



# Team Thomas Sustainability Report 2022



## Introduction

At Thomas Concrete Group, care for people and the environment is crucial. That's why sustainability is and has been important to Team Thomas for a long time – a fact that is best illustrated in our Group's Mission statement "To be the closest to customers and together actively contribute to building a sustainable society". Our company has highly competent and committed employees who develop and produce ready-mixed and pre-casted concrete. We care and want to make a difference.

In many ways, 2022 did not become the year most people anticipated. In February the Russian invasion of Ukraine started and the situation in the world became significantly more uncertain. The trend of increasing inflation and higher interest rates escalated and particularly in Europe the energy situation became a challenge. At the same time the consequences of COVID-19 pandemic continued to have an impact on societies, supply chains and not the least people.

Nevertheless, Team Thomas has during the year had a tireless focus on the ambition of being the leader in terms of offering sustainable products and services. We have selectively given priority to activities where we can contribute the most. Since cement stands for more than 90 percent of the CO<sub>2</sub> footprint of concrete, we have worked hard on developing and delivering more products with alternative binders, reducing our usage of cement. Our share of delivered THOMAGREEN® products has increased, but still there is a long way to go. Together with architects, developers, contractors, material suppliers and others, we can become much better in the construction industry.

Concrete is an amazing and sustainable construction material. It is natural, beautiful, and creative. Unlike most other material being used that might only last fifty years, concrete can be described as a symbol of sustainability. After all, what other buildings stand for more than 2,000 years, such as the ancient concrete buildings in Rome?

Together with all other companies in the construction industry, we have a great responsibility to be transparent and honest in our efforts to continuously improve sustainability performance. Every material used in construction has its own merits. Hence, it's important to always look at the facts and proven data when making a choice.

I'm proud of what our Group has done in the area of sustainability, but every day we have to actively continue working to improve. Hopefully, you'll find this report inspiring, and a good way to share with others what we do and what matters most at Thomas Concrete Group.

### **Hans Karlander**

CEO and President

Thomas Concrete Group AB





## In this report you will find:

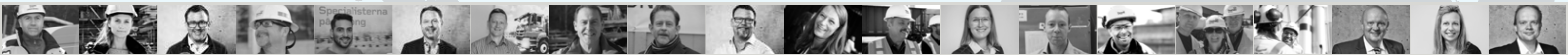
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# This is us



*"We are Team Thomas, small enough to be quick and flexible, big enough to be efficient and professional"*

– Hans Karlander



We are an independent, family owned Group producing and distributing high quality ready-mixed concrete and precast concrete elements to commercial and private customers. Our success is built on the added value we offer in exceptional personal service and technical competence. Our entire Group has a strong focus on environmental responsibility and employee welfare.

We are Thomas Concrete Group  
– The Concrete Specialists.

**10.5 billion SEK in consolidated turnover**

(approx 1,050 million USD, 950 million EUR)

**165 concrete plants**

**4 plants for precast elements (SE)**

**4 import terminals for binders and other raw materials (SE)**

**1 accredited central testing laboratory (SE)**

**3 national testing laboratories (DE, PL, US)**

**5.9 million m<sup>3</sup> of concrete produced**

**5 countries**

**2,200 employees**

  
**Thomas**<sup>®</sup>  
CONCRETE GROUP



# Our Strategic Platform

## Our culture

We are a committed team...

- that cares and acts in the best interest of our customers, colleagues and company.
- that constantly seeks possibilities, having high focus on profit and results.
- that is responsible and alert, always striving to be the best.
- that supports each other, sharing energy and having fun.

## Our vision

To be perceived as being the best in our industry.

Best in terms of:

- Customer service
- Safety
- Quality
- Mindset
- Way of working
- Financial results

## It is all about us

Our customers determine our future

## Our heritage

We are an independent, family-owned Swedish company,

with high entrepreneurial and local spirit,

and with reliable, persistent long term thinking.

## Our mission

To be the closest to the customers and together actively contribute to building a sustainable society.

## Our customer offer

High quality concrete, knowledge and reliable services provided by a committed team.

- On time
- At site
- At agreed price





## Concrete is Essential for Building Sustainable Societies

We live in a rapidly developing world where urbanization is at the forefront. There already is, and will continue to be, an increasingly growing need for infrastructure, tunnels, bridges, power plants, homes, schools, hospitals, and office buildings. Concrete is essential for building resilient and sustainable societies. At the same time, all building materials used today have an environmental impact. This creates the challenge of balancing economic growth, social responsibility, and environmental protection.

Determining whether a building material is sustainable requires the economic, social, and environmental aspects that the material entails over the construction's entire life cycle are evaluated and weighed together. From a life cycle perspective, concrete meets high sustainability demands. Concrete is strong, durable, fire resistant, affordable, and locally available. A concrete structure has a service life that exceeds 100 years, during which it requires minimal maintenance. Concrete has many properties that serve as prerequisites for sustainable construction.

At Thomas Concrete Group, we believe that sustainability creates value for our business, our employees, our customers, our owners, and society. As The Concrete Specialists, we are determined to maximize this value and committed to continuously minimize the negative impact throughout the life cycle of concrete.



# Let's together explore the huge potential of low carbon concrete



Building with low carbon concrete is the single largest measure to reduce the construction industry's climate impact. To facilitate the choice and use of low carbon concrete, we continuously develop Our Green Offer. At the same time, our research and development work continue towards achieving carbon neutral concrete construction.

Looking at the different stages in a construction project: planning, design, procurement, construction, operation, and maintenance, the earlier in the project the higher potential for reducing the CO<sub>2</sub> emissions. Effective collaboration between all actors in the design stage, including concrete manufactures, is required for the industry climate transition. In all our markets, we are putting focus on and increasing our dialogue with developers, designers, architects, and contractors to accelerate the use of low carbon concrete and to support the industry's transition.

During 2022, our KPIs remained on a stable level. With extra effort and focus on safety in 2022, our safety KPI is back on a downward trend after a slight increase in 2021.

I am pleased to share our Sustainability Report 2022 with you. It presents our focus areas and KPIs and shows concrete examples of what we have done in 2022 to contribute to building a sustainable society. This year we have extended the section on Our Green Offer.

**Karin Gäbel**  
Sustainability Manager  
Thomas Concrete Group AB

## Sustainability Governance

Sustainability is closely linked to Thomas Concrete Group's core business through our mission, and we integrate sustainability into all aspects of our business. Our overall objective is to create value for all our stakeholders, both by generating and maintaining the company's economic value and by building a sustainable society with added environmental and social value. Our Strategic Development Committee, consisting of the Group's top management, ensure that the sustainability agenda, long-term targets, and policies are aligned with the company's strategic framework.

To drive and coordinate our sustainability agenda and to guarantee a consistent approach across our Group, we have several Group-wide committees and networks. The Sustainability Work Group focuses on environmental sustainability, the Safety Council on safety and risk-elimination, the HR Network on employees and their well-being, the Technical Meetings on research and development, and the International Marketing and Communications Meetings on sustainability communication.

Thomas Concrete Group has set specific sustainability objectives, KPIs, in areas deemed highly relevant for our overall strategy. The KPIs provide

clear targets and make it easy to track our progress and development. To ensure that the targets are met, Thomas Concrete Group also has several policies with principles to guide decisions. These include a Safety Policy, Environmental Policy, Finance Policy, and a Purchasing Policy.

Management teams in our subsidiaries ensure that development projects, target setting, and reporting processes are aligned with the Group's sustainability agenda and adapted to local business and market conditions. They also report on local sustainability performance and progress.

Our Code of Conduct describes the expected behavior of every employee in interaction with colleagues, customers, local communities, and other stakeholders. The Code of Conduct serves as a baseline for personnel in their day-to-day work and is supported by education, routines, and instructions. All members of Team Thomas must adhere to the Code of Conduct.

## Our ambition

To be an industry leader in providing sustainable products and services.

# Supporting Global Initiatives

## Sustainable Development Goals

Thomas Concrete Group supports the United Nations' Sustainable Development Goals and we focus on the goals where we can contribute the most. Throughout this report we have visualized how our actions are connected to the different goals.



