



TIMBECO WOODHOUSE OÜ
SUSTAINABILITY REPORT
2023

30 YEARS OF TIMBECO

sustainable wooden house manufacturer

Timbeco is a wooden house manufacturer with a 30-year history, which gathers several successful companies around itself: Timbeco Woodhouse OÜ engaged in the production of prefabricated and modular buildings, Timbeco Woodmill OÜ focused on the processing of lumber and the production of log houses, Livful OÜ engaged in the production of CLT houses, Timbeco engaged in construction and real estate development in Estonia. Ehitus OÜ and Timbeco Construction OÜ engaged in erecting prefabricated and modular buildings in foreign markets. Timbeco's office and production unit are located in Tõdva, Saku municipality, and the companies employ a total of 150 people.

timber + ecological = **TIMBECO**

The name Timbeco is derived from the English words "timber" and "ecological", which characterize the company's field of activity and values.

30 YEARS OF TIMBECO

We will celebrate the company's 30th birthday in 2023.

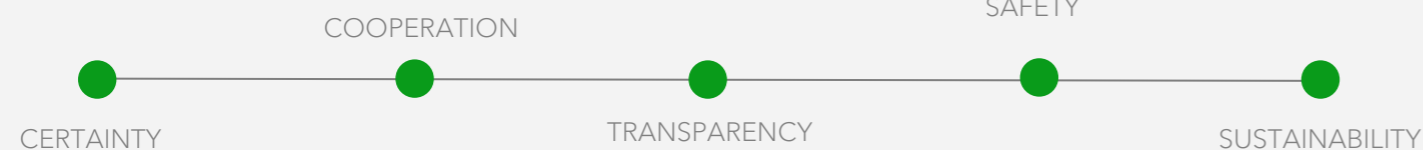
VISION

The leading manufacturer of wooden buildings in Europe

MISSION

We create a better quality of life in an environmentally friendly way

VALUES



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30 years of dedication to wooden buildings

At Timbeco, we are proud of our 30-year history, the buildings we have built and our great team. Since the establishment of the company, we have grown and developed together, becoming a leader in the field of factory-produced buildings. Our long-term experience has made us a reliable partner who can offer high-quality and environmentally friendly solutions to customers in Estonia and elsewhere in Europe.

Timbeco's goal is to create a higher quality of life in an environmentally friendly way and to develop as a team into the best manufacturer of wooden factory houses in Europe. In order to achieve this goal, we need to develop new technologies, materials and skills every day in order to be a top player in the ever-increasing competition.


We are happy to say that Timbeco's production base is strong and the team is ready for ever greater challenges in the field of modular construction. The factory complex has acquired an increasingly modern and safe appearance and content. We are especially pleased with the ability to safely store, fire and sort waste.

In order to successfully cope with difficult economic conditions, we consider it very important to continuously develop our team, services and products, as well as the cooperation experience offered to our partners. This is important both during the sales process, in the design phase and during project implementation. We believe that in this chain of activities it is possible to achieve efficiencies that cannot be achieved with traditional construction methods. By working together, we can design, produce and erect public buildings with a smaller environmental footprint and energy-efficient homes. We see that our competence and ability can be successfully applied in the large renovation wave of apartment buildings. At this point, it is important to cooperate with universities and research projects and use this knowledge in practice.

We want to overcome turbulent times with as few losses as possible, while ensuring the professional level and high motivation of our team. That's why we pay more and more attention to the health and well-being of our employees. Internal trainings in mental health, sports, self-development and financial wisdom are just a few examples of how we want to share additional knowledge and skills to cope with difficult situations. Flexible working hours and methods are also becoming keywords in order to maintain a balance between work and family life. We support the sports activities of the company's employees and recognize long-term colleagues.

Timbeco's strategy is based on sustainability, and we aim to achieve carbon-neutral corporate operations by 2028. To achieve this, we take into account carbon sequestration in the buildings we manufacture and erect, the energy consumption of buildings, transport-related impacts and waste recycling.

We are making efforts at several levels to achieve our green goals. It is important for Timbeco and our partners that we can calculate the amount of carbon emitted during the life cycle of buildings and find ways to reduce it already in the design phase. Our partners and the input information available from them play a very important role in calculating the life cycle of the building. We have received a lot of valuable feedback and it encourages us to continue on the chosen path. Reducing waste, recycling and optimizing processes with the help of information technology capabilities are giving better and better results and we believe that we can achieve our long-term goals.

 Siim Leisalu
CEO



2022 year in short



Timbeco adopted OneClick LCA software

Timbeco's design team adopted the life cycle impact analysis software for buildings. It enables the evaluation of the environmental impacts arising from the construction method, materials, transport solutions, building construction and later use already in the initial phase of the projects. The software provides greater added value to our customers, because performing LCA calculations will soon become mandatory.



Timbeco is implementing the 6S system in production

For the successful implementation of this project, we used the help of TJO Konsultatsioonid OÜ. During the consulting project, short training sessions were held, where the principles of the 6S system were introduced step by step. Practical work also took place during each short seminar, where the necessary activities were carried out on the basis of a sample workplace. By now, we have started to implement the 6S system step by step in other production halls as well.

Expansion of production areas and storage area

In 2022, we completed the construction of a new production hall for the production of wooden elements and increased the storage area with a hard surface, where it is safe for forklifts to maneuver. In addition, we modernized the markings of buildings and walkways and improved fire safety systems. Fire alarm notifications have been moved to the basis of the production hall, in the event of an alarm, the Rescue Board will receive accurate information about the building and the location of the alarm



Timbeco Woodhouse OÜ board member and sales director Tõnis Vaiksaar made a presentation at the GreenEst Summit 2022 conferences

The presentation focused on how we do things in Timbeco, what are the green trends in the construction sector and what our neighboring countries have achieved on the green journey. In the second half of the presentation, the focus was on how to achieve a lower carbon footprint in the construction sector and what should be the role of the state, local government and financial institutions in achieving climate goals.



Timbeco is Estonia's Sustainable Company of the Year 2022 (in a competition organized by Enterprise Estonia and the Central Union of Estonian Employers)

Sustainability is one of our core values and the foundations of our operations, and it is our greatest pleasure to note that, in addition to our employees and customers, it has been noticed and recognized by the public as well. We are actually just taking the first steps on our sustainability journey, and several important milestones are still waiting to be achieved in the coming years, just like the entire construction sector in Estonia and Scandinavia.



In northern Norway, Timbeco built the first large apartment building for which LCA calculations were performed

The first modular building, whose life cycle (LCA) calculation has been performed by Timbeco, has been completed. This gives a better overview of the Co2 impacts of the building during production, transport, erection and throughout its life. The purpose of the calculation is to reduce environmental impacts as much as possible.

