks to a number of targeted initiatives, our cement supplier Aalborg Portland saw a considerable reduction in its carbon emissions, which also contributed to our carbon emissions per acoustic panel produced falling by almost 5 per cent compared to 2022. This reduction will be reflected in Troldtekt's updated environmental product declarations (EPDs), which are scheduled to be published before the end of 2024.

You can read more about the work to reduce our cement footprint in the article on page 23.

Certified timber: The core of our acoustic panels

We use large quantities of timber from Danish forests for the production of Troldtekt acoustic panels.

That means it is also crucial that the timber comes from responsible sources – i.e. forests where wildlife, plant life and the people who work in there are taken into account. Troldtekt only uses timber from forests that have at least one of the two leading certifications for responsible forestry – FSC and PEFC. All Troldtekt acoustic panels are therefore either PEFC certified or FSC certified, so we can always trace the wood in the finished acoustic panels back to the forest.

Over their entire product life cycle, the carbon footprint of Troldtekt acoustic panels based on FUTURECEM is:

26 per cent lower than that of Troldtekt panels based on grey cement.

38 per cent lower than that of Troldtekt panels based on white cement.



About FSC and PEFC

- > FSC stands for Forest Stewardship Council® and is widely supported by green organisations such as WWF and Greenpeace. The scheme focuses on social, environmental and economic interests.
- > For example, FSC requires that dead trees remain in the forest, that tall stumps and five old trees per hectare are left standing, and that parts of the certified forest are completely untouched. This allows for a richer animal and insect life and is in line with UN Sustainable Development Goal 15 on 'Life on land'.
- > The other leading international scheme is PEFC, which stands for Programme for the Endorsement of Forest Certification.
- > PEFC is the world's largest certification system for sustainable forestry. Like FSC, the scheme focuses on biodiversity and labour rights – as well as on the protection of important forest areas.

Return schemes for acoustic panels in action

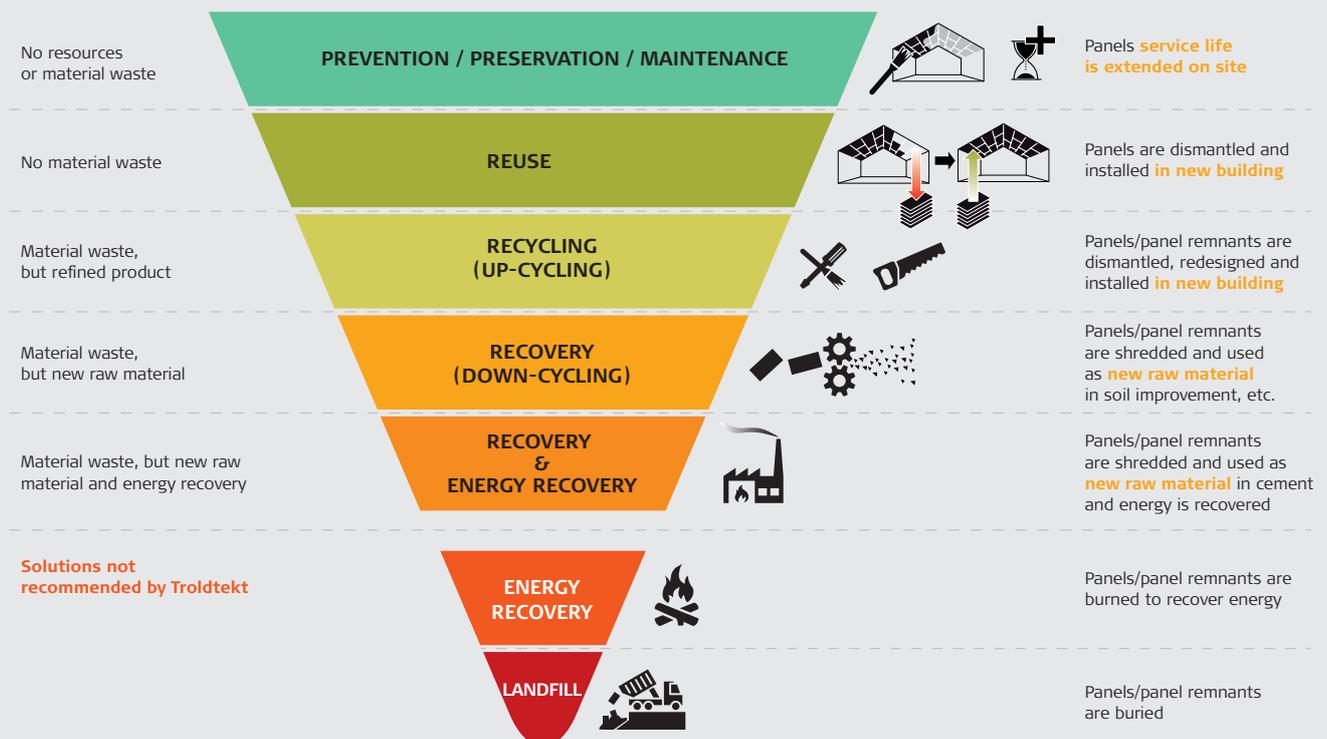
Troldekt intensified its efforts to promote the circular economy and give acoustic panels an extra life cycle in 2023. We already have an established scheme where cement-bonded wood wool waste from our production can be reused, for example, for livestock bedding, ground cover or the stabilisation of roads.