## Green Taxonomy

Thomas Concrete Group views EU's green taxonomy as a driving force, an important step, and an important tool in enabling the climate transition.



## Climate Change

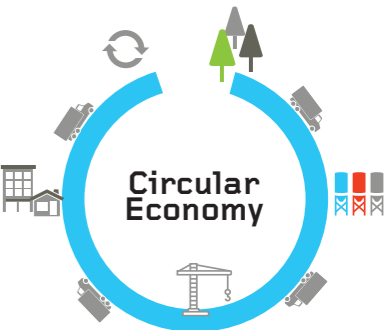
Thomas Concrete Group supports the Paris Agreement. We are working towards a vision of zero carbon concrete to contribute to the construction industry's climate transition.



PARIS2015  
UN CLIMATE CHANGE CONFERENCE  
COP21·CMP11

## Circular Economy

Buildings and infrastructure made of concrete are built to last. With an average service life that exceeds 100 years, concrete is an important building material in achieving circularity. Resource efficiency, reduced and circular use of materials, and minimized waste are important aspects of Thomas Concrete Group's contribution to a circular economy.



## Digitalization

At Thomas Concrete Group, we firmly believe that digitalization of the construction industry is key to finding more efficient ways of working. Better transparency and real time data will help us make more sustainable choices in the future.





# Balancing the Pillars of Sustainability

To successfully achieve our sustainable development commitments, we base our work in the three pillars of sustainability: society, environment, and economy. By focusing our efforts on these areas, we can assure our contributions embody the entire sustainability spectrum.

Due to its characteristics, concrete provides strong, durable and safe constructions that are energy efficient and require a minimum need for maintenance during their lifetime. Concrete is locally produced. The environmental footprint of concrete can today be reduced by 50 percent, with even greater potential moving forward. Besides, concrete is a material that can be used long term – and has been so. Concrete structures that were built over 2000 years ago are still functional today. On top of this, it is 100 percent recyclable.

Concrete is literally the foundation on which we build our sustainable societies. Therefore, concrete is, at its core, a sustainable material.



# Our Focus Areas and KPIs

## Safety

We put safety first and engage employees in the importance of it. All employees are educated in safety procedures in order to stay safe and avoid risks at our plants and at construction sites.

Read more on page 58

LTI (Lost Time Injury)  
**TARGET < 14.25**  
**2025**

**ACTUAL 16.4**  
**2022**      2021   2020  
 16.7   15.2

## Binder optimization

In order to provide low carbon products, we are optimizing the binder content in our ready-mixed concrete. By introducing alternative binders and reducing the content of cement, the climate impact can be reduced significantly.

Read more on page 44

Alternative binders  
**TARGET > 50 %**  
**2025**

**ACTUAL 26 %**  
**2022**      2021   2020  
 27 %   26 %

## Engagement index

We care for the health and well-being of all employees. We aim to become the best in our industry by building a strong Team Thomas.

The survey is conducted every 18 months.

Read more on page 62

EI (Engagement Index)  
**TARGET > 86**  
**2025**

**ACTUAL 83**  
**2022**      2021   2020  
 83   84

## Energy & emissions

We are taking action on reducing our energy consumption in terms of making our production and transportation fleet more energy efficient, and by reducing our fossil fuel dependency.

Read more on page 48

Energy consumption  
 (kWh/m<sup>3</sup>)  
**TARGET < 5**  
**2025**

**ACTUAL 7.9**  
**2022**      2021   2020  
 8.2   7.5

## Economy

In order to have a sustainable development of our company, we need to have a solid base and a profitable business securing the future of the Group.

Read more on page 75

Solvency  
**TARGET > 40 %**  
**2025**

**ACTUAL 46.9 %**  
**2022**      2021   2020  
 48.0 %   47.8 %





Our Green Offer





# Our Green Offer



We have developed Our Green Offer to facilitate the choice and use of low carbon concrete. The offer brings together products, knowledge, and services offered by Thomas Concrete Group, to contribute to sustainable and low carbon concrete construction.

As The Concrete Specialists, Thomas Concrete Group are continuously developing Our Green Offer products and services.



# Products

## THOMAGREEN®

is concrete with a lower CO<sub>2</sub> footprint and with the same high quality, function, and performance as traditional concrete. We achieve this mainly by replacing parts of the cement with alternative binders and by optimizing the amount of binder in the concrete. Admixtures are used to optimize the use of cement and the performance of the concrete while the aggregates are used to improve binder usage, water usage, performance, and environmental footprint. Recycled aggregates can also be used. In addition to using alternative binders, CarbonCure Technology is offered on the US market.

## THOMABLOCs

are casted with residual concrete and are a sustainable way of reusing concrete. The blocs are smooth concrete blocks in a variety of sizes and work like large LEGOs for stacking and interlocking with multiple applications, such as storage bins and security barriers.

# Services

Services are offered across the Group and are developed to complement our sustainable and low carbon products. The services aim to help the customer in choosing the right products. For instance, we assist the customer with concrete optimization regarding strength, alternative binders, and environmental footprint. Different CO<sub>2</sub> savings estimations are also offered. In addition, we offer simulations of heat and strength development of the concrete to foresee necessary actions to be taken at the construction site.

We offer EPDs (Environmental Product Declaration) for products and projects to increase transparency and give our customers and the industry the opportunity to make more sustainable choices. EPD is an official disclosure of the environmental performance of a product or material. The declaration is reviewed by a third party, and later verified and registered in an EPD system.

Additionally we offer digital services, such as My Concrete® portal, digital strength monitoring and forecast of future strength development to support easy and effective use of Our Green Offer.



# Digitalization

Digitalization is closely connected to Our Green Offer as it facilitates and supports our customers in using low carbon products. At Thomas Concrete Group, we believe that the digitalization of the construction industry will be key to finding more efficient ways of working. Better transparency and real time data will help us make more sustainable choices. Therefore, we invest in business development projects and actively seek out new possibilities to create digital services for our customers on our digital platforms.

## Data is key for the journey to sustainability

The massive amount of data collected with sensors and other tests on the performance of our concrete at a vast number of different jobsites under a wide range of conditions will be an invaluable asset for further improvement of the sustainability characteristics of our concrete.

## Further digital services

We are convinced that the need for streamlined services that make it easy for our customers to reduce waste, save time and money, and become more sustainable will continue to grow. We are committed to helping our customers on this journey and are working hard preparing the next launch



## My Concrete®

Our customer portal My Concrete® is our platform for providing improved digital services to our customers. The application facilitates and streamlines order and delivery management, offers real time tracking and push notifications about deliveries, and gives our customers the opportunity to download digital delivery tickets. With the help of My Concrete®, customers can better plan and coordinate their work at construction sites, thus optimizing concrete transportation and placement time.



## Monitoring Maturity with Sensors

Since 2021, we offer an easy to use plug-and-play service that allows our customers to monitor, in real time, the maturity development of their concrete. In-depth information about the maturity progress is sent directly to the My Concrete® portal for our customers to view, and a maturity report is available for download for each measurement. This allows for our customers to better plan their construction schedule, save time and money, and reduce waste.

Real time insights of concrete properties and performance on the jobsite will help the customer take the right actions to ensure quality of the cast and reduce potential energy losses and waste.



## Forecast of future strength development in real time

Since 2021 we are also offering real-time forecasts of future maturity developments. By using AI and weather data, we can provide a forecast of when the concrete will have reached its target strength. In doing so, we help our customers fine-tune their construction schedule and reduce waste, saving both time and money on the jobsite.

Combining local weather data with real time insights and forecasts on concrete maturity also make it easier for our customers to select more sustainable concrete mix designs with a higher content of alternative binders.







# In Practice

## Poland

Thomas Beton in Poland is producing and delivering high volumes of concrete with a large proportion of alternative binders as a standard.

The interest in sustainable construction is continuing to increase in Poland. In 2022, Thomas Beton developed their green offer THOMAGREEN® to support the Polish market's growing demand for low carbon products and solutions. This gives customers the possibility to decrease the environmental footprint which, in turn, enables certifications such as LEED and BREEAM. The products have been positively welcomed by the internal organization and customers.