Creating value in Timbeco

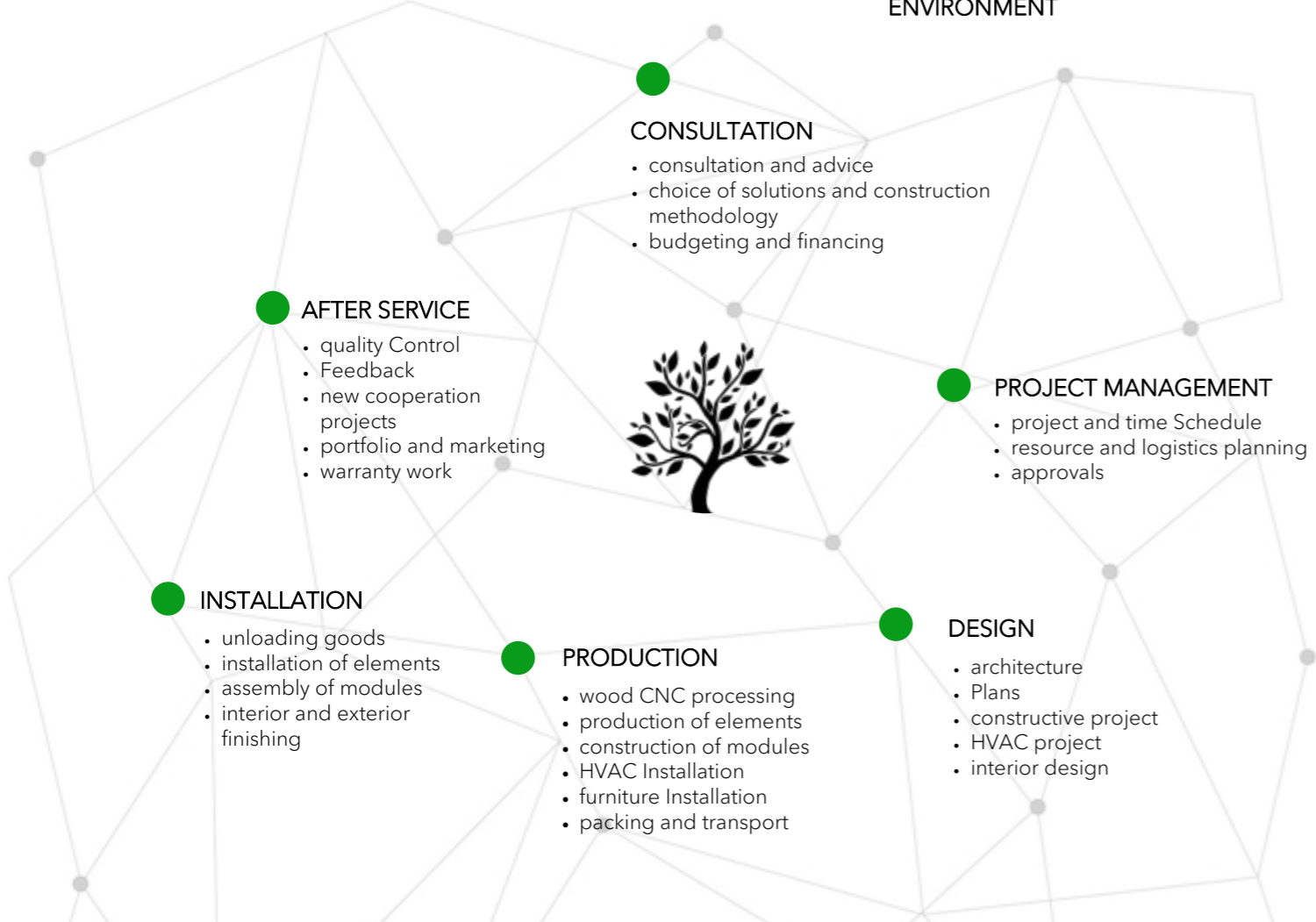
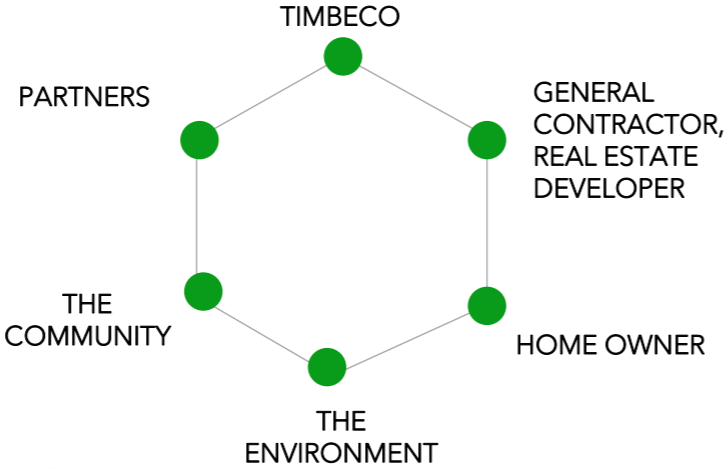
We believe that dealing with increasing urbanization and growing environmental issues requires a smart and sustainable approach. We have all the necessary competencies to bring a sustainable way of thinking to the residential real estate sector. We want to prove that fast, cost-effective and environmentally friendly housing development can be industrially produced in a factory and is highly scalable.

Together with our partners, we want to create beautiful and durable buildings that are part of a modern, happy and diverse living environment where people want to stay and make their homes.

A Timbeco product is a service

How we do work is increasingly important to the people at Timbeco. To do this, we look at each project as the client's business plan and Timbeco as a service provider in its implementation.

The core of our value proposition is the best customer experience, which we achieve thanks to a comprehensive, transparent and high-quality service.



At Timbeco, we consider the consistent development of services and products as well as the cooperation experience offered to our partners to be important. The sales process, consulting activities, budgeting, planning, procurement activities and project implementation can only be done in cooperation with the team. We believe that in this chain of activities it is possible to provide efficiency that cannot be achieved with traditional construction methods. By working together, we can design, produce and erect public buildings and energy-efficient homes with a smaller environmental footprint.

Summary of target markets

Estonia

The Estonian construction market has been in a downward trend for a long time due to the increase in interest rates, general instability and decreasing purchasing power. Many development projects have been put on hold and the market situation is expected to stabilize.

It is true that the environmental impact of buildings is one of the major criteria for participation in tenders. In our opinion, the introduction of ESG principles into public procurement has very positive effects on companies in the wooden house sector. We are seeing the first signs of increasing interest from real estate developers and local governments in modular buildings and buildings with a lower environmental impact.

A lot of European Union funds will be channeled into the renovation of apartment buildings in the coming years, and thanks to this, this sector is becoming more and more important for Timbeco. Together with Taltech, we contribute to the DRASTIC project, where we start the reconstruction of an apartment building in the key of the circular economy and test the assembly, disassembly and re-installation of facade elements. We document damages caused by disassembly and assess how difficult it is to fix them if they occur. This is necessary to prove the circular economy viability of industrial renovation processes.

Sweden

Sweden has long had one of the hottest housing markets in Europe. Sweden's central bank suddenly started raising interest rates in April 2022 and has continued to do so for the past year.

According to Danske Bank, no recovery is expected in the near future. The bank expects house prices to fall by 25% from peak to trough in 2023-2024. However, the state and local governments have continued to build new buildings, and more and more green goals and requirements for energy saving are included in the projects. However, builders with private capital are increasingly exploring ways to make their construction activities more sustainable through wooden house manufacturers. The trend in wooden construction continues to grow.

Norway

A major influence is primarily the permanent drop in the Norwegian krone exchange rate, which makes buying goods from the euro area more expensive and directly affects the Estonian wooden house sector.

Demand in the housing market has fallen significantly. At the same time, the number of offers has increased and the prices are high. Many real estate developers have put their projects in the drawer and are waiting for the market to recover.