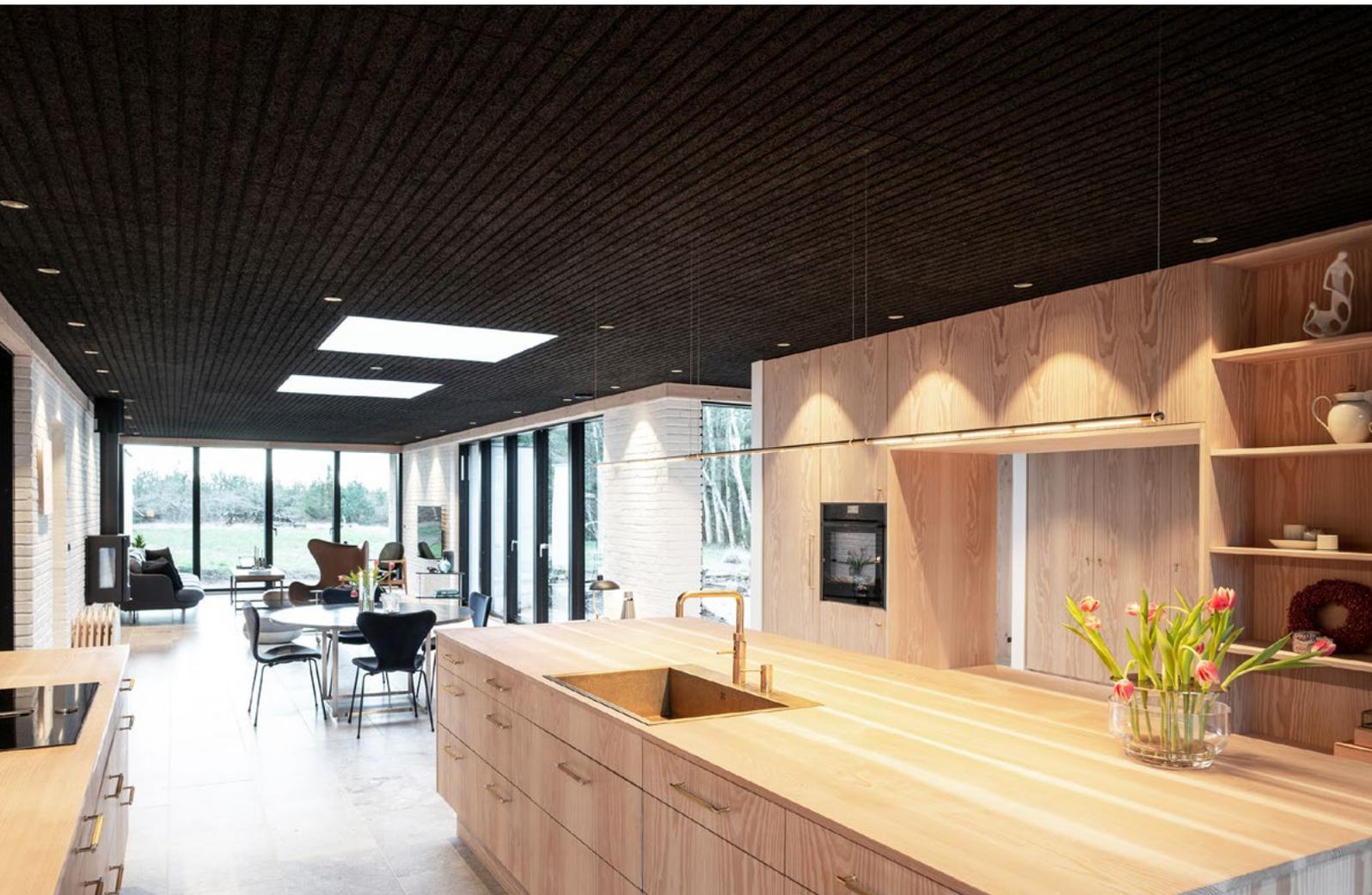
Aalborg Portland takes sawdust from our edging workshop back to Aalborg in the cement trucks so that it can be used in the production of cement. The wood content of Troldekt sawdust contributes to the combustion process and replaces fossil fuels (energy), while the cement content becomes raw material (filler) in new cement.

We are now expanding the return scheme so that acoustic panels that are cut or scrapped on building sites can also be recycled in the same way. In practice, our local partner, North Trade House, is responsible for receiving and reusing the panels. We offer the scheme on all our primary markets and are working on finding solutions to make it possible to return offcuts and discarded panels locally.

The ambition is also to reuse and recycle panels from demolitions and ensure the recovery of any surplus material from them – and thereby reactivate the resources in the panels at the highest possible value level in the waste hierarchy. With the appointment of a new Manager of Circular Solutions, Darma Louise Duus in 2024, we have our organisation in place so we can roll out circular initiatives.

Troldekt resource hierarchy 2024





Cement footprint continues to decrease

The cement in Trolldtekt acoustic panels accounts for the largest carbon footprint. Actions adopted in 2023 show that the footprint is gradually becoming smaller.

Virtually the entire carbon footprint of a Trolldtekt acoustic panel comes from the cement, which together with wood creates the unique properties of cement-bonded wood wool. Cement plays an essential role in giving acoustic panels their robustness, fire retardant properties and durability – all without the use of harmful chemicals.

"We are continuously investigating the possibility of using alternative binders, but so far the advantages of cement

are difficult to replicate. It's therefore gratifying that efforts to reduce the carbon footprint of cement are bearing fruit," says Tina Snedker Kristensen, Head of Sustainability and Communications at Trolldtekt.

The amount of CO₂ emitted on average per acoustic panel produced was 6.9 per cent lower in 2023 than in 2020.

“ The amount of CO₂ emitted on average per acoustic panel produced was 6.9 per cent lower in 2023 than in 2020.

FUTURECEM is part of the answer

Tina Snedker Kristensen emphasises Trolldtekt's decision to invest in cement supplier Aalborg Portland's low-carbon cement type, FUTURECEM, as one of the reasons for the reduction.

Trolldtekt acoustic panels based on FUTURECEM have a lifecycle carbon footprint that is 26 and 38 percent lower over their respective lifecycles than Trolldtekt panels based on traditional grey and white cement, respectively. So far, it is mainly grey cement that Trolldtekt has replaced with FUTURECEM.

"In 2023, acoustic panels based on FUTURECEM accounted for approximately 6 per cent of our production. This was a noticeable increase from 2022 and almost on par with the volume of traditional grey cement. The share of FUTURECEM will continue to increase significantly when we completely phase out the panels based on traditional grey cement from 2024," explains Kristensen.

She adds that Trolldtekt is also now gradually starting to replace white cement with FUTURECEM in the panels that are painted in light colours. The use of FUTURECEM results in different colour shades in the painted panels, so customers will continue to be able to choose panels based on traditional white cement.

Cement supplier reduces emissions

At the same time, it also has a positive impact on Trolldtekt's climate accounts when the company's regular cement supplier, Aalborg Portland, reduces its carbon emissions.