During 2022, Thomas Beton devoted a lot of time testing concrete with low-emission cement. The tests were mainly carried out in laboratory conditions with some cements new to Thomas Beton and some new to the Polish market. The purpose of these preliminary studies was to test the feasibility of replacing or reducing the use of ordinary Portland cement in infrastructure applications and the results will also provide input for the THOMAGREEN® range of products. Tests with Portland-composite cement, pozzolanic cement, and composite cement have also been conducted.

All THOMAGREEN products use the minimum amount of cement according to what is approved by current Polish standards.

## USA

Thomas Concrete, USA, offers THOMAGREEN® products produced with various alternative binders and CarbonCure™ technology.

During 2022, Our Green Offer has been further developed and defined. An assessment on how THOMAGREEN® performs compared to the newly defined industry baseline has been carried out. The results show that the performance is in line with, or better than, the industry average in all five divisions. Also in 2022, Limestone cement was introduced as a replacement for ordinary Portland cement in some markets. This replacement reduces the CO<sub>2</sub> footprint of the concrete without impacting performance or quality.

Raising awareness of the potential of low carbon concrete and Our Green Offer has been an elevated focus point for both internal training and external customer events. The foundation for this includes a structured, goal-oriented program of internal education on Our Green Offer, aiming to increase knowledge of how to communicate the offer to the market.

EPDs have become increasingly important. Currently, 535 product specific EPDs are readily available and in 2022 alone, 87 new EPDs were generated. Each year the EPDs are updated internally and verified by a third party for recertification.

THOMABLOC® continues to be an important product and in total 15,415 blocks were cast during the year.





## Sweden

THOMAGRÖN® is Thomas Betong's branded green offer in Sweden that includes product selections based on construction design. This offer has yielded a reduction in carbon footprint by up to 50 percent.

Thomas Betong has continued to develop the offer of low carbon precast concrete elements and now delivers several low carbon precast products. Further, Thomas Betong has continued to cast THOMABLOC as a way of recycling concrete. During 2022, 1,855 blocs were cast at the ready mixed concrete plants and a decision was made that casting blocs will be tested also at the precast plants.

As EPDs have become increasingly important, Thomas Betong has continued to increase efforts in producing EPDs for a growing number of ready-mixed and precast products. In 2022, Thomas Betong started producing EPDs using the industry EPD tool developed by a research institute. At the end of 2022, Thomas Betong offered general EPDs for 9 ready-mixed products and 8 precast products.

During 2022, Thomas Betong helped customers simulate strength and temperature development before casting. The simulations held forecasted weather and project specific data, which enabled the customer to foresee the performance of the concrete and to take actions to ensure the quality of the cast. During curing, the concrete's actual maturity development was monitored in real time with sensors and the results were provided to the customers via My Concrete®.

In March 2022, a new website, [klimatförbättradbetong.guide](https://www.klimatforbattbetong.guide), ([lowcarbonconcrete.guide](https://www.lowcarbonconcrete.guide)) was launched in Sweden. An important tool for Swedish customers and society at large to raise awareness about low carbon concrete and what enormous, untapped potential it has to reduce global CO<sub>2</sub> emissions.

## Germany

Thomas Beton, Germany, offers concrete with CSC-certificates to enable the customer to receive credits in green building rating systems such as BREEAM, DGNB, and Envision. The certification is provided by the Concrete Sustainability Council and has four levels. During the autumn of 2022, Thomas Beton re-certified plants, and in addition, another 6 plants were certified for the first time. In total, 15 plants are currently certified.

In 2022, THOMAGREEN® was launched to support the German market's growing demand for low carbon products and solutions. THOMAGREEN® has four levels providing customers additional values, aligned with the CSC levels. Within THOMAGREEN® BRONZE, use of hard coal fly ash as an alternative binder is guaranteed and the customer gets an in-house verified EPD. Within THOMAGREEN® SILVER, the lowest carbon footprint concrete is provided together with an in-house verified EPD. Within THOMAGREEN® GOLD, an external verified EPD is added.

To meet the growing interest in and demand of EPDs, Thomas Beton started using the EPD tool of GCCA (Global cement and concrete association). With this tool, official EPDs can be produced in-house and internally or externally verified. During 2022, EPDs were created and verified for 17 products and the work will continue in 2023.

Thomas Beton continued to work with recycling and had the first projects with recycled aggregates in the concrete as part of THOMAGREEN® in 2022. Also, 1,240 THOMABLOCs were produced.







## Sköndalsvillan Tyresö, Sweden

**Product:**  
Thomagrön® and Thomagarage Grön

**Customer:**  
Oljibe via sub-contractor Linotol

**Volume:**  
470 m<sup>3</sup>

**Savings:**  
30 tonnes CO<sub>2</sub> prevented

Foto: Stora Sköndal

## Gdańska Apartments Gdańsk, Poland

**Product:**  
THOMACRYSTAL

**Customer:**  
BAUHAUS Sp. z o.o.

**Volume:**  
2,388 m<sup>3</sup>

**Savings:**  
211 tonnes CO<sub>2</sub> prevented



## Überseequartier E2S-E2N Hamburg, Germany

**Product:**  
THOMAGREEN® Silver

**Customer:**  
Köthenbürger HTI

**Volume:**  
2,600 m<sup>3</sup> THOMAGREEN® Silver  
out of 2,800 m<sup>3</sup> in total

**Savings:**  
300 tonnes CO<sub>2</sub> prevented



DC Developments / PASCH Design

## Smith Farms Spartanburg, SC, USA

**Product:**  
THOMAGREEN® with CarbonCure

**Customer:**  
The Conlan Company

**Volume:**  
62,110 m<sup>3</sup>

**Savings:**  
590 tonnes CO<sub>2</sub> prevented



CO<sub>2</sub> savings are calculated based on the current baseline in each country.



## Bridge E20 Vårgårda Vårgårda, Sweden

**Product:**  
Thomafrys Grön

**Customer:**  
Veidekke Entreprenad AB

**Volume:**  
500 m<sup>3</sup>

**Savings:**  
23 tonnes CO<sub>2</sub> prevented



## Normannenweg Hamburg, Germany

**Product:**  
THOMAGREEN® Bronze

**Customer:**  
Richard Ditting GmbH & Co. KG

**Volume:**  
9,000 m<sup>3</sup> THOMAGREEN® Bronze  
out of 10,000 m<sup>3</sup> in total

**Savings:**  
700 tonnes CO<sub>2</sub> prevented



## Railway Bridge over the Regalica River Szczecin, Poland

**Product:**  
THOMACRYSTAL

**Customer:**  
BUDIMEX S.A.

**Volume:**  
4,500 m<sup>3</sup>

**Savings:**  
534 tonnes CO<sub>2</sub> prevented



## Crossroads Logistics (XL) Spartanburg, SC, USA

**Product:**  
THOMAGREEN® with CarbonCure

**Customer:**  
Lihtko Contracting, Inc.

**Volume:**  
10,650 m<sup>3</sup>

**Savings:**  
544 tonnes CO<sub>2</sub> prevented



CO<sub>2</sub> savings are calculated based on the current baseline in each country.





Environment

**Thomas**<sup>®</sup>  
Specialist in  
pembelung



# Environment



## Environmental Policy

Thomas Concrete Group has a vision to reduce our long term environmental impact in all local and global processes. We will continually strive to develop solutions for a sustainable society of tomorrow.

Our Team mission is to integrate all business measures to reach this goal. With clearly defined objectives, compliance accountability, common development, and good dialogue, we desire to be our customer's first choice as their concrete producer.

We clearly care for the environment of the present and future generations.

Permits, Regulations, and Industry Requirements will always be treated as our minimum level of environmental performance.

## Environmental Objectives 2025

> 50 % alternative binders

< 5 kWh per produced m<sup>3</sup> concrete



# Life Cycle Assessment of Concrete

At Thomas Concrete Group, we have worked with Life Cycle Assessments (LCA) for many years. By assessing the environmental impact at all stages of the concrete life cycle, we can prioritize and adapt our sustainability work and our process and product development.