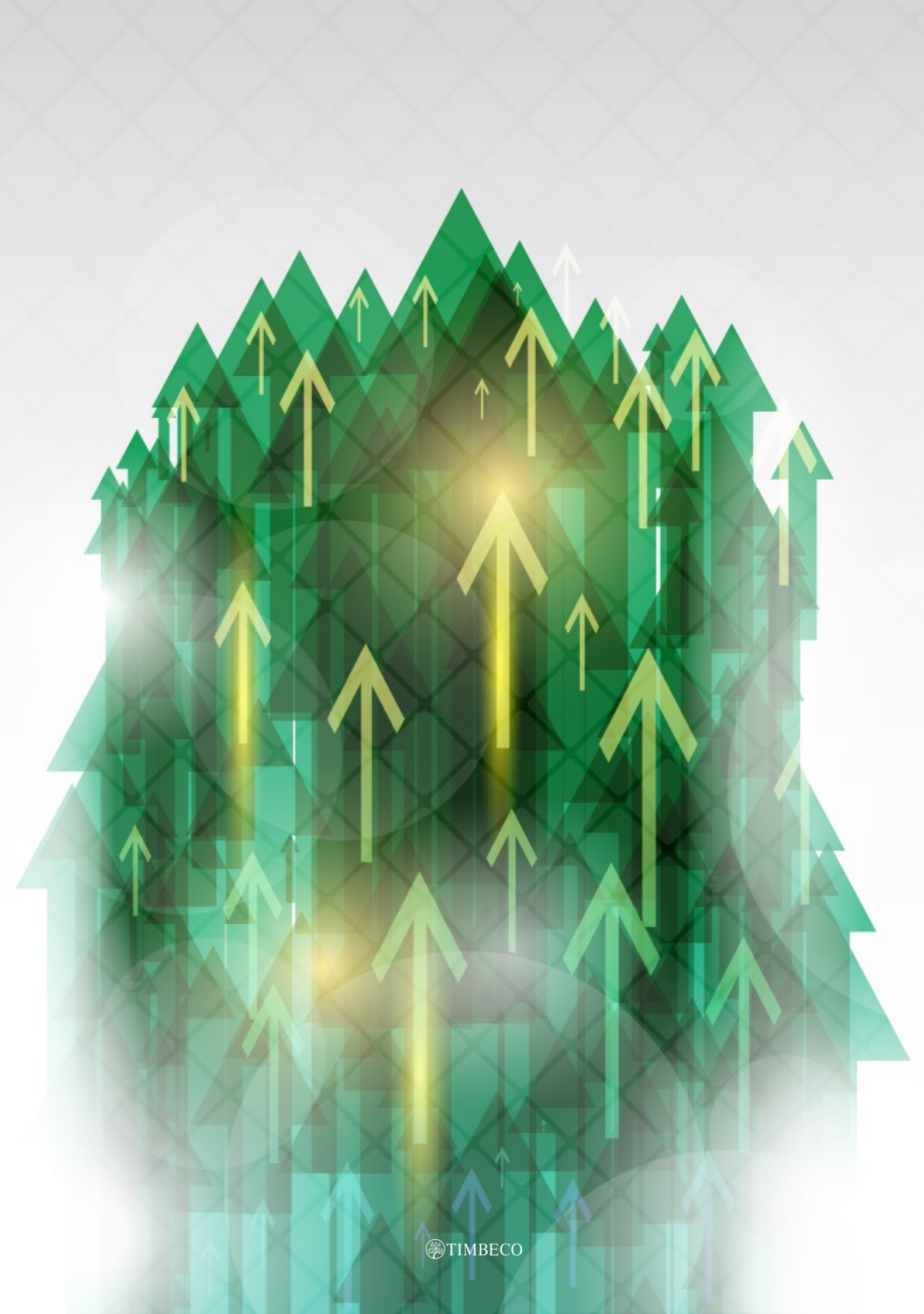
Community buildings, however, are getting more attention, and the downturn in the construction market is being taken advantage of by local authorities who want to build schools, retirement homes and kindergartens.

The partners have been researching more and more about various green topics, because the awareness of real estate developers and builders has started to grow locally. There are also companies that have not had much exposure to wood construction before, but as the sector is moving in this direction, there is a desire to familiarize themselves with more sustainable construction techniques and opportunities.

The Netherlands

In the Netherlands, it is noticeable that more and more environmentally sustainable construction has been increasingly focused on the national level. Many architects are also involved in the development of the field, and thanks to this, wooden construction is gaining a larger bearing area.

The volume of construction of factory-produced buildings has not been significant in the Netherlands so far, but step by step it is moving in the direction of erecting more factory-produced buildings. Above all, they are interested in the speed of construction and the smaller environmental footprint of buildings.



Timbeco services

When developing Timbeco's services, we are analyzing changes in the target markets and taking long-term green trends into account. Timbeco's focus is on the construction of modular buildings and we have therefore expanded our production capacity. In our opinion, the market of modular buildings is clearly in a growth trend, and one of the key solutions is standardized room plans, choice of materials and construction solutions.

The integrity of the Timbeco Modular Standard (TMS) service and the high level of project management allow customers to grow their business multiple times with the same number of people. Having a detailed overview of how Timbeco fulfills various roles, manages the necessary processes and is responsible for the final implementation of the project. In our opinion, the industrial production of buildings is an innovative and future-proof construction method, where instead of optimization, the uniqueness and special features of each project are found through standardization.

We see growth opportunities in the public buildings sector in the coming years. Increasingly higher environmental requirements are noticeable in larger procurements, and customers have a growing desire to build buildings with less environmental impact.

We are ready for the green wave of the construction sector and are able to offer buildings produced and erected from building materials with a low carbon footprint using effective construction methods.

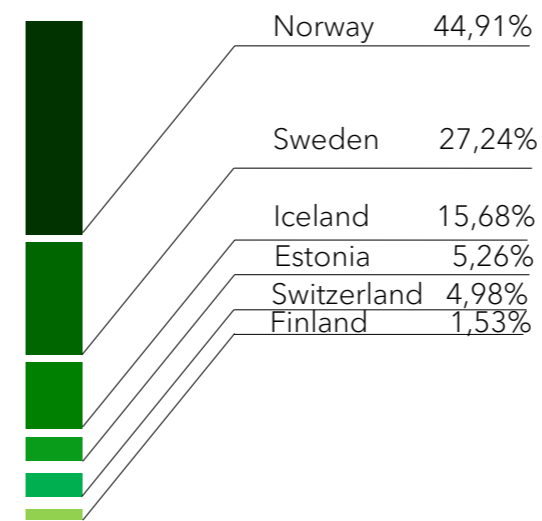
The ability to calculate the carbon footprint (LCA) allows us to offer our customers more and more added value. The greatest impact on reducing the carbon footprint can be achieved by choosing materials and construction methods immediately at the beginning of the project. The earlier the Timbeco wooden house factory is involved in the project with its team, the greater the effect can be achieved in reducing environmental impacts.

Timbeco clients

Our main partners are small and medium-sized Northern European real estate developers and construction companies. The Timbeco brand means reliability, professional attitude, best solution and quality guarantee for our customers.

Timbeco is highly valued for the transparency of services, high added value of products, energy efficiency, innovative and cost-effective solutions. Our promises and deadlines must and can be highly appreciated by our customers.

Sales by market in 2022



In 2023 and 2024, we have directed our sales focus to markets with lower currency risks and growing demand for wooden buildings with a smaller footprint. One of the key markets for us continues to be Estonia, where we see a significant increase in the sales of our products and services in the coming years.



Certificates

ISO 9001:2015 since 2012
ISO 14001: 2015 since 2015
ISO 45001:2018 since 2018

ISO 9001 quality management system

In order for organizations to compete successfully in the market with their products or services, their management must take care of continuous process improvement to ensure good quality. Continuous improvement and improvement is the basic principle of the quality management system. Adherence to the ISO 9001 standard requires the existence of a quality management system at an elementary level and is a guarantee for the customer that promises will be fulfilled.

ISO 14001 environmental management system

Given the ever-increasing awareness of climate change and environmental issues, organizations need an effective environmental management system that provides long-term competitiveness. Conscious environmental management is a company's opportunity to show that during the production and distribution of goods, they are aware of and control the impact of their activities on the environment. The company's desire to protect the environment is reflected in the sustainable consumption of raw materials, the selection and use of sustainable energy sources, the application of modern technologies, the efficient handling of emissions and industrial waste, as well as the logistical transportation of products.

ISO 45001 occupational health and safety control systems

Occupational safety problems may seem exaggerated until the first accident, which leads to physical injury and causes material and moral damage and negative publicity for the company. The occupational safety system is a very important part of the company's management, which creates the basis and framework for targeted, transparent, effective, fact-based and employee-inclusive occupational health and safety activities. Adopting an understandable and controllable occupational safety system also helps to manage and reduce potential risks and injuries.



ETA European Technical Assessment from 2021

The European Technical Assessment is an assessment document that confirms the performance of a construction product in relation to its main characteristics.

Harmonized standards and European technical assessments create a common technical language used by all those involved in the construction industry and enable manufacturers to draw up a declaration of performance and affix the CE mark. The CE mark allows a construction product to be legally placed on the market in any EU country and then traded in the EU's single market.

SINTEF certificate from 2022

At the beginning of 2022, the technical approval TG 20710 of the Norwegian Building Research Institute (Sintef Buildings and Infrastructure) came into effect for the building system developed in Timbeco.

Sintef confirms that the Timbeco element and modular building construction system consisting of design, manufacturing and construction solutions is suitable for use in the Kingdom of Norway and complies with the Norwegian Building Code. The approval covers buildings of up to 4 floors and covers areas such as load capacity, energy efficiency, sound insulation, fire resistance, wet rooms and the environment.