Aalborg Portland's ESG report for 2023 show that emissions have fallen by 24 per cent over the past two years. Measured per tonne of cement produced, Aalborg Portland's carbon emissions fell by 15 per cent during the period – from 923 kilos of CO₂ in 2021 to 782 kilos of CO₂ in 2023. This is due to increased sales of less aggressive cement types such as FUTURECEM and the fact that Aalborg Portland has converted its cement production to increasingly using alternative fuels – instead of fossil fuels.

Aalborg Portland CO₂ results 2023

- > Aalborg Portland has reduced its carbon emissions by 543,394 tonnes over two years, including a reduction of 274,512 tonnes in 2023 compared to 2022.
- > This corresponds to a total reduction of 24 per cent over the last two years. Per tonne of cement produced has fallen by 15 per cent.
- > The company's target is a total reduction of 1.6 million tonnes of CO₂ by 2030.
- > The results are mainly due to increased use of alternative fuels, sales of low-carbon cement types and lower production volumes due to falling market demand.
- > Aalborg Portland plans to build a large-scale carbon capture facility that will capture at least 400,000 tonnes of CO₂ annually from 2030.



Geopolymer: A possible substitute for cement?

Troldtekt has been involved in an innovative three-year project since 2022, aimed at reducing the construction industry's carbon footprint and resource consumption. The project, called ReSource, is led by the Danish Institute of Fire and Security Technology and has been selected for Realdania's initiative "Housing construction from 4 to 1 Planet".

ReSource aims to turn waste from the construction industry into new, more sustainable building materials. One of the key focus areas is to replace the cement in Troldtekt acoustic panels with geopolymer.

By using geopolymer instead of traditional cement, the project participants hope to be able to significantly reduce the environmental impact of the construction industry.

The first phase of ReSource involves testing the potential in Troldtekt acoustic panels, for example. If successful, it could pave the way for more environmentally friendly production of building materials and thus contribute to a greener construction industry.

Good experiences with waste heat recovery can lead to further energy savings

A pilot project in 2023 showed great potential for energy savings through heat recovery. Troldekt is now investigating the possibilities of harvesting further energy savings in production.

An important part of the production of acoustic panels is the energy-intensive drying process, which takes place in our drying ovens. This is where the cast panels dry and harden, ready for installation in buildings. The heat for the drying ovens comes from Troldekt's own biomass furnace.

It was therefore very promising when a pilot project on selected oven sections in 2023 showed the potential to cut 30 per cent of energy consumption by reusing waste heat from the process. To realise that potential, a large heat exchanger is installed on the roof above the drying ovens.

The heat exchanger on the roof of the drying hall works in the way where hot and humid exhaust air from the drying ovens meets cold supply air from outside. When this happens, a large amount of heat is moved from exhaust to supply.

Based on the good results from the pilot project, Troldekt began to investigate the potential for expanding the method to the rest of the company's drying process in 2023.



New filter ensures stable heat supply

Troldtekt's heat supply is based on carbon-neutral energy thanks to our biomass furnace, which provides heat for processes and buildings by burning wood chips.

After a period of maintenance on the boiler, we had a desire to increase our performance. The solution was that between Christmas and New Year 2023, we installed a new ESP filter on the boiler in the production.

An ESP (Electrostatic Precipitator) filter is a type of air filter that uses electrostatic forces to remove particles, such as dust and ash, from an air stream or flue gas. It works by giving the particles an electrical charge and then attracting them to charged panels or electrodes where they are captured.

The new ESP filter is a significant improvement over the previous bag filter. It has uniform filtration, is cheaper in operation and easier to maintain. In addition, we avoid particle emissions in the event of defects in the filter bags, which saves Troldtekt from unforeseen shutdowns on the drying and painting lines.

Troldtekt began to feel the benefits of the new filter in early 2024, as it has ensured a stable heat supply during the cold start to the year.



Energy Management System: Better overview of energy consumption

By being part of the global Kingspan Group, Troldtekt can learn from other comparable manufacturing companies. Troldtekt and seven other companies in Kingspan's insulation division, were selected to test a new energy management system (Shell Energy Management System) in 2023.

The aim is to obtain a better and more detailed overview of energy consumption, so that we can address abnormally high consumption and identify potential energy savings.

Establishing a well-functioning Energy Management System (EMS) requires more detailed insight into where energy

is being used in real time. Installers were therefore busy setting up a total of 51 meters to monitor electricity consumption in Troldtekt's production facilities in 2023. Eight new district heating meters, eight water meters, an air meter and a gas meter have also been installed. Together with the existing meters, they will provide data for a dashboard that gives Troldtekt a much more precise picture of where energy is used in production.