## Raw Materials

The LCA of concrete shows that most of the environmental impact originates from the production of required raw materials. The impact is mainly due to the significant emissions of carbon dioxide from cement, which is one of the binders in concrete. When limestone, the main raw material in cement, is heated during cement manufacturing, carbon dioxide is released. As much as 90 percent of the carbon emissions connected to concrete production come from cement production.

Read more on page 42.

## Production and Distribution

The production of the concrete itself has relatively low environmental impact. Energy is used to mix the concrete and to heat or cool water and aggregates depending on season.

Concrete is produced near the construction site with local raw materials, which reduces the impact of transportation on the environment and society.

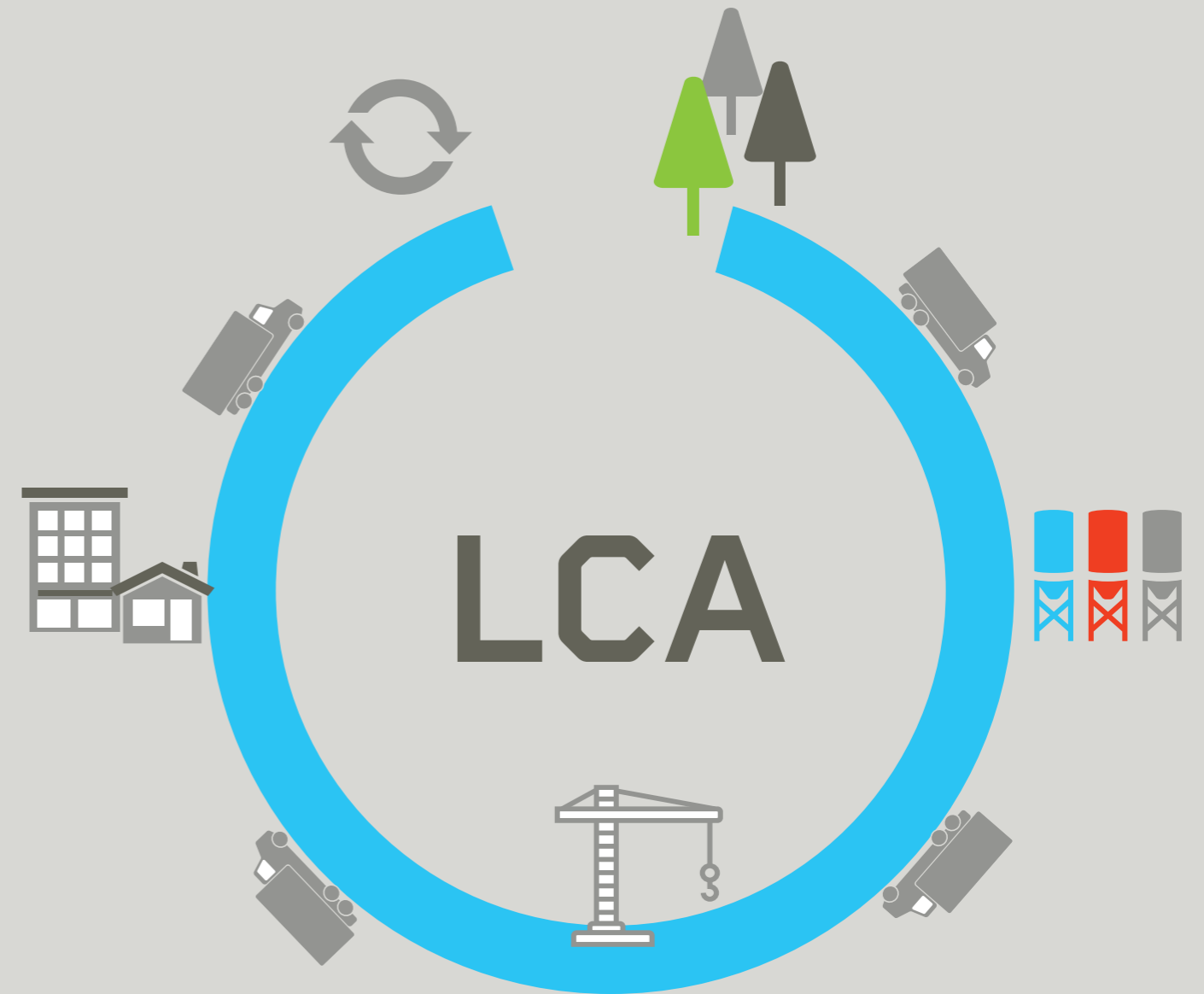
Read more on page 48.

## Operation, Maintenance and Use of Concrete Structures

Concrete is a durable material with a long service life. It requires little to no maintenance, and its ability to store both heat and cold saves energy. A concrete structure absorbs carbon dioxide throughout its entire life cycle. This completely natural process is called carbonation, and it does not affect the properties of the structure. Up to 20 percent of the carbon dioxide released during the production of the structure can be absorbed over its life cycle. From a life cycle perspective, concrete structures have low environmental impact.

## End of Life

Concrete is 100 percent recyclable and crushed concrete absorbs CO<sub>2</sub> at an even faster rate.





# Raw materials

Concrete mainly consists of three natural raw materials: aggregates, binders, and water. Additionally, various admixtures that improve the properties of the concrete are included in small doses.

As mentioned in Thomas Concrete Group's sustainability report for 2021, Thomas Cement acquired Stockholms Bulkhamn AB to provide the Group with greater opportunities to develop concrete production using alternative binders and other raw materials. During 2022 Thomas Betong,

Sweden, invested in 15 new silos within both business unit ready-mixed concrete and business unit precast concrete. The silos will be used to handle alternative binders and this investment brings opportunities to produce even more low carbon concrete at all our plants.



The raw materials in concrete are:

aggregates 65–75%

water 15–20%

binders 10–15%

Concrete also contains <1% of admixtures







## Binders

Cement is the adhesive that binds aggregates and water together to create concrete. Replacing cement with alternative binders, such as slag or fly ash, is an efficient method of reducing the use of cement and the related carbon emissions from cement manufacturing. We also continuously work to reduce our use of binders by optimizing our concrete compositions to require as little binder as possible.

Thomas Concrete, USA, has during 2022 started to use Limestone cement as an alternative of ordinary Portland cement in some concrete. Further, the use of Limestone cement will increase. In this type of cement up to 15 percent limestone is allowed to be added compared to 5 percent in ordinary Portland cement. Since the limestone is not heated during cement production, the CO<sub>2</sub> emissions are reduced by 7–9 percent.

In 2022, the fly ash situation became more challenging in Germany due to an import ban of Russian coal. Thanks to increased efforts, Thomas Beton, Germany, managed to cope with the situation, but also to increase the proportion of fly ash in standard concrete by 10 percent.

The share of alternative binders used in the different countries varies significantly due to the cost and availability of raw materials as well as the different demands and the maturity of the different markets. In 2022 Thomas Beton, Germany, used as much as 45 percent alternative binders, Thomas Beton, Poland, used 28 percent, Thomas Concrete, USA, used 23 percent and Thomas Betong, Sweden, used 17 percent.

## Water

Water is an essential ingredient in the production of concrete. It is also a necessity for maintaining clean trucks and plant mixers to avoid concrete build-up. Thomas Concrete Group aims for a circular water economy.

We have water recycling systems at 71 percent of all our plants and installing water recycling systems is now a standard procedure at our new establishments. In the recycling systems, water, which has been used to clean the trucks and mixers, is separated from concrete residues in sedimentation ponds. The treated water is then reused in concrete production to reduce the use of fresh water.

At Thomas Betong, Sweden, the water recycling system consists of several ponds which the water is pumped between to allow for further separation between the water and the concrete residue. As of 2022, 25 of the Swedish plants have been equipped with this system.

In 2022, Thomas Beton, Germany, continued to automatize the semi-automatic truck mixer cleaning systems at two plants. The systems recognize when a truck mixer is under the tower and automatically start cleaning after a specified time. As part of the new construction for one plant, an investment was made in a recycling system with a pump

feed option as well as equipped with a semiautomatic truck mixer cleaning system.