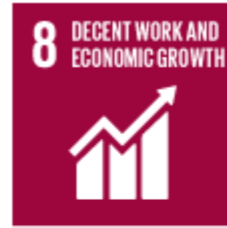


Timbeco sustainable development goals

Sustainable development goals (ESG Environmental, social and corporate governance) help Timbeco to put the company's activities in a larger context and to create connections with other organizations and fields. Among the goals of sustainable development, we have highlighted three areas where we see that we can create the greatest impact with our activities. We believe that these are goals where we can actively help create real change.

PRINCIPLES

- The success of the company depends on our people. We understand that success is directly related to the well-being of people who create value, who are offered a supportive work environment and who feel a personal and collective sense of mission and that they are valued;
- We have focused on the development of digital services, with which we reduce our ecological footprint. This allows to reduce paper and time consumption and create flexible forms of remote work;
- We build with wood because we value it as the most sustainable building material. We strive every day to find new innovative and environmentally friendly construction solutions;
- Timbeco wooden buildings are durable and visually dignified and meet the principles of a modern living environment. We start from circular economy guidelines and design buildings in such a way that they can be relocated, expanded, and construction materials can be used again;
- We want to build new buildings in cooperation with our customers in such a way that the best possible living conditions are guaranteed indoors (suitable humidity level, ventilation and soundproofing);
- We build in a controlled working environment because it ensures higher quality and better use of resources;
- We use the most environmentally friendly solutions in transport and choose our partners according to this principle.



8. Decent work and economic growth

Field: To achieve greater economic productivity; make the use of resources more efficient.



12. Responsible consumption and production

Challenge: To use natural resources more efficiently by reducing waste generation and raising people's awareness.



13. Climate action

Challenge: Improve awareness and corporate capacity in climate change mitigation.

"We create a better quality of life in an environmentally friendly way"

Creation of a charging facility for electric cars
There is a plan to build charging facilities for electric cars next to the factory and office parking lots.



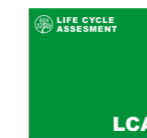
Solar park on the roof of production buildings
Electricity production for factory and office use.



Competence center for wooden construction
We are creating a competence center for wooden construction.



Calculation of LCA
LCA calculation capability has been created and implemented for the first projects.



ESG reports
We started preparing ESG reports and publishing them



TIMBECO2.0

2028

Zero-carbon company
Materials, production, transport and construction of buildings

2026

Acquisition of electric lifts and creation of infrastructure
Replacement of the lift fleet with electric lifts

2025

Production waste
We recycle at least 90% of production waste.

2023

TMS modules
Complete solutions from standard modules for erecting different types of buildings.

2022

Green Tiger Program
We went through the Green Tiger program.

Timbeco

sustainable development goals

OBJECTIVES/ACTIVITIES	2021	2022	CHANGES
TURNOVER (million euros)	12,5	16,7	
E-ENVIRONMENT*			
ENERGY CONSUMPTION PRODUCTION Kwh per 1m ² per year	2,76	2	■
ENERGY CONSUMPTION OFFICE Kwh per 1m ² per year	4,96	3,44	■
WATER/SEWERAGE, OFFICE/PRODUCTION m ³	3,92	6,1	■
WASTE IN THE OFFICE M ³	3,74	3	■
PAPER/CARDBOARD IN THE OFFICE m ³	0,89	1,02	■
WASTE IN PRODUCTION M ³	2,37	2,1	■
PLASTIC WASTE t	0,87	0,7	■
CARDBOARD RECYCLED IN PRODUCTION t	0,54	0,28	■
GENERAL WASTE IN PRODUCTION t	7,38	3,72	■
DRYWALL RESIDUES SENT TO RECYCLING t	0,84	0,64	■
WOOD RESIDUES RECYCLED t	1	1	■
SCRAP METAL t	0,1	0,26	■
HAZARDOUS CHEMICALS t	0,11	0,4	■
<i>*unit of reference data divided by annual turnover (e.g. water consumption in the office 49 (490 m³) divided by turnover 12.5 = 3.92</i>			
INSTALLATION OF NEW BRIGHT LED LUMINAIRES IN PRODUCTION HALLS	70%	100%	■
LCA CALCULATION AS STANDARD ON TMS PRODUCTS	0	1	■
IT EQUIPMENT SENT FOR RECYCLING VIA GREENDICE	0	100%	■
S-SOCIAL			
COMPREHENSIVE DEVELOPMENT PROGRAMS FOR EMPLOYEES (people who have completed the course)	1	5	■
ACCIDENTS AT WORK AT WORK (TARGET 0 SERIOUS ACCIDENTS AT WORK)			
SERIOUS ACCIDENT AT WORK	1	1	■
G-GOVERNANCE			
A COMPANY OR EMPLOYEE HAS COME UNDER EXTERNAL IT ATTACK	0	0	■

■ Positive

■ Neutral

■ Negative



Added value of factory-produced buildings



LCA

LCA calculation for Timbeco buildings in the early project phase.



Thanks to the LCA calculation, it is possible to make choices in terms of materials and construction methods in the direction of a smaller environmental footprint.



Standardized modular solutions help reduce costs and increase construction capacity.



Produced in a controlled environment and from materials. Safety at work is a priority.



In the case of modular buildings, up to 95% of the work has been carried out in the factory and therefore it is possible to



Buildings are designed with the principles of the circular economy in mind.



Timbeco Building Life Cycle Assessment (LCA)



Life Cycle Assessment (LCA) is a systematic analysis of the environmental impact of products or services throughout their life cycle, from resource extraction to waste management. This includes suppliers and processes in the production chain (e.g. production of raw materials, consumer goods), the use phase and waste management (e.g. recycling or disposal of waste).

The calculation results in 60 years of total life-cycle GHG emissions, including emissions from building materials and products, construction, use and final handling.

Through life-cycle assessment, the producer has the opportunity to better analyse and optimise the production technology and raw materials used in order to reduce the environmental impact of the product by improving sustainability and competitiveness.

In the long term, the methodology will be used throughout the European Union, as the draft of the redesign of the Energy Performance of Buildings Directive published on 15.12.2021 will require the life-cycle carbon footprint of a building to be reported in the energy performance certificate from 2027 onwards.

The methodology is based on environmental declaration standard EN 15804+A2:2019 (EPD), life cycle standard EN 15978 (LCA) and European Level(s) framework. In order to calculate the life cycle of buildings according to these standards, it is necessary to establish an accurate calculation scope and procedures for using source data and default values, which makes the methodology of each country slightly different.

■ **Embodied Carbon** - carbon emissions from the extraction, manufacture, transport, installation, maintenance and end-of-life of building materials. It accounts for about 11% of global CO₂.

■ **Operational Carbon** - carbon emissions resulting from the use of the building: for example, the energy needed to heat, cool and maintain the building.