Data: Environment

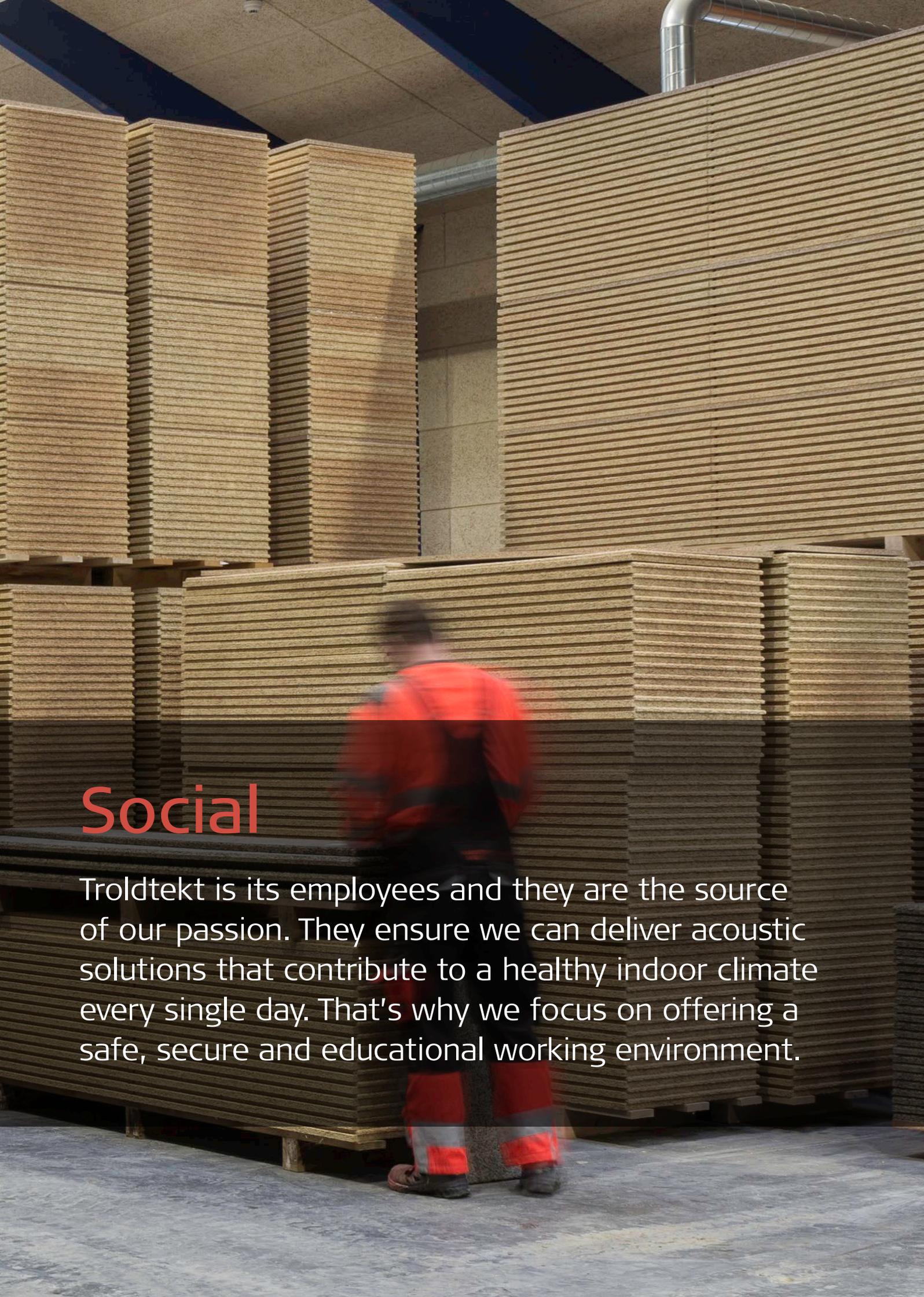
	2021	2022	2023
CO₂ emissions in Scope 1 (total tonnes and kg per m ² of acoustic panel produced)	166 tonnes = 0.03 kg/m ²	149 tonnes = 0.03 kg/m ²	341 tonnes = 0.07 kg/m ²
CO₂ emissions in Scope 2 (tonnes and kg per m ² of acoustic panel produced)	0	0	0 *
CO₂ emissions in Scope 3 (tonnes and per m ² of acoustic panel produced)	49,113 tonnes = 8.11 kg/m ²	41,282 tonnes = 8.09 kg/m ²	34,894 tonnes = 7.70 kg/m ²
Total CO₂ emissions (tonnes in total and kg per m ² of acoustic panel produced)	49,280 tonnes = 8.14 kg/m ²	41,431 tonnes = 8.12 kg/m ²	35,235 tonnes = 7.78 kg/m ² **
Energy consumption per m² of produced acoustic panel	19.65 MJ	21.12 MJ	20.40 MJ
Share of energy from renewable sources (%)	97.8%	97.7%	94.5%
Total proportion of recycled materials as a percentage of total materials consumption (%)	1.9%	2.1%	1.8% ***
Electric trucks (number and %)		21 = 91%	21 = 91%
Electric cars (number and %)		6 = 19%	8 = 24%
Charging stations for electric vehicles (number)		6 (12 power outlets)	6 (12 power outlets)
Water consumption (per m ² of produced acoustic panel)	31.796 m ³ /year & 0.005 m ³ /m ² panel produced	28.148 m ³ /year & 0.006 m ³ /m ² panel produced	26.448 m ³ /year & 0.006 m ³ /m ² panel produced

* Troldekt uses 100 per cent wind power. In practice, we have a purchase agreement with Ørsted guaranteeing the production of enough green power at one of their certified wind farms to cover Troldekt's electricity consumption. Most of Denmark's electricity consumption currently comes from wind power. That also means Troldekt has to buy certificates for a smaller proportion of our electricity consumption than previously to realise 100 per cent wind energy.

** The number of square metres produced varies from year to year, which is why there are greater fluctuations in CO₂ emissions, especially in scope 3.

*** Prefabricated Troldekt panels contain cement partially produced from recycled materials (for example, the cement may contain ash and sand dredged from shipping channels).



A worker in a red safety vest is seen from behind, walking through a large warehouse. The warehouse is filled with numerous tall stacks of light-colored, ribbed acoustic panels. The worker is positioned in the lower center of the frame, moving towards the right. The background shows more stacks of panels and a concrete wall with a metal pipe running horizontally. The floor is a smooth, light-colored concrete.

Social

Troldtekt is its employees and they are the source of our passion. They ensure we can deliver acoustic solutions that contribute to a healthy indoor climate every single day. That's why we focus on offering a safe, secure and educational working environment.



Social

This section addresses issues within the following ESRS standards:

- S1** Own workforce
- S2** Workers in the value chain
- S3** Affected communities
- S4** Consumers and end users

“
Creating a safer working environment without occupational accidents and near-misses must be part of our culture.”

Troldtekt as a safe and attractive workplace

We have high ambitions in terms of sustainability, which for us are also about creating a healthy, safe workplace for all our employees. Safety is paramount in a manufacturing company and is an area of constant focus for Troldtekt. For the same reason, we recruited Janet Fredensborg as our Health & Safety Coordinator in 2023, and her job involves systemising our safety work and ensuring that measures and guidelines are given the right level of visibility.

Creating a safe working environment without occupational accidents or near-misses must be part of our culture – and that calls for continuous training, visibility and, not least, perseverance. Everyone agrees that safety has the highest priority, but only by incorporating safe habits into our routines can we live up to our ambitions.