At Thomas Concrete, USA, Five-depot purification systems are used to separate solids from water, and further, enable the recycling and reusing of water. In 2022, 70 percent of the plants can produce concrete with recycled water. At some plants, it is also possible to safely discharge water back to the environment due to the use of Applied Technologies combined with the purification systems. In this process, the water is treated with CO<sub>2</sub> to adjust the pH to the correct level. Meanwhile, 70 percent of the CO<sub>2</sub> is absorbed in the process.

## Alternative Binders

**TARGET 2025 > 50 %**

**ACTUAL 2022 26 %**

	2021	2020
2021	27 %	26 %
2020	27 %	26 %







## Aggregates

The choice of aggregate determines not only the quality of our product, but also its environmental impact. The texture of the aggregate surface affects the amount of water needed in the composition which in turn affects the need for additional binder. Aggregates have changed from natural stone to quarried, which often increases the water demand due to the altered texture. Therefore, we are actively searching for new compositions of aggregates that have textures which will reduce the amount of binder needed.

As the demand of recycled aggregate is increasing in Germany, Thomas Beton, Germany, had their first projects with concrete containing recycled aggregate in 2022. The aggregate was made from concrete demolition of urban concrete creations. In this way, the concrete is reused in a high-quality manner and thus takes in account of the concept of circular economy.

## Concrete Admixtures

Admixtures are added to the concrete to improve its properties and provide functional, economic,

and environmental benefits. We use admixtures to optimize the concrete and reduce the need for cement in the concrete compositions, thus reducing our carbon footprint. In addition, at the precast business unit in Sweden, admixtures are tested and used to optimize the production-cycle casting with low carbon concrete.

During 2022, Thomas Beton, Germany, started with Solid Air Concept as an air entrainment which gives a higher life span of mass structures and high consistency classes due to better durability.

## Reinforcement Steel

Apart from aggregates, binders, water, and admixtures, our precast products also include steel, a common form of concrete reinforcement. About 90 percent of the reinforcement steel used in slabs is manufactured in-house. This allows us to fabricate our mesh and girders exactly according to our drawings, virtually eliminating waste for these products. Further, 100 percent of the steel used in-house is recycled.





# Production and Distribution



Our concrete plants are primarily powered by electricity. Additional energy may be required to heat or cool aggregates and water during cold or hot seasons and is almost exclusively driven by heating oil, except for a few plants which have natural gas as an energy source. We also conduct energy audits at all our plants to assess and improve our energy performance.

In 2022, Thomas Beton, Poland, installed completely new heating systems at two concrete plants, replacing less efficient and old facilities. Thomas Concrete, USA, has been working with a vendor on evaluating a highly energy efficient cement blower and while the results are early, it is promising for the future. Thomas Beton, Germany,

installed a new liquid gas-based concrete heater at one plant.

Further, Thomas Beton, Germany, continued to use green electricity and saved 550 tons of CO<sub>2</sub>. At Thomas Betong, Sweden, EPD-certified renewable and climate-neutral hydropower has been used since 2019 and continued in 2022. During the year, environmental mapping has been conducted in Sweden including energy, environment, waste disposal, and water usage. The mapping is providing a guide to identify areas of improvement, and an foundation for upcoming improvements.

During 2022, Thomas Concrete Group has worked to reduce energy use throughout the

organization. For instance, both Thomas Beton, Germany, and Thomas Concrete, USA, have had information campaigns to make every employee take responsibility for saving as much energy as possible at plants, offices, trucks, and pumps. In addition, replacements of light will be with LED from now on.

Concrete is a local product made with locally sourced raw materials. It is distributed within one hour from the concrete plant, which allows for short transportation distances and low carbon emissions. We work actively at further optimizing our deliveries and transportation distances.

At Thomas Beton, Germany, 9 truck mixers, 1 concrete pump and 1 silo truck for binders were newly purchased. Further, the individual diesel consumption of each truck is checked monthly with immediate follow-up in the event of anomalies.

Thomas Concrete Group is committed to continually invest in our fleet by replacing old trucks with new ones in order to reduce CO<sub>2</sub> emissions, as well as oil and fuel usage. In 2022, Thomas Concrete, USA, invested in 100 new trucks to replace those older than 12 years. In Poland, Thomas Beton invested in 10 new concrete trucks and replaced two old loaders.

In 2022, Thomas Betong, Sweden, initiated a competition for their internal drivers to reduce diesel consumption due to idling. The best performing drivers were awarded. Consequently, diesel consumption for idling has been reduced by 4.2 percent. The competition will continue in 2023.

**Energy & emissions**  
kWh/produced m<sup>3</sup> concrete

<b>TARGET 2025</b>	<b>&lt; 5</b>		
<b>ACTUAL 2022</b>	<b>7.9</b>	<b>2021</b>	<b>2020</b>
		8.2	7.5



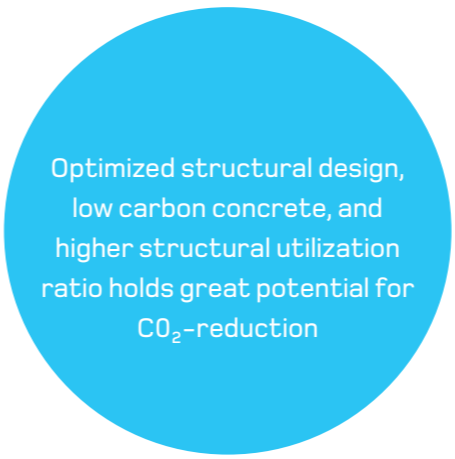


# Research and Development

## C-lab®

C-lab® is based in Gothenburg, Sweden, and is Thomas Concrete Group's accredited (ISO/IEC 17025) centre for material and laboratory testing, technical consultation, and research and development. We are one of a few global concrete suppliers to operate our own research and development facility.

During 2022, 5,186 accredited testing assignments of concrete, aggregates, and binders were conducted according to national and international standards.



Optimized structural design, low carbon concrete, and higher structural utilization ratio holds great potential for CO<sub>2</sub>-reduction

## Net zero concrete construction

The aim of R&D at Thomas Concrete Group is to develop innovative products and process improvements in construction and to minimize the CO<sub>2</sub> emissions. Construction of buildings and infrastructure accounts for approximately 20 percent of annual global CO<sub>2</sub> emissions and 39 percent when the operational phase is included. Hence, to limit global warming, the construction sector needs to reach net zero carbon emissions, alongside other sectors of the economy.

To this end, we have continued our research activities into concrete mix optimization and alternative binders. As the supply of traditional alternative binders is not sufficient, other materials are becoming more attractive in our pursuit for low carbon concrete. A wide range of materials has been investigated to assess their potential and suitability; both natural and artificial pozzolanas and alternative metallurgical slags have been tested. We are also engaged in standardization activities to further accelerate the implementation of new alternative binders.

But to reach net zero, more than concrete mix optimization and alternative binders need to be considered. Effective collaboration between all project stakeholders is required for a successful implementation. In addition, breakthroughs, like CCS/CCU, will be required for net zero.

To assess the potential CO<sub>2</sub>-reduction in the design phase, a LCA-study has been conducted for a typical Swedish multi-family residential building. Our research suggests that about a 30 percent reduction is rather easily achieved by a more detailed and optimized structural design and by not over specifying the concrete strength. A 40 percent reduction can be achieved by utilizing low carbon concrete with a high cement replacement, thus, this may require additional measures to ensure that the construction schedule is not affected. In addition, our LCA-study also shows that approximately 15 percent of the initial embedded CO<sub>2</sub> for the concrete is absorbed through carbonation during the service life. Besides, research suggests ensuring a higher structural utilisation ratio can lead to a ~30 percent reduction in material usage. Hence, we need to see a more sensible use of materials in the construction sector if we are to meet carbon reduction targets and we need to “build clever” and “build more with less”.