Components of building lifecycle assessment

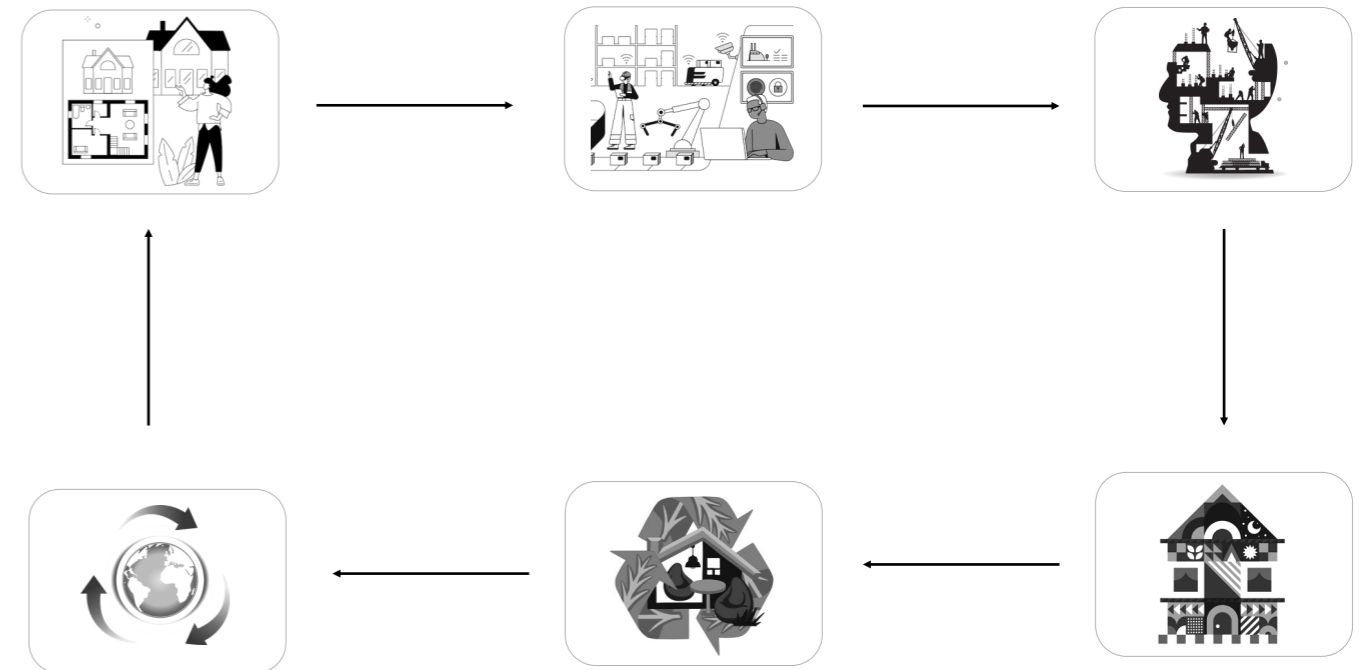
PLANNING OF SUSTAINABLE REAL ESTATE PROJECTS/ BUILDINGS. SELECTION OF CONSTRUCTION METHOD AND MATERIALS

PRODUCTION PHASE OF BUILDINGS

- A1 - raw materials and production of building materials
- A2 - transport
- A3 - production

CONSTRUCTION OF BUILDINGS

- A4 - A5 Construction
- A4 - transport to the construction site
- A5 - construction/installation



ADDITIONAL INFORMATION OUTSIDE LIFE CYCLE D

Benefits or burdens for the environment from recycling, reuse and energy recovery beyond the life cycle of a building. Takes into account the potential of exported renewable energy, reuse, reuse and recycling.

END OF LIFE OF BUILDINGS

- C1 - dismantling and demolition
- C2 - transport to a waste treatment plant
- C3 - Demolition waste management
- C4 - Final withdrawal from circulation

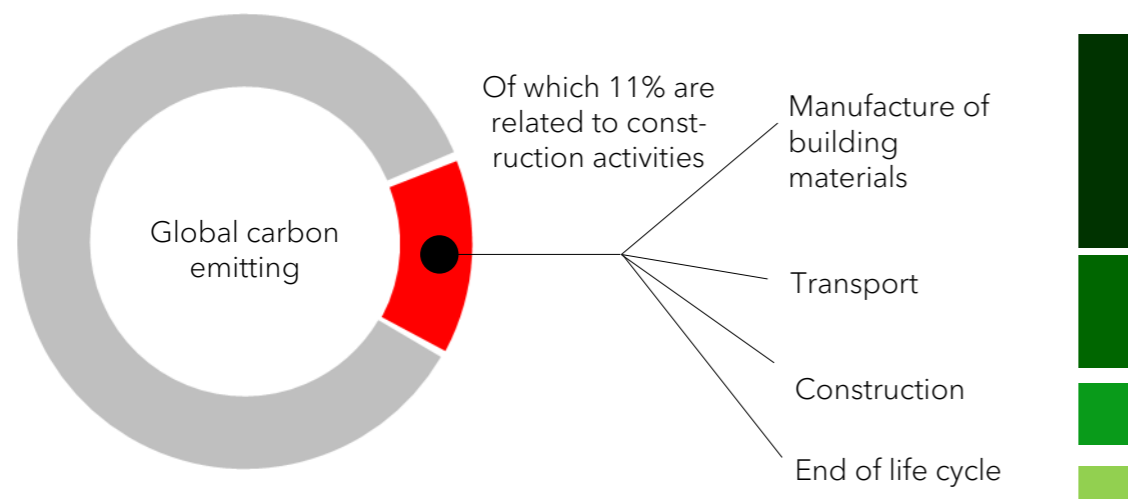
USE OF BUILDINGS

- B1 - everyday use
- B2 - maintenance
- B3 - repair work
- B4 - replacement of parts of the building
- B5 - Renovation
- B6 - energy consumption
- B7 - water use

■ **The LCA calculation can be carried out in different stages of the project:**

1. In the conceptual design phase of the building, where the building materials and construction method are determined;
2. In the design phase, it is possible to perform a comparative LCA calculation;
3. In the construction and procurement phase;
4. When the building is commissioned.

The level of detail of the LCA depends on the data available at each stage. One Click LCA offers tools suitable for different phases.



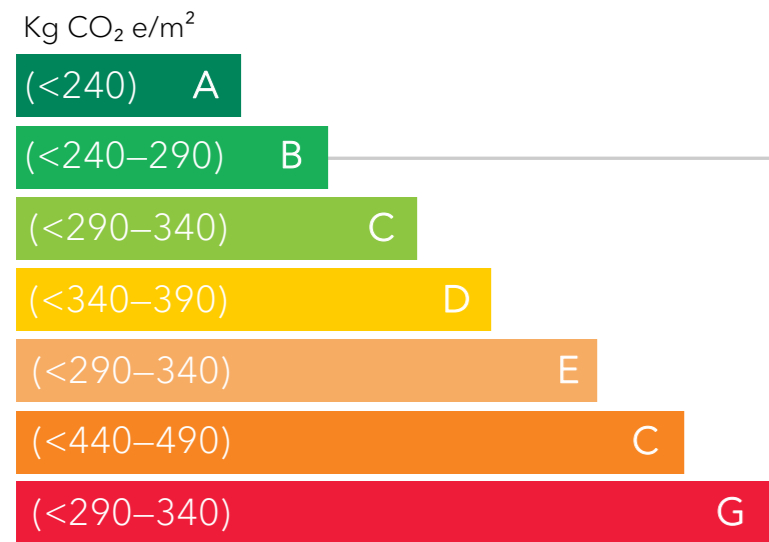
Timbeco LCA calculation methodology



Carbon heroes Benchmarking

Comparative data are based on region and destination countries. For example, for some projects in Sweden or Norway, there are more than 200 similar objects in the sample from different Scandinavian countries (sample "Northern Europe").

- Information sharing and storage is anonymous
- Verified by experts
- Additional control by algorithms



Most of the buildings manufactured and erected by Timbeco correspond to class **B** according to LCA calculations.

Performance metrics (A-G)

- The range is divided into 7 levels
- The average of the results falls in the "D" range.
- A, B and C are better than average results
- E, F and G are worse than average results

Target country solutions for carbon footprint calculations

BREEAM is an internationally adaptable sustainability standard recognized and implemented in 89 countries. In Norway, carbon footprint calculations are made according to NS 3720 standard and TEK17 environmental declaration, and in Sweden BREEAM SE NC 2017.



Examples of visualization

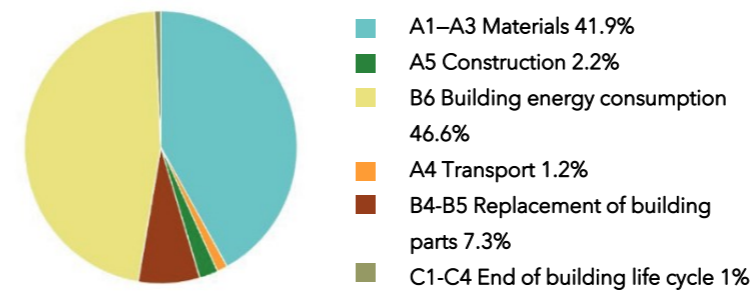
Issuance of CO2 in different building elements and stages of the life cycle

Example of CO2 emitting by building elements

- Foundation construction - 15%
- Building walls and facade - 15%
- Suspended ceilings, floors and roof - 30%
- Other structures and materials - 18%
- Construction technology - 22%

The adjacent table and diagram is one example of how GWP is distributed between different building elements and life cycle stages. The results suggest that efforts should be made during the building design phase to reduce GWP.