Elevating safety awareness included a safety course at Dansk Metal for our three health and safety representatives in 2023, along with a systematic review and risk assessment of all processes and work areas, internal campaigns and weekly safety postings on the intranet, as well as focus on correct and ongoing reporting of safety observations and near-misses.

Enhanced training and development

Troldtekt attaches great importance to the training of our employees – because we want to be an attractive workplace with good development opportunities and because we want to be the best specialists in our field.

As we have employees with many different educational backgrounds, it can be a complex task to offer the right framework and opportunities for everyone. We have therefore appointed a new People & Development Manager, Line Sakstrup, who will set the framework for professional development in the future. In line with our continued growth, we will need even more specialist knowledge and higher qualifications in a number of areas in parallel with more management training, as good management is essential for employee satisfaction and company cohesion.

We set up a new training committee in 2023 that will initially focus on the hourly-paid personnel at our factory in Troldhede in particular. Factory Manager Orla Jepsen and CEO Michael Heeager Nystrup are among the five members of the committee.

Conditions of employment

Employee conditions are rooted in Troldekt's personnel policy, in our works council (SU) and in our occupational health and safety committee (AMO). Employees are represented by trades union representatives, who ensure they are kept informed on an ongoing basis about their conditions and rights. Troldekt adheres to the Confederation of Danish Industry's current collective agreement, provides free workwear, the possibility of flexible working hours as well as health insurance for all interested employees.

With regard to salary, working hours and conditions for sick leave, Troldekt offers better conditions than those stipulated in collective agreements.

We attach importance to being an inclusive workplace, where we also make room for our colleagues engaged on a flexible basis or who otherwise need more considerate working conditions.

Troldekt's Code of Conduct

In 2023, we implemented a new Code of Conduct, which forms the framework for our ethical commitments. Our Code of Conduct applies to all employees and represents core values such as honesty, integrity and compliance with the law.

Although some of the values and principles may seem self-evident to colleagues at Troldekt, it is important that we as a business have a clear position.

The five core values of our Code of Conduct are:

- > clear, ethical and honest communication about the business
- > compliance with all applicable legislation
- > respect for the safety and well-being of employees
- > protection of the Group's assets
- > continued commitment to a more sustainable future.

A positive partner for the local area

Our factory in Troldehede is a major employer for the town. That also means it plays a major role, and given our ambition for growth, that role is only expected to increase in the coming years.

We attach great importance to good dialogue with our neighbours and work continuously to eliminate or reduce any inconvenience we may cause them. In recent years, for example, we have spent a very large sum of money on reducing the amount of noise, dust and particles.

We want to make Troldehede an attractive place to live, which also helps us to bring new employees to the area. That's why we continuously support the life and development of the town. Recent years have seen us do so through support for the establishment of a new recreational ground and sponsorship of the town's sports centre.

Good acoustics are part of a healthier indoor climate

In collaboration with our employees, we defined a purpose for Troldekt as a company in 2023. In addition to engaging internally, that purpose clearly encapsulates the role our solutions can play for end users: "We want to harness the benefits of good acoustics to create a healthy indoor climate with passion for people and the planet."

Acoustics and indoor climate have a major impact on people's well-being and comfort. As we spend most of our time indoors, we need healthy buildings.

“

We attach great importance to good dialogue with our neighbours and work continuously to eliminate or reduce any inconvenience we may cause them.

“ Being able to realise our ambitions requires dedicated resources. That's why we created two new positions in this area in 2023.

Troldtekt acoustic panels are widely used– in schools, childcare institutions, offices, swimming pools, sports centres, restaurants and private homes – precisely to ensure a healthy indoor climate with good acoustics. The most important feature of Troldtekt panels is that they effectively absorb sound and provide a short reverberation time.

We also document the material health of our products. As part of Troldtekt's Cradle to Cradle certification, our products have been thoroughly analysed down to 100 ppm (parts per million) and assessed for their impact on people and the environment.

In addition to Cradle to Cradle certification, Troldtekt has achieved certification according to a number of indoor climate standards in Denmark and abroad: Danish Indoor Climate Labelling, Allergy UK, Sundahus, Finnish Indoor Air Association and Building Information Foundation RTS as well as Der Blaue Engel.

Two new profiles to enhance education and the working environment

Troldtekt has high ambitions for the personal development of our employees, and we attach great importance to creating a safe working environment. Being able to realise our ambitions requires dedicated resources. That's why we created two new positions in this area in 2023.

In November, we welcomed Janet Fredensborg as Health & Safety Coordinator. Janet is a trained occupational therapist and has 15 years of experience in the field of health and safety with manufacturing companies. She brings her experience to Troldtekt's organisation, where she will work for a healthy and safe working environment for everyone. Among other things, she now heads our Safety Committee.

At the turn of 2023-24, Line Sakstrup took up the position of Head of People & Development. She comes from the tech world, where she worked with organisational and employee development. Line was recruited to create the optimal framework for employee training and development, so that we continue to be an attractive workplace with the right specialist skills.



Janet Fredensborg
Health & Safety Coordinator



Line Sakstrup
Head of People & Development

We raised the bar for our working environment in 2023

Safety training, risk assessments and the appointment of a new Health & Safety coordinator are some of the initiatives that will improve and systematise the working environment at Troldekt.

Safety in the workplace has the highest priority, and one accident is always one too many. There were 18 work-related accidents at Troldekt in 2023, of which nine resulted in absence. That's too many when the goal is zero.

To achieve that goal, we need to work proactively with safety, and 2023 was the year in which we focused on health and safety work – well supported by Kingspan's standards and tools.

At the end of 2023, we started a targeted campaign kicked off with dedicated resources in the health and safety area through the appointment of Janet Fredensborg as Health & Safety Coordinator. Several other initiatives were also launched during the year – some of which continued into 2024.

Initiatives in 2023 to prevent occupational accidents:

- › Troldekt's three health and safety representatives at the factory in Troldekte attended a 12-day safety course at Dansk Metal and are now even better equipped to work on all the ambitious projects we have launched.
- › A systematic review and risk assessment of all our processes and workplaces is in progress in cooperation with operators in those areas, management and our internal health and safety organisation.
- › Every month, we run internal micro-campaigns that focus on a current theme regarding safety.
- › We put weekly safety postings on the intranet to create awareness and ongoing focus on current topics about safety.
- › Safety inspections take place in all departments and on all shifts twice a year.
- › We focus on ongoing reporting of safety observations and near-misses.