**Ingemar Löfgren**  
R&D Manager  
Thomas Concrete Group AB





## Research Projects



### Poland

In 2022, Thomas Beton, Poland, conducted a project to determine the CO<sub>2</sub> intensity ratio between the carbon footprint of the concrete and the corresponding compressive strength. The results of the project suggest that using alternative binders and postponing the assessment of compressive strength from 28 days to 56 days enable more efficient use of the binder, thus reducing the CO<sub>2</sub> intensity of the mix. In a practical setting, adding alternative binders or postponing the assessment of the compressive strength enables using decreased concrete strength classes. Using these methods, the CO<sub>2</sub> intensity ratio is reduced by 40–50 percent.



### Sweden

In 2022, Thomas Betong, Sweden, tested a new concept with cement free concrete and successful tests were made at two plants. The cement free concrete's consistency, workability, and strength development are as good as conventional concrete but with a much smaller environmental footprint – only 0,08 kg CO<sub>2</sub> per litre concrete. According to current standards in Sweden, cement free concrete can't be used in load bearing structures and is therefore tested in other contexts. However, the concept is an important milestone for Thomas Betong towards the target of delivering the first climate-neutral concrete before 2030.



### BETCRETE 3.0

BETCRETE is a Swedish research project with the goal to enable and accelerate the implementation of the cement and concrete industries roadmaps for carbon-neutral concrete construction. The project brings together 24 partners along the value chain and is coordinated by Research Institutes of Sweden (RISE). In 2022, BETCRETE 2.0 was successfully concluded and BETCRE 3.0 started. BETCRETE 3.0 will focus on accelerating the implementation of the results from 2.0, and on the development of alternative binders and collection of KPIs. It will also involve the work with demonstration projects where solutions can be tested in practice.

## Associations and Certifications

We strengthen our business processes and methods by following key standards and certifications outlined by the industry and through our participation in sustainability driven associations.

### International Organization For Standardization (ISO)

Thomas Betong, Sweden, and Thomas Concrete, USA, are quality and environmentally certified in accordance with ISO 9001 and ISO 14001. Their progress is audited annually by an external party, holding their performance to a high standard of continuous improvement.



### The Swedish Concrete Association

Thomas Betong, Sweden, is a member of the Swedish Concrete Association. They are conducting several activities to promote sustainability in the construction industry, with a large focus on long term thinking.



### The Concrete Initiative

In Sweden, Thomas Betong is also a part of the Concrete Initiative, a group whose goal is to bring climate-neutral concrete to the market by 2030, and to make it universal by 2045.

### National Ready Mixed Concrete Association (NRMCA)

Thomas Concrete, USA, is a member of the NRMCA, which is active in a number of initiatives to make the industry more sustainable.



### Bundesverband Transportbeton (BTB) – Vero Association

Thomas Beton, Germany, is a part of a regional association for building materials named "Vero". Vero is a member of the ready-mix concrete Association BTB. BTB is the national provider for the CSC-certification. Additionally, they are involved in training initiatives for operators and drivers.

### Ready Mixed Concrete Producers Association (SPBT)

Thomas Beton, Poland, is part of the SPBT, which for almost twenty years has been promoting concrete as an economical, sustainable, safe, and durable construction material.





Social

Team Thomas







## Our culture

We are a committed team...

- that cares and acts in the best interest of our customers, colleagues and company.
- that constantly seeks possibilities, having high focus on profit and results.
- that is responsible and alert, always striving to be the best.
- that supports each other, sharing energy and having fun.

### Social Objectives 2025

EI (Engagement Index) > 86

LTI (Lost Time Injury) < 15



# Safety First

We always put safety at the top of our agenda. Thomas Concrete Group is working towards making safety much more than compliance. Safety is about our people, our customers, our teamwork, and our culture. In addition to keeping up with mandated government requirements, we continuously implement new safety measures.

In 2022, Thomas Concrete Group again saw a decrease in our LTI frequency and it is fortunately back on a downward trend after a slight increase in 2021. We are of course happy to see this downward trend again, However, we are not satisfied and will continuously develop our safety work.

## Lost Time Injury

<b>TARGET 2025</b>	<b>&lt; 14.25</b>		
<b>ACTUAL 2022</b>	<b>16.4</b>	<b>2021</b>	<b>2020</b>
		16.7	15.2

## Safety Vision

We are a committed team that cares and acts in the best interest of our customers, colleagues and company.

Our company vision is to be perceived as being the best in our industry including safety first.

We lead with safety and promote a culture where all employees value safety as a way of life.

## Safety Policy

We ensure that safety is a value in every aspect of our business and measure it regularly.

We insist on a safe operating environment, application of safe operating procedures, and employee compliance with all company safety policies and governmental regulations.

**Hans Karlander**  
CEO and President, Thomas Concrete Group AB





## Safety awareness

At Thomas Concrete Group, we believe that an important step to increasing safety at work is to be aware of the safety issues and the risks in our surroundings to prevent them. But also to highlight safe behavior and safe actions.

A well celebrated tradition at Thomas Concrete, USA, is an annual Safety Banquet where the Concrete Delivery Professionals (CDP) who qualify as SAFE drivers are honored. In March 2022, the event took place for South Carolina Upstate where all employees were invited and encouraged to bring a guest. In total almost 300 guests attended.

At Thomas Betong, Sweden, a designated safety week is an annual event. In 2022 the major focus was to expand the knowledge and usage of the BIA system to report dangerous occurrences, near misses, and accidents. The reported data gives awareness of where risks occur and where to put extra focus.

Thomas Beton, Poland, continued inspections of the concrete plants in terms of health and safety. Also, World Day for Safety and Health at Work was celebrated in April, emphasizing the need for continuous and comprehensive actions to improve safety.

Thomas Beton, Germany, has revised all operating instructions. Pictograms were renewed and new operating instructions were created and tested by external safety specialists. In 2022, unfortunately, there were two minor accidents where acid got into the eyes of employees during cleaning work. For this reason, different models of tightly fitting safety glasses have been tested to introduce a mandatory model for all cleaning work and work with fresh concrete in 2023.

We ensure that safety is a value in every aspect of our business and measure it regularly.

## Safety at Silos

Until 2022, no silos for binders at Thomas Betong, Sweden, had alarms and measurements to warn and stop the loading of binders in case of overflow. As the compressors at the loading trucks are getting more and more effective, the problem of overflow is increasing. From a perspective of safety, overflow may cause danger as the vent on top of the silos can detach and throw away.

In 2022, Thomas Betong, Sweden, made investments in 13 new silos. A third of the silos were installed and set into operation during 2022. Installation of the remaining silos is in different stages, but all will be finished in the first quarter of 2023. To prevent the risk of overflow and accidents the new silos hold level alarms, pressure alarms, monitoring of safety valve, and valve for stop loading. In addition, five existing silos at critical locations will be upgraded with similar systems.

In the USA, the National Ready Mix Concrete Association (NRMCA) hosts the Mixer Rodeo Championship competition annually. In the competition, the country's concrete truck drivers measure their skills against each other's, practically, but also theoretically. The 2022 championship ended with great success for Thomas Concrete, represented by Joey Melton.

The competition begins with testing the participants' theoretical knowledge via a hundred questions. After that, the participants are given two minutes to walk around the truck to find the ten deliberately placed faults. In the final part, the concrete trucks are driven around an obstacle course. Each part is graded and the person with the highest total score is selected as the winner.







# Well-Being and Health

At Team Thomas, we strive to create a sound working environment for all our employees. We work to establish an atmosphere that emphasizes physical safety and encourages a creative exchange that allows us to speak our mind and influence our work. We believe this will contribute to healthy and happy colleagues.

## Team Thomas

### Engagement Index

The survey is conducted every 18 months.

**TARGET 2025** > 86

**ACTUAL 2022** 83      2021 83      2020 84







## Prosperous employees and teams

We at Thomas Concrete Group believe that healthy, prosperous employees bring fruitful win-win situations when we work together to improve ourselves, our working environment, and Team Thomas. Moreover, we believe such improvements spark further motivation, engagement, and well-being. Our ambition is to offer a great workplace where all employees thrive. Collaborations between employees in different teams, locations, and professions contributed to increased production, improved working conditions, gained knowledge, and thriving employees.