An example of a building's GWP calculation when emitting



GWP - Global Warming Potential

NB! For visualization and comparison of different materials, OneClick LCA offers a very large number of different tools.

Comparison of the use of different materials in the execution of the same project

In the future, buildings with a lower carbon footprint will clearly have a greater competitive advantage. If this were to become a reality, construction from different materials would begin to be compared and an increasingly weighted choice would be made to erect buildings with a smaller footprint. The same building, constructed of concrete, steel or wood, differs greatly in terms of environmental impact.

GWP - Globaalse soojenemise potentsiaal)

AP - Acidification potential

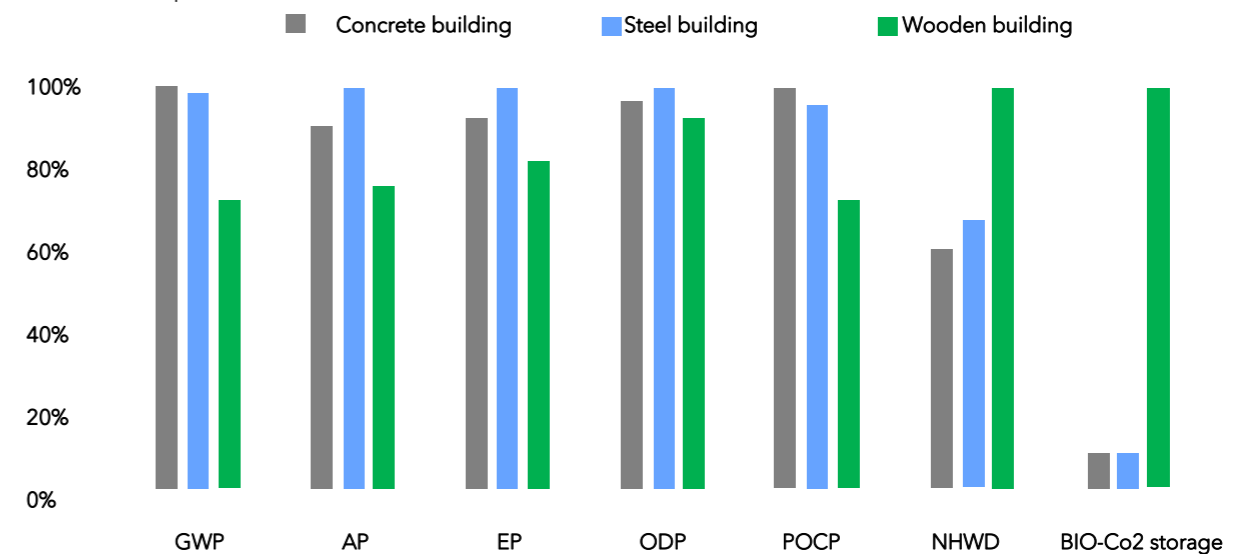
EP - Eutrophication potential

POCP - Photochemical ozone creation potential

ODP - Ozone depletion potential

NWHD - Non hazardous waste disposed

BIO-CO2 STORAGE Biological carbon sequestration is the natural ability of life and ecosystems to store carbon.



Timbeco standardized modular construction solutions

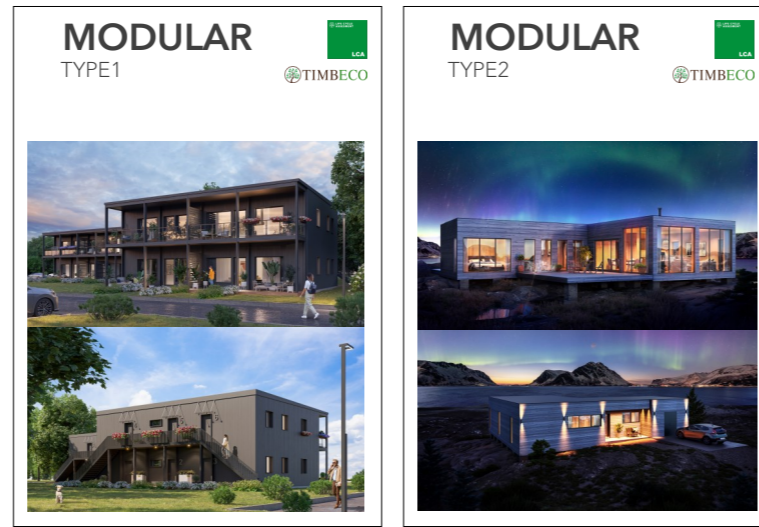


Timbeco Modular Standard (TMS)

TMS is a new approach to building from modules. The modules produced from the wooden frame are combined into multifunctional living spaces on the "plug & play" principle. The result is buildings that not only provide a modern living environment, but also have decisive advantages in terms of health and indoor climate. Timbeco Modular Standard enables short construction times, minimizes on-site emissions and creates homes that are almost 100% recyclable.

TMS solution for real estate development company

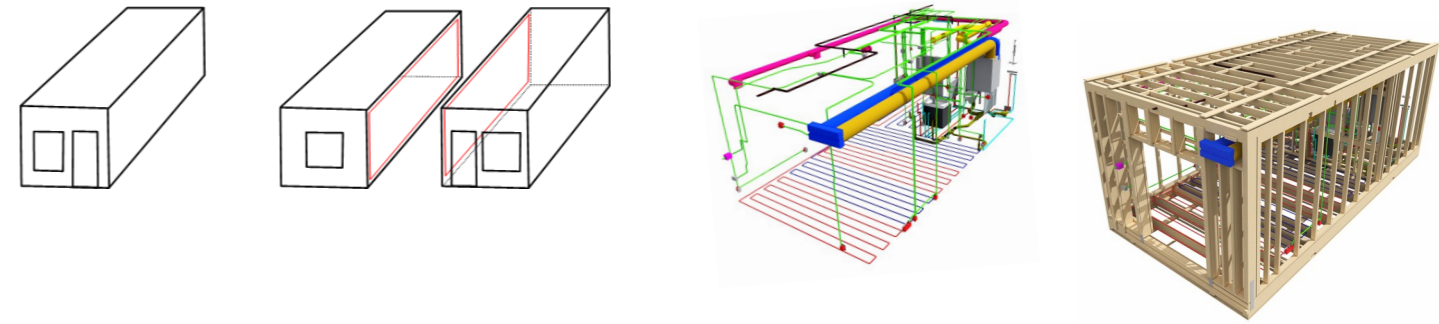
Our service is especially suitable for a real estate developer or a start-up real estate developer who wants to do large residential construction projects. Timbeco Modular Standard offers a full service, starting with plot planning, matching suitable buildings and maximizing salable m2 to delivery of turnkey modular houses within 7-10 months! Using our service, customers do not need to have specialists in each field in their company, because the projects of Timbeco Modular Standard products are already solved with statics and HVAC



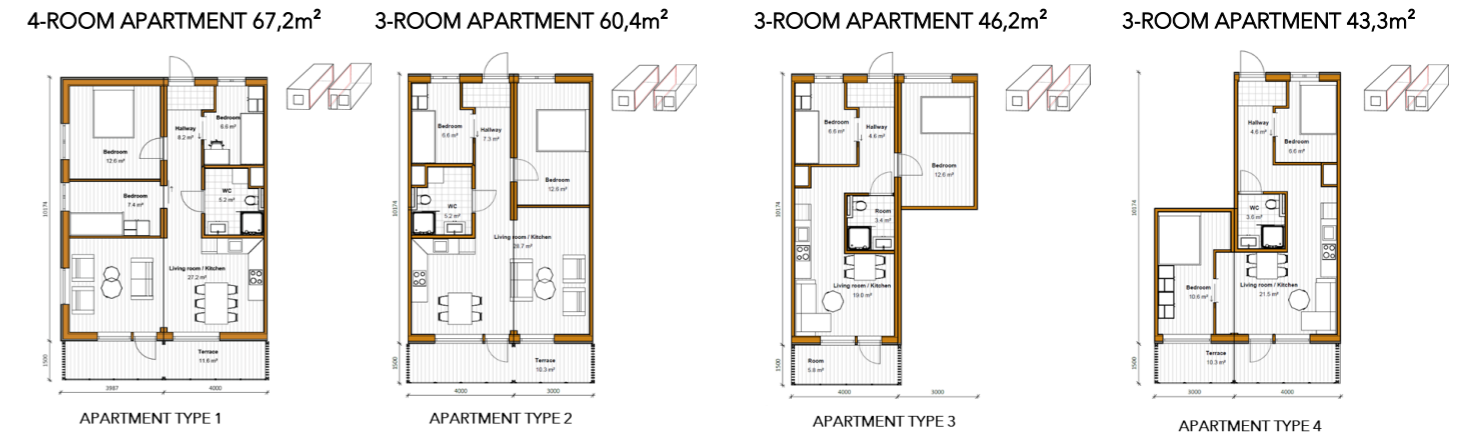
All TMS modular buildings have an LCA calculation.