In the event of an employee suffering an accident, the most important thing is to take good care of the employee in question. Among other things, the accident must be reported to our insurance company and the authorities in good time, to ensure they are taken care of in the event of complications. Secondly, it is important that we learn from the accident to prevent reoccurrence.



Janet Fredensborg talk about safety with Area Coordinator and AMO representative Christian Berntsen Weyergang.

Our focus on safety continues in 2024

At the end of 2023, we started using an effective analysis tool to help get to the bottom of accidents, and we will continue to use this tool in 2024. It involves thorough accident investigation, where we work together to find all the root causes of the accident. The analysis forms the basis of our work with corrective and preventive actions that must be implemented to prevent reoccurrence.

We are also planning to achieve ISO 45001 certification for health and safety management in 2024.

Apprentices nominated Troldekt for the West Jutland apprenticeship award



In February 2024, Industrial Technology Centre (ITC) in Lem awarded the prize of 'Apprenticeship of the Year in the Metal Industry in Ringkøbing-Skjern Municipality 2023'. Troldekt was among the three companies nominated for the title –

and the nomination for the award came from Troldekt's two apprentice metalworkers in Troldekte.

"There were many good reasons for nominating Troldekte: Good working conditions, interesting work, good colleagues, and we are respected as equals. We are very happy to be here and proud of our apprenticeship," say Stefan Susnea and Ben William Seymour, both apprentice metalworkers at the factory in Troldekte.

This was the first such award ceremony, and even though Troldekte did not win this time, it is still recognition for the workforce at Troldekte, and the nomination is also highly significant for the future employment of apprentices," explains Hans Jakobsen, Maintenance Manager in Production.

"Praise and recognition go particularly to all the colleagues who make Troldekte a good workplace and a good place to learn a craft on a daily basis," he adds.

New committee to ensure the right training

A fully automated factory means greater need for specialist knowledge. Troldekte also wants to be an attractive workplace where employees have the opportunity to develop through training. For that reason, we set up a new training committee in 2023, which will initially focus on our production facilities in Troldekte.

"Production represents the highest area of complexity at Troldekte, and is where we have the largest group of employees. So, it's only natural that we start by identifying skills needs here. We can use that data to continuously

compile a course catalogue that our employees can choose from," says CEO Michael Heeager Nystrup.

He is one of the five members of the committee, which includes three employees from production and two of Troldekte's managers.

According to Nystrup, the committee's work involves choosing from the many courses already offered by the Confederation of Danish Industry and making the relevant courses available at Troldekte. Individual and more comprehensive training plans for selected specialist functions can also be added.

Financial support for Troldekte's sports centre

The sports centre in Troldekte brings together all age groups for sports, exercise and fosters community spirit. But because it's self-financing, it receives no municipal subsidies. Running costs have increased in recent years threatening its existence. That's why Troldekte agreed to a three-year sponsorship of the centre's operations in 2022.

As Troldekte has its production in Troldekte and wants to contribute to an attractive urban environment, it was natural to enter into a sponsorship agreement with the centre as a natural meeting place for the locals. As part of the agreement, the centre has changed its name to Troldekte Hallen. Together with a number of smaller sponsorships from other local companies, the agreement helps to close part of the gap in the centre's finances.



Troldtekt panels were given new life at 'Byggefestival' (construction festival) in Ebeltoft

In spring 2023, Troldtekt decided to raffle off 200 square metres of acoustic panels, including Troldtekt v-line design solutions, for a good cause. The winner was the Byggefestival in Ebeltoft, held on 10-16 July 2023. The acoustic panels were mainly used for the festival's stage area. Festival guests could also use the remaining panels in their own construction projects.

This spring, the panels were part of Troldtekt's exhibition stand at BYGGERI'23 in Fredericia. Anyone could submit a project and describe how they wanted to reuse the acoustic panels. Among the many applications, the choice fell on the festival in Ebeltoft.



The festival will move to Als in 2024 and cooperate with the Centre for Sustainable Development Goals. Several of the Troldtekt acoustic panels will once again be part of the design of the stage area.

Less noise at Videbæk Skytteforening (shooting club)



Troldtekt wants to support associations in our local area. One example is Videbæk Skytteforening, which asked if we had any acoustic panels with factory defects. "Troldtekt donated 275 square metres of panels in 2023, and even though functionality was more important than aesthetics, the result after installation is impressive," says Niels Hybholt, the club president.

"We installed the last Troldtekt panels at the shooting range in September. There's no doubt they have significantly improved acoustics and reduced noise levels. The installation was tested during a weekend when we held the Videbæk Tournament and had the ranges filled with shooters from morning to evening. Using the shooting range has also become significantly more pleasant.

Troldtekt sponsors student competition at SCHULBAU



The internationally renowned SCHULBAU trade fairs focus on future school buildings, holding events all over Germany. In connection with SCHULBAU in Hamburg, a student competition was held again in 2023 – with Troldtekt as the main sponsor.

Teams were put together with students from across the bachelor's degree programmes in design and building construction at Hafen City University Hamburg as well as education science and school research at Hamburg University. The students participating in the interdisciplinary cooperation had to develop a school project that could potentially be realised. Sponsorship of the student competition is an example of how Troldtekt wants to support the multidisciplinary training of young construction consultants and give them the opportunity to work on a "real" project during their education.

Colleagues in flex jobs create value for us all

Troldtekt employs five flex workers. This is part of Troldtekt's responsibility in the labour market and enriches everyday life in our company.



Taking responsibility for people with special needs is part of Troldtekt's values, which is why we have a total of five employees employed on flex job schemes. One of them is Heidi Larsen, employed as a service and office assistant 15 hours a week. Heidi has worked at Troldtekt for 15 years, becoming indispensable in Troldhede, where she handles a wide range of tasks.

Among other things, she is responsible for purchasing selected products and cleaning agents for production, as well as office furniture and accessories for the coffee machines. She also keeps track of when to buy gifts for colleagues' commemorative occasions.