At Thomas Beton, Germany, a bicycle lease service was introduced where employees have the opportunity to lease a bicycle. At Thomas Betong, Sweden, all employees were offered a free healthcare examination in 2022. Teams could also organize a sport- or physical activity with some financial support.

In 2022 Thomas Beton, Poland, organized a "FAMILY DAY" at the plants in Koszalin and in Świecie. The event was attended by Thomas Beton employees with their families and companies that cooperate with our plants daily. The event offered plant visits, numerous attractions such as a raffle with prizes, music, and a joint dance show. In addition, the children could enjoy refreshments. Family days will be held regularly.

At Thomas Betong, Sweden, plant personnel and drivers developed and implemented new working routines at one plant to help serve a customer large volumes during a critical part of a project. The result was a new hourly delivery record for the plant, exceeding what was previously considered the upper limit. Still, there was time for breaks, quality was maintained, and the customer was pleased. In Germany, Thomas Beton, re-started regular group meetings for their process mechanics in 2022. At the meetings they get together as a team to talk and discuss extensive topics, share experiences, and continue to develop the operations.



## Reduce overtime and improve employability

Overtime among drivers is an important issue that we are constantly working on to improve and accomplish a sustainable working environment. In 2022, Thomas Beton, Germany, implemented a new section in the annual driver training, particularly focusing on legal requirements and compliance with working hours. More professional drivers and blue-collar workers were hired to relieve drivers and alleviate the overall situation.

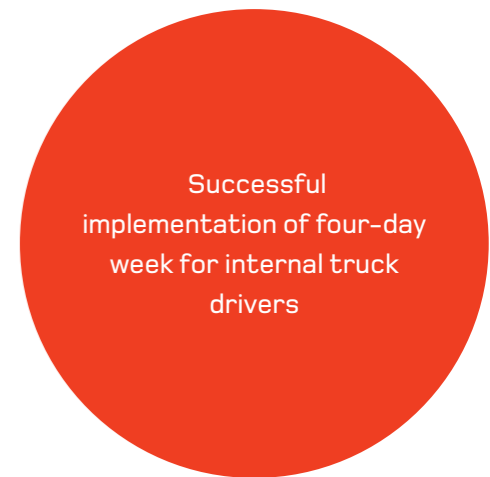
Following the successful results of the implementation of a four-day week for internal truck drivers in 2021 at Thomas Betong, Sweden, a pilot project of a four-day week was initiated also for pump drivers in one region during the autumn of 2022. The results show a decreased overtime and improved worklife balance. The drivers in the pilot project found it challenging to get used to the new way of working at the beginning but soon got used to it and are planning to continue this way of working forward.

Thomas Beton, Germany, has been working with operational integration management during the year. This involves employees who have been on long-term sick leave. As part of company integration management, talks are held and measures are taken to ensure that these employees can be reintegrated into their jobs more quickly.

## Concrete Delivery Professionals Project

Due to a highly competitive market and a strong demand for concrete, Thomas Concrete, USA, was challenged to fully staff our mixer trucks with Concrete Delivery Professionals (CDP).

As CDP turnover increases recruiting needs, the focus has been on hiring and retaining CDPs. In 2022, new procedures how to recruit, train, engage, and lead CDPs to improve their experience have been put into place. The results are increased concrete deliveries, decreased time and resources spent on recruiting and training new recruits, as well as improved safety and accident rates of CDPs.



# Education and Development

Thomas Betong, Sweden, has for the third year in a row been named Career Company of the year. The motivation stated that Thomas Betong, part of Thomas Concrete Group, is a dynamic organization that cares about its employees.

Our success depends on our personnel, their engagement, and their ability to perform. We believe that education and mentoring programs along with daily tasks will lead the way for our personnel and make us the leader in our field as The Concrete Specialists.

## Internal Education

During 2022, 15 operations managers within the precast business unit at Thomas Betong, Sweden, attended a nine-day training, divided into two sections, to deepen their knowledge of Work Environment and Leadership. The training aimed to strengthen them in their role as leaders and to positively influence the quality, efficiency, work environment, safety and well-being at the plants.

At Thomas Beton, Poland, a two-day training in occupational safety and health was held for managers, technicians, and technologists. The training focused on labour law, job instructions, workplace safety, training in pre-medical first aid and how to act in the event of a fire or natural disasters.

To support managers, Thomas Betong, Sweden, have organized “knowledge sharing over coffee” during 2022. Managers could

voluntarily attend short meetings over teams. The meetings, which were highly appreciated, addressed different themes and allowed managers to discuss, gain knowledge, and gather information. In 2022, Thomas Beton, Germany, held several training sessions for their employees in the lab to further their education and to be on the highest level of knowledge regarding the legal requirements.

Furthermore, sustainability education, including how to better communicate and sell Our Green Offer to customers and prescribing customers has continued across the Group in 2022.

## External Education

At Thomas Concrete, USA, all drivers are offered the NRMCA (National Ready Mix Concrete Association) driver training. The training covers everything from safe driving, construction site safety, maintenance of concrete trucks, environmental aspects, and customer service. As of the end of 2022, 57 of the drivers at Thomas Concrete, USA, have been certified.

In 2021, Thomas Beton, Poland, organized training for young engineers and designers at a construction company. In 2022, another training for five new engineers was organized. The attendees learned about production and delivery of concrete, as well as testing of fresh concrete. The training was very much appreciated and planning for the next training has already started.



## Students and Graduates

To focus on long-term development, we value young professionals. Thomas Concrete Group has a trainee program that aims to develop the business. Also, Thomas Beton, Germany, offers a couple of trainee positions to include young people in the organization and to promote their development. The trainees that completed their apprenticeship during 2022 have now been taken on as employees.

In 2022, Thomas Concrete Group and Thomas Betong, Sweden, launched a new program for young academics called Young Professionals. The program offers an opportunity to gain deep knowledge of the operations and establish a wide network within the company, combined with a permanent employment.

Thomas Concrete Group offers technical supervision of master theses and puts great value on internships and other similar positions more suited for a younger target group. Every year, Thomas Concrete Group also hosts events for students and participates in several local career fairs to meet and recruit young professionals and to inform them about concrete from a sustainability perspective.

For Team Thomas, it is highly important to include people of various ages. This is a way to see our company and our opportunities from different perspectives to constantly develop our organization.







# Local Community Involvement



## Thomas Concrete Group supports UNHCR's work in Ukraine

In 2022, Thomas Concrete Group donated to Swedish Red Cross and UNHCR to support their important work in Ukraine during the ongoing crises.

## Thomas Concrete Group supports The World Childhood Foundation

Thomas Concrete Group has, in 2022, continued to support the World Childhood Foundation's work with children's rights. Her Majesty Queen Silvia of Sweden founded the World Childhood Foundation in 1999 to support children at risk around the world and to fight for every child's right to a childhood.



## Thomas Concrete for Harvest Hope

Thomas Concrete, USA, has been active in a variety of local charities. The initiatives often come from the personnel themselves and involve big personal commitments. During 2022, two Thomas Concrete employees, with help of local industry partners, hosted the third Annual Contractors for Hope event to benefit Harvest Hope Food Bank in the Midlands of South Carolina. This year, sponsorship tables were offered and a VIP area was added for sponsors who purchased a table for the event. Further, a raffle and silent auction was included to help raise additional donations. A total of \$30,436 was raised for Harvest Hope, which equates to approximately 138,000 meals for the local community.



# Human Rights and Anti-Corruption

Our Code of Conduct is a policy document that is supported by education, routines, and instructions, and serves as a baseline for our personnel in their day-to-day work.

- We provide equal opportunities without regard to nationality, skin color, gender, religion, sexual orientation, social or ethnic origin.
- We do not allow discrimination or harassment.
- We provide a safe and healthy working environment and work for continual improvement.
- We work against corruption in all its forms, including extortion and bribery.

In Poland and Germany, the provisions on the prohibition for restrictive practices are contained in compliance documents that each employee signs. Further, antitrust training is scheduled in Poland for the first quarter of 2023 and will be conducted by a person from Thomas Beton's legal department in Poland under the supervision of an external law firm.