Apartment buildings are planned using 1, 2 or 3 modules



Examples of ready-made room solutions



PRELIMINARY WORK WITH THE PROJECT

- General planning of buildings on the plot
- Selecting building types
- Preliminary price calculation
- Evaluation of the profitability of the project
- Creating a Schedule
- Preparation of drawings for building permit

DESIGN AND PROJECT MANAGEMENT

- Production and construction project documentation.

TRANSPORT

- Transport plan
- Transport of the modules to the site according to the plan

SALES SUPPORT FOR REAL ESTATE PROJECTS

- Customer-based design of sales materials, marketing support.
- LCA analysis and building CO2 footprint calculation.

TECHNICAL CONSULTATION

- Detailed planning
- Fire safety analyses
- Audio analyses
- Description of MEP systems
- Choosing finishing materials
- If necessary, development of a special solution

PRODUCTION

- Procurement of materials
- Production plan and logistics
- Module production and quality control
- Furniture Installation
- Packing for transport

CONSTRUCTION

- Construction resource planning
- Construction site logistics and erection plan
- Installation of modules
- Finishing work

AFTER SERVICE

- Complete handover of project documentation
- Annual inspections and warranty work during the warranty period

Waste collection by type



■ **Remains of plasterboard**
Gypsum scraps are collected and sent to the handler.

■ **Glue-containing and chemically treated wood waste**
Collected separately and sent to the handler

■ **Packaging film**
Collected separately and sent to reprocessing to produce new packaging film.

■ **Sawdust**
It is collected and made into wood briquettes.

■ **Insulation wool scraps**
It is collected and a specialized company produces bulk wool from it.

■ **Metal waste**
Collected and sent to the metal collection.

■ **Hazardous waste and contaminated packaging**
Collected in separate containers and sent to the waste station.

■ **Wood waste**
Wood blocks longer than 600mm are collected separately and sent to finger jointing.



Economical use and recycling of construction materials

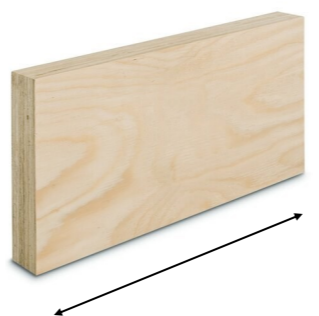


C24 wood

We use C24 strength-graded construction material with CE conformity mark.

LVL frames and beams

We use LVL material more and more because it has good technical parameters, is easy to use and has a smaller environmental footprint.



Increased adoption of appropriately sized and pre-processed/finished materials

When sourcing wood and board material, we base it on the assumption that it would be as accurate as possible and would help reduce the generation of waste. Whenever possible, we use pre-processed and finished materials.

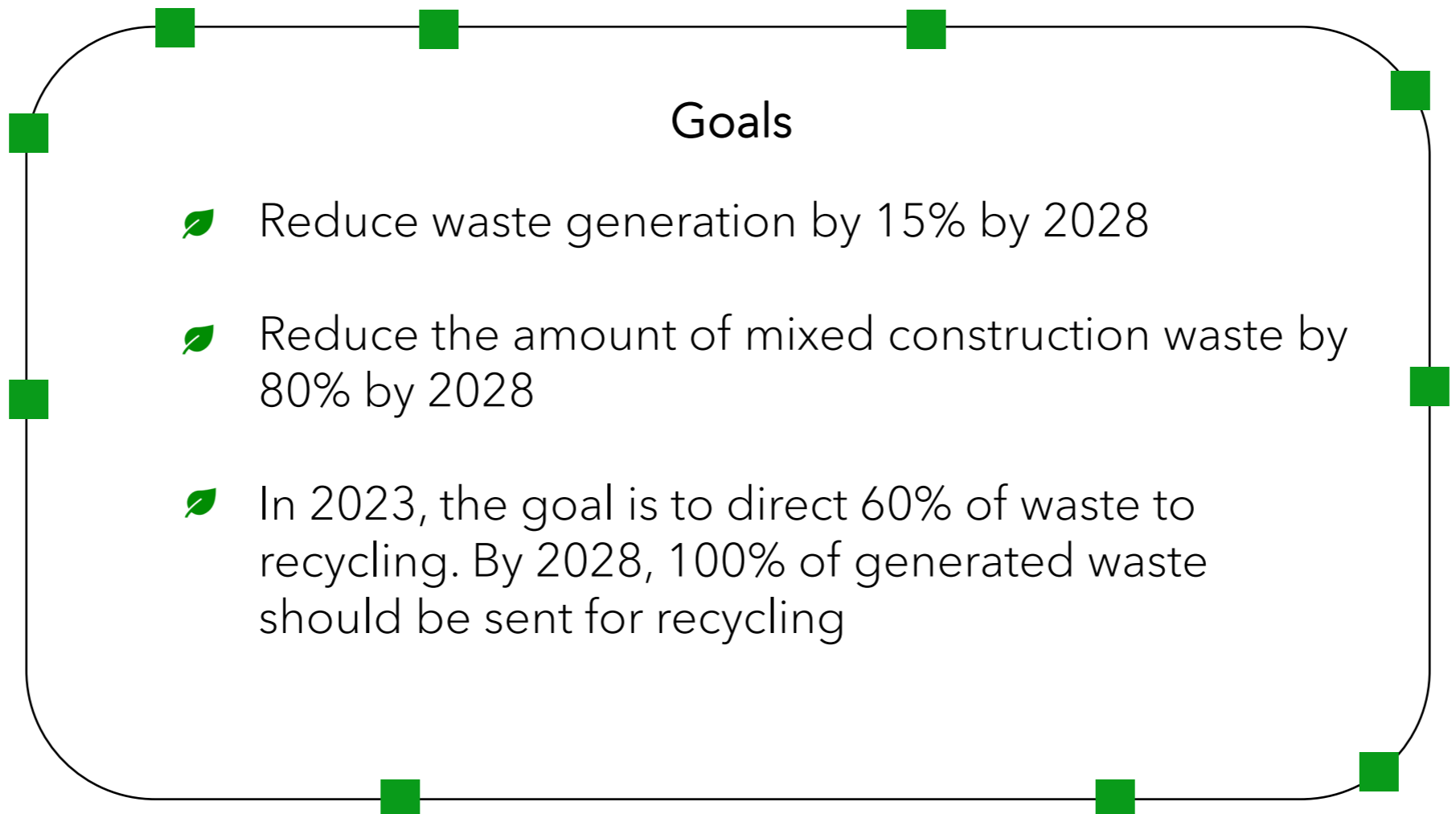
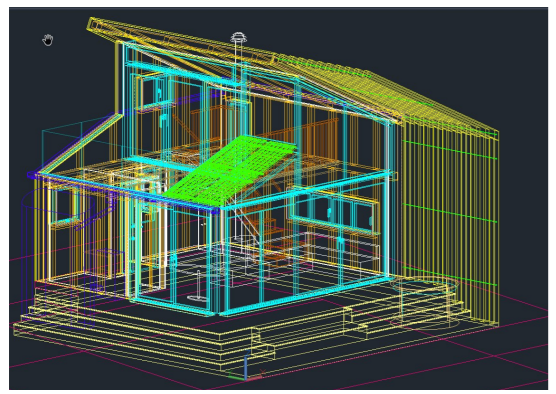


FSC® Timber Supply Chain Certification

The FSC certificate confirms that wood from responsibly managed forests is used in the production of wood material and that this material is traceable at all stages of production and marketing.