"I'm really happy to be employed by Troldtekt. Being able to be part of the labour market despite health problems means a lot to me. As my pain gets worse during the day, it's best if my working hours are in the morning, so being able to schedule my working hours to suit my day means a lot to me," says Heidi.

Heidi also distributes fresh fruit and carrots for the personnel, and makes sure that the company lunch programme runs smoothly. She will also step in if assistance is needed to organise catering for major events at the factory.

"I feel lucky because I'm part of a good workplace and have great colleagues," says Heidi.

Part of taking social responsibility

Lise Kirkegaard, Supply Chain Manager, is responsible for flex workers at Troldtekt. She says that their employment is closely linked to one of our values being responsibility.

"Hiring flex workers means we contribute to ensuring inclusion in the labour market. We have a number of flex workers employed in both administration and production, which creates great value for us. They undertake a wide range of tasks and help move Troldtekt in the right direction. We also ensure that Troldtekt remains an accommodating workplace that can embrace many different people," she says.



SITE SAFETY STARTS HERE



Speed limit



No private passengers



No smoking

Data: Social

	2021	2022	2023
Industrial accidents (with absence)	6		
Industrial accidents (with and without absence)		11	18 *
Accident frequency (accidents with absence) Number of industrial accidents/1 million hours worked	25	42*	60
Absence due to illness, total (%)	5.89%	7.3%	7.68% **
Gender distribution of senior employees	29% women / 71% men	29% women / 71% men	29% women / 71% men

* Troldekt changed its calculation method in 2022. We used to only record accidents that resulted in absence within 24 hours of the accident in line with standard Danish practice. The figure now includes all accidents, in line with international practice, such as the UN Global Compact's new registration form.

** Data includes the hourly-paid employees at the factory in Troldekte, which constitute the majority of the workforce at Troldekte A/S. Absence due to illness among salaried employees is not registered in full, and we have therefore chosen not to include this data in the overview. The increase in absence due to illness is due to more employees being on long-term sick leave. Troldekte aims to retain employees affected by long-term illness, which is reflected in our sick leave figures.



Governance

Being responsible is a core value for Trolldtekt. We attach great importance to being transparent about our strategic work with sustainability. This is reflected in a number of policies and certifications.



Governance

This section addresses issues within the following ESRS standards:

G1 Business Conduct

“ ISO certifications provide us with thorough documentation of all core processes in our company

Compliance as a cornerstone

Troldtekt has been part of the Kingspan Group since 2022, and 2023 was our first full year in the Group. That also means we are now covered by Kingspan's global compliance programme and internal audit system. These apply to product compliance, marketing integrity, anti-corruption and several other factors.

We conducted internal audits in 2023 under the auspices of the Kingspan Insulation division, which Troldtekt is part of, and the overall Kingspan Group. Audits help us implement improvements across Troldtekt's functions.

In addition to Kingspan's own programmes, we started the process of achieving ISO certifications in accordance with ISO 9001 (quality management) and ISO 45001 (work environment management) standards in 2023. We expect to achieve both in 2024.

ISO certifications provide us with thorough documentation of all core processes in our company, including established Standard Operating Procedures for our production processes. They will serve as a means of continuous improvement in the areas where we identify potential – while reducing the risk of error. They will also give us a stronger foundation when we implement changes in products or processes.

Environmental policies

Troldtekt's environmental policies are rooted in our work with the Cradle to Cradle design concept. Our entire range of Troldtekt cement-bonded wood wool products in natural and standard colours are Cradle to Cradle Certified at gold level. This certification is an international type III standard, which involves third-party verification and declaration of data.

Under the auspices of Cradle to Cradle, we fulfil requirements on climate change, water, forests and biodiversity management, air pollution, upcycling and resource consumption. It also ensures that we must constantly improve in these areas, and in 2023 we achieved re-certification at gold level.

For the time being, Troldekt has chosen to certify three of the five categories (Material Health, Renewable Energy and Carbon Management) according to the new and more demanding version 4.0, while we are still certified according to version 3.1 in the other two categories (Material Reutilization and Social Fairness).

CSR policy

Employee and human rights are rooted in Troldekt's personnel policy, in our works council (SU) and in our occupational health and safety committee (AMO).

When it comes to wages, working hours and circumstances during illness, we offer conditions that exceed the norm and the applicable collective agreements. We set up a training committee in 2023 to raise awareness of the opportunities for voluntary supplementary training for our hourly-paid employees.

Anti-corruption policy

At Troldekt, we have clear guidelines for anti-corruption: We apply zero tolerance for any form of corruption, bribery or fraud. We do not permit accepting or giving bribes in any form for the purpose of obtaining commercial or personal advantage.

Our Anti-Corruption Policy includes a list of examples of specific activities we do not tolerate. The list covers everything from false invoices and misleading financial reporting to misuse of customer data and inadequate competitive criteria in connection with the procurement of services.

Nor is it permitted to make contributions to political organisations – or enter into sponsorships for commercial gain. There are also limits on hosting events and on gifts that employees either give or receive.

All managers at Troldekt have signed the anti-corruption policy and contributed to disseminating the policy internally so that all employees are aware of it.

Policies for conduct and integrity

In addition to the anti-corruption policy, we have a Code of Conduct to ensure that the conduct of employees and suppliers is legally and ethically correct – in line with the Group's values.

The Code of Conduct guides employees in complying with the Group's values, making the right decisions and speaking up if they experience violations of the Code of Conduct.

On page 33 of this report, you can read about the core values that form the basis of our Code of Conduct.

All Troldekt employees are familiar with the Code of Conduct.

Supplier relationship policies

In continuation of our Code of Conduct, we have implemented a Supplier policy, which forms the basis of collaboration with our suppliers. All our major suppliers received and accepted the Supplier policy in 2023, which covers four major areas:

“

We apply zero tolerance for any form of corruption, bribery or fraud.

“ Troldekt is not only ambitious on our own behalf, we also want to play an active role in the development of sustainability and the circular economy throughout construction.

- > business integrity
- > ethical practices for employment
- > anti-bribery and corruption
- > environmental responsibility

Danish forestry operations from which we receive Norway spruce for production are also subject to the requirements for environmental and working conditions that apply in the FSC and/or PEFC certification schemes.