At Thomas Concrete, USA, the sales teams participate annually in antitrust training delivered by local attorneys. The training serves to educate employees

about the existing laws governing antitrust and competition for the purpose of preventing unfair agreements/arrangements from being made.

At Thomas Betong, Sweden, a new Whistle blow function was implemented during 2022. The function ensures anonymity for the person reporting, easing reporting, handling, and follow-up. It is therefore an important tool to strengthen our ability to get knowledge of malpractices within the area of Human Rights and Corruption.





Economy





# Economy



## Financial Responsibility

For Thomas Concrete Group to be socially and environmentally responsible, we must remain financially solid. Without conducting profitable business, we cannot invest in the research and innovation that ultimately leads to the development of sustainable societies.

Thomas Concrete Group is an independent, family owned company. It was founded by Mr. Martin Thomas and the Group is still owned by the Thomas family, a family that has a sincere wish to nurture and develop the company for the future as a strong international and independent group.

In March 2021, the Thomas Family Foundation was formed. The foundation has two purposes. One is to create an opportunity for the Thomas family to continue to own and manage the company in the long term, the other is to finance independent scientific research and training.

The Thomas Family's goal has always been to build a business for future generations and to reinvest a majority of the profit. From the beginning, Thomas Concrete Group has aimed for a sustainable business, one that is profitable in the long term, and which creates a good workplace for its employees. By valuing accountability, compliance, clearly defined objectives, and good dialogue, we desire to be our customer's preferred concrete supplier.

Our long term financial objectives are ambitious. Overall annual targets are set and agreed upon in the forecast process, allowing us to improve results with each step along the way and achieve our vision of being perceived as the best in our industry.

## Solvency

**TARGET 2025 > 40 %**

**ACTUAL 2022 46.9 %**

2021	2020
48.0 %	47.8 %





## Our Business Model

Team Thomas' core business is to develop, produce and distribute concrete products. The Group has a total of 165 ready-mix concrete plants as well as four plants for production of precast concrete elements. The Group also offers services, such as concrete pumping, quality controls and technical advisory, making Team Thomas a complete concrete supplier.

Thomas Concrete Group values long term investments and focuses on developing its business responsibly. This means that Thomas Concrete Group has an ambitious sustainability agenda with human and environmental focus in every detail.

We have served the market and our customers well in the past and we will continue with this, keeping a long-term focus to expand and to maintain our position as The Concrete Specialists.







## Our Challenge

The economic situation can change suddenly, and it is not always easy to predict in time. The current situation in the world serves as proof of this. Quick downturns in the overall economy, increased prices of raw materials, increased interest rates, and a decreased number of project starts in the construction market are some of the threats to our success.

The tragic invasion of Ukraine is causing a deep humanitarian crisis that traumatically affects millions of people in Ukraine and the neighboring countries. The war also amplified the economic challenges triggered by the Covid-19 pandemic. This happened not least in Europe and has affected a lot of businesses – including ours. Since the breakout of the war, there have been rising costs of energy and fuel. The increased prices and supply shortages of many raw materials, such as binders, steel, and aggregates have further complicated the situation. On top of all of this, the inflation rate is rising.

For us, this means that our costs have increased and will continue to do so moving forward. To handle these issues, we will need to increase prices for our customers and keep doing so to compensate for our increasing raw material costs. Being successful in this work is an important challenge for us. However, this becomes even more challenging in an environment where the central banks increase the interest rates to handle the inflation issue. It also means that our customers need to be able to handle pricing increases in such an environment.

Looking forward we are facing an even more challenging market with fewer project starts and more paused projects, in addition to the cost-related challenges. At the same time, we are facing an upcoming potential financial depression that we need to handle.

Regardless of the economic situation and upcoming challenges, we will handle it together as a strong Team Thomas – The Concrete Specialists. Having team members with high-level expertise, education, and sales competence is imperative to ensuring that we are the closest to the customers and their go-to supplier.







# How We Have Reported

## THIS IS THOMAS CONCRETE GROUP

This sustainability report constitutes the Group's and the company's statutory sustainability report and is part of the administration report for Thomas Concrete Group AB with organization number 556062-2812. The board is responsible for the sustainability report and for its preparation in accordance with the Swedish Annual Accounts Act. This year's sustainability report refers to the financial year of 2022 and contains information about the Group's sustainability work. The reported information and figures are aggregated for the whole group, containing information from all five main subsidiaries: Thomas Betong AB (Sweden), Thomas Concrete, Inc. (USA), Thomas Beton GmbH (Germany), Thomas Beton Sp. z o.o. (Poland) and Thomas Cement AB (Sweden). The report covers the ready-mixed concrete and precast concrete businesses. A selection of KPIs and main activities have been highlighted. All areas are more thoroughly followed up country-wise.

## ENVIRONMENT

### Binder optimization

In this report we focus primarily on binders since they have the greatest environmental impact. The cement and alternative binder use is based on purchased volumes, volumes from our production systems, and manual analyses. When we measure binder optimization, we summarize the volume of purchased alternative binders with preblended alternative binders in our purchased cement.

The share of alternative binders has remained quite stable over the past three years, however, on a level half-way from our target. This is mainly due to lack of availability of fly ash and slag as well as a tradition of using traditional concrete\* by the market.

### Energy

Figures on energy consumption are derived from invoices and suppliers from all our ready-mix plants as well as our precast plants. Energy consumption is measured in kWh from electricity, diesel, and heating oil in liters. Total energy consumption is calculated using table values of energy content. We present usage per produced cubic meter. We have one plant with natural gas in Germany and a few in the USA, and a few with district heating in Sweden. This year they are included in this report.

This year we have put increasing efforts reviewing our KPIs and data. This has led to a more accurate but slight higher value in energy consumption per cubic meter compared to previous years.

### Water recycling

Plants with water recycling systems are calculated as a percentage of our plants. In parallel to upgrading existing plants, we continuously upgrade and restructure our plant network. This leaves us with a varying number of plants.

## SOCIAL RESPONSIBILITIES AND PERSONNEL

"To us, people and environment are crucial" – it is not just a saying. We invest a lot in our personnel, in international charity, and in making Team Thomas a positive change in local communities. We measure this through our Employee Surveys and to some extent also through our Customer Surveys.

## SAFETY

Safety statistics are calculated with LTI (Lost Time Injury) and are presented as an aggregated number for the whole Group.

A history of poor safety results has led us to raise focus on safety and over the last few years we've seen a rapidly changing positive trend toward better physical safety performance. Our five-year goal is to be recognized as being the best in our peer group, with our safety performance in the top quartile.

## EMPLOYEE SATISFACTION

Health and satisfaction statistics for our employees are measured with Engagement Index (EI). EI is based on surveys handed out to all employees. The survey is conducted every 18 months. Last survey was carried out in 2021.

## ANTI-CORRUPTION

Corruption is a risk that we keep under constant focus. For the moment we do not see it as a high-risk issue. With our Code of Conduct, which we continuously review and update, as well as our training in competition law, we feel secure that we maintain our business ethics on a high level.

## HUMAN RIGHTS

We run a local business no matter where we operate. We have 100 percent traceability of our materials and products which most certainly leaves us in a good position of saying that we fulfill, along with our main suppliers, the Universal Declaration of Human Rights. Our challenge is to make sure that our evaluation of suppliers is good and thorough enough, that it is being carried out at given intervals, and that we succeed in tracing those few suppliers who operate in countries outside of those from our subsidiaries.

Today our follow-up varies within the Group, partly because some of our plants are ISO certified and others not. We are evaluating a common method of setting our goal for Human Rights.

## WHERE DO WE GO FROM HERE?

Launching our first Team Thomas Sustainability Report in 2016 was a great step. We have identified several areas to improve further. We also have the ambition to complement certain data going forward. Including:

- Transportation and distribution
- Concrete pumping
- Continue to improve how we monitor data including developing a CO<sub>2</sub> KPI

Finally, I wish to thank you for taking your time to read Team Thomas' Sustainability Report, and I hope that you will follow our journey. Please, feel free to contact us if you have any questions.

### Hans Karlander

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Report written by Jakob Hallgren with support from Karin Gäbel and input from the Team Thomas organization and various surveys.