Influence in industry organisations

Troldekt is not only ambitious on our own behalf, we also want to play an active role in the development of sustainability and the circular economy throughout construction. That's why we actively participate in a number of councils, organisations and associations that help set the industry's agenda.

Our memberships include:

- > Green Building Council Denmark's special committee for material content and climate impact
- > DI Byggeri
- > DI's special building policy committee
- > DBI – Danish Institute of Fire and Security Technology
- > Danish Standards committee for the circular economy in construction (S-878)
- > German Sustainable Building Council (DGNB)

Whistleblower scheme for reporting improper behaviour

Kingspan has a whistleblower scheme through which all employees – anonymously and in their local language – can contact us if they suspect violations of the Code of Conduct, including the anti-corruption guidelines.

The scheme is available via Kingspan's website, from where the employee will be redirected to an external and independent function. Reports can be submitted by phone or in writing.

ISO certifications systemise everyday life

Troldekt began the extensive process of achieving ISO 9001 and ISO 45001 certifications in 2023. They will give us a solid foundation to stand on when we need to improve our processes for further growth in the coming years.

The larger a company becomes, the greater the benefits optimising everyday processes bring. But the risk of errors having consequences increases. With a number of ISO certifications, Troldekt will systemise all core processes and thus build a solid foundation for future improvements.

"We are on an international growth trajectory that will result in a significant increase in the number of employees. We also have plans for a new factory and to bring new products to market efficiently. That's why it's vital that all our processes are documented and that we have addressed the potential for improvement," says Anne Dorthe Kloster, Executive Assistant at Troldekt.

"Many of our colleagues have worked at Troldekt for many years, and it's essential that we translate their specialist knowledge into written procedures," she continues.

Major certifications in 2024

The process of attaining ISO certifications began in 2023, and we plan to have the two major certifications ISO 9001 and ISO 45001 by as early as 2024.

- > ISO 9001 is the most comprehensive and constitutes a broad quality management system.
- > ISO 45001 has a specific focus on health and safety management.

Once these two are in place, Troldekt will be aiming for further certifications within product compliance, environment and energy. The process of certification is extensive and involves all of the company's departments.



"Everyone has to pull their weight and each department has to describe their processes via flowcharts, after which that documentation will be kept updated in an online quality management system. We need to spot risks and opportunities for improvement along the way, so that we can continue to work with them and continuously improve," says Kloster.

Taking a look in the mirror

The greatest risks and opportunities can lie where processes apply across our departments. We will therefore conduct internal audits in 2024, and Kingspan will also visit to carry out an audit.

"The internal audits are a way of checking that we do what we say. For example, when Sales describe processes for order processing, it involves other departments in the company. So, before the actual certification, we need to ensure that our process descriptions are actually put into practice," says Kloster.

The Chartered Institution of Building Services Engineers (CIBSE) acts as an

independent party for the actual ISO certifications. CIBSE has extensive experience in certifying other manufacturing companies in the Kingspan Group.

Pilot project provided valuable experience

When Troldekt started working with ISO certifications in 2023, we did so with a pilot project in our Purchasing Department. The project taught us important lessons that have now been transferred to the rest of the company. For example, we gained an overview of the architecture behind the certifications and the system in which we have to document our processes.

Anne Dorthe Kloster explains:

"Subsequently, all our functions received an introduction to the purpose, mindset and methodology behind ISO certification. Each department is then allowed to work on describing their own processes. The approach differs from department to department – for example, in production we need manuals for the fixed processes. The team leaders and machine operators have all been involved."

Audits provide access to knowledge from over 200 factories

When Kingspan's audit teams come to Troldekt, the purpose is not to tick boxes and apply rigid control. The Group's internal compliance programme must provide the means for making improvements.

Troldekt's CEO, Michael Heeager Nystrup, talks about audits and compliance without using words such as "control", "checklists" and "ticks". For him, the focus is on improvement. And when auditors from Kingspan come to our factory in Troldekte or the head office in Tranbjerg they bring with them the right tools to ensure improvement.

"The compliance programme is a natural way of working for Kingspan. It also means that the internal audit teams have many years of experience from the Group's more than 200 production sites in more than 80 countries," says Nystrup.

"We can see that the Kingspan companies that have the best control over compliance are also the most efficient and make the fewest errors in everything from production and packaging of goods to approvals and documentation. Everyone in the Group must be in control of their processes, skills, raw materials and products," he continues.

Learning and transparency

2023 was Troldekt's first full year as part of the Kingspan Group. The year included internal audits in areas such as finance, marketing and general product compliance.

"There are high demands on the skills of everyone who carries out audits at Kingspan, something we can feel when they visit us. They are talented people who are good at teaching others, giving feedback and creating transparency. It's been beneficial for us to get an assessment of where we are already doing well and where we can improve," says Nystrup.

Audits are conducted at two levels in Kingspan. By the individual divisions – Troldekt belongs to Kingspan Insulation – and at the overall Group level.

The means to be among the best

The compliance programme is a new way of working for Troldekt's employees and primary suppliers. In short, it's about managing changes in products and processes. But so many audits also represent a major cultural change.



Audits provide tools to be among the very best - and to have complete control over processes, skills, raw materials and products.

"It's important to remember that the purpose is not auditing just for the sake of it. It's about gaining the means to be among the very best in the industry globally," says Nystrup, and adds:

"Our customers, on the other hand, will not notice a big difference. They just need to continue to enjoy the quality and service that Troldekt stands for."



Data: Governance

	2021	2022	2023
Recorded cases of anti-corruption and bribery	0	0	0

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About Troldtekt

Troldtekt acoustic solutions for ceilings and walls ensure good acoustics, effective fire protection and contribute to a healthy indoor climate. The main product is Troldtekt acoustic panels made from natural wood as well as cement extracted from Danish mineral resources. All Troldtekt cement-bonded wood wool products in natural and standard colours are Cradle to Cradle certified in the gold category. Troldtekt acoustic panels are the obvious choice for ceilings in most types of buildings – from offices and commercial buildings to schools, institutions, swimming pools, sports centres and private homes. Troldtekt A/S was founded in 1855 as a trading company in Aarhus. Since 1935, the company has produced Troldtekt cement-bonded wood wool in Troldhede in western Jutland.

Certifications