The choice of materials in the design of buildings

When designing buildings, Timbeco engineers take into account the standard dimensions of materials, so that cutting to size is as efficient as possible and with as little waste as possible. In addition, it is also taken into account that building components should be as easy as possible to install and dismantle. This is necessary so that, if desired, elements and modules can be dismantled and new buildings can be built from them.



Goals

- 🌿 Reduce waste generation by 15% by 2028
- 🌿 Reduce the amount of mixed construction waste by 80% by 2028
- 🌿 In 2023, the goal is to direct 60% of waste to recycling. By 2028, 100% of generated waste should be sent for recycling

Collection of wood scraps by type

Wood scraps are collected in production halls in a container marked accordingly. Wood material with a maximum length of up to 600mm is considered production waste. In total, wood waste is collected in five different categories.

Finger jointed frame material

We send wood waste longer than 600mm to finger joint gluing to produce frame material from it.



Packaging film produced from recycled plastic waste

We use film produced from plastic waste for weatherproof packaging of wooden elements. We collect film waste generated in production and construction sites and send it for recycling.



Bulk wool is produced from insulation wool residues

We collect the wool waste generated in production and send it to our partner, who produces bulk wool from it.

Heating blocks from production waste

Sawdust is pressed into heating briquettes and is used for heating production buildings and is also sold to private customers.



Safety

Occupational safety objectives

Timbeco's main occupational safety goal is 0 serious occupational accidents in the factory and on construction sites. To achieve this, the company has put together an action plan that will help achieve this goal.

Training of new employees

When a new employee is added, comprehensive safety training is carried out. Training materials are shared, safety videos are reviewed together, and rules and requirements are explained.

Trainings

The company ensures the organization of the necessary trainings for forklift drivers, medical aid providers and the entire team to ensure fire safety.



Working environment meetings

The company has functioning working environment meetings, where an equal number of employees and employer representatives participate. The purpose of this meeting is to ensure a good working environment, to resolve issues of occupational health and occupational and environmental safety.



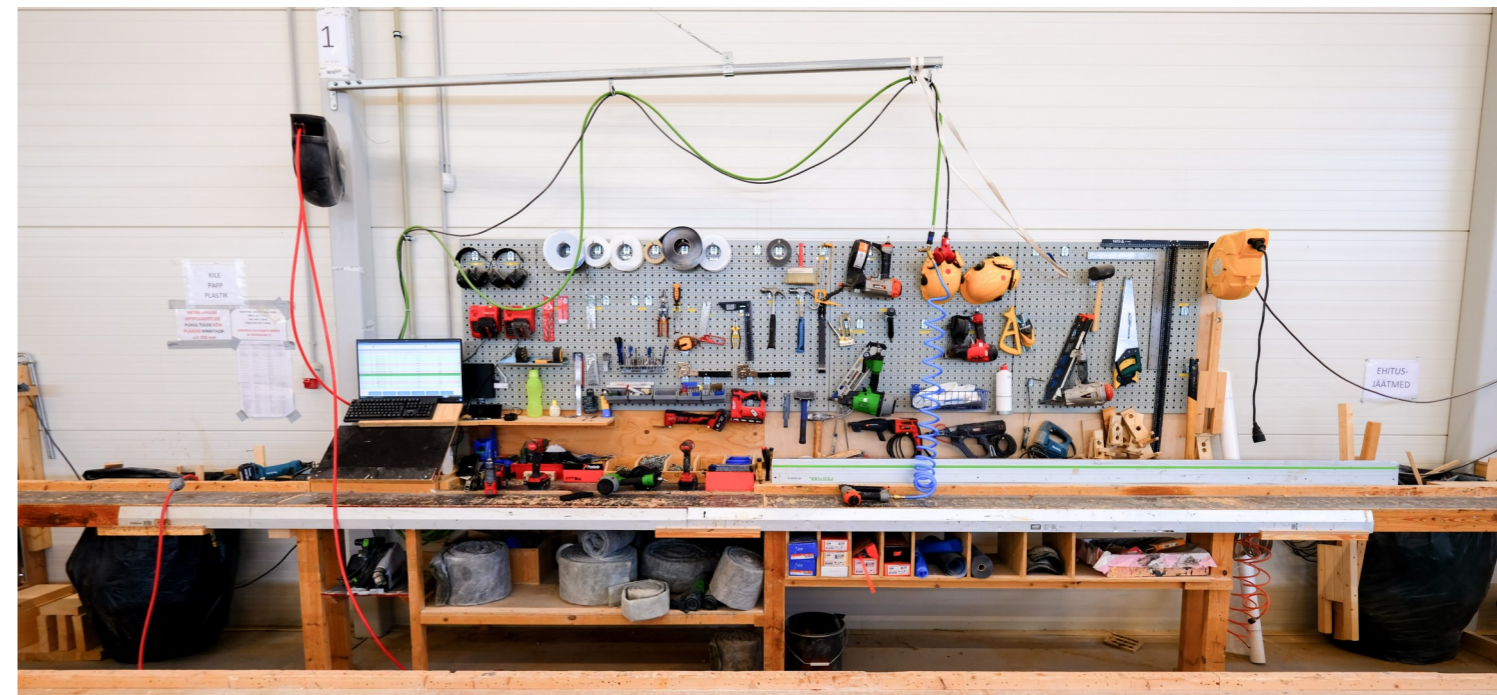
Work clothes

Timbeco employees operating in the factory and on construction sites are equipped with work clothes, helmets, headphones, harnesses and safety shoes provided by the company.



Safety signs and markings

In the factory and construction sites, great emphasis is placed on the presence of safety signs. All visitors to the factory are informed in advance about the safety rules and the use of safety equipment.



Regular health check-up

The Timbeco factory is regularly visited by a health bus, which facilitates the health check-up of employees.



Occupational and environmental safety tours

Regular tours to ensure occupational and environmental safety in production, where compliance with requirements is checked. The minimum allo-

Ohutusringkäik Timbeco TR week 21, Internal measurement 24.05.2023, Week 21

Date	Week	Project			
24.05.2023	21	Ohutusringkäik - Timbeco Woodhouse OÜ	Kadi Prants		
Measurement topics	Notes	Positive	Negative	Level	
TOOTAMINE, ISIKUKAITSEVAHENDID	9	9		100.0 %	
TOORISTAD, SEADMED, MASINAD	9	9		100.0 %	
TELLINGUD, REDELID	6	4	2	66.67 %	
KÄIGUTEED, PIRDED	3	2	1	66.67 %	
TULEOHUTUS, ELEKTROHUTUS	1	1		100.0 %	
OHUTUSMÄRKID, ETTEVÕTTE VISUAALNE IDENTIFIEET	2	2		100.0 %	
TÖÖKOHA KORD, JÄÄTMED, TÖÖLISTE OLMERUUMID	8	8		100.0 %	
Total	38	35	3		
LEVEL: 92.11 %					

Fire safety activity

We have invested significantly in fire safety activities in recent years.

- A closed water reservoir has been built next to the factory to supply water to the fire hydrants and sprinkler system.
- The production halls are marked with large signs and this helps to reach the correct building quickly in case of transmission of an alarm based on the production hall.
- Rescue team entry routes and hydrant locations are properly marked.
- We regularly organize fire drills.



Implementation of 6S system

6S system

It is a LEAN management technique whose principle is that we keep things simple and do what is necessary - We make things happen!

6S is a workplace organization methodology that uses 6 stages in the implementation process.

Since these stages are originally in Japanese and all start with the letter S, hence the name "6S".

Sort - those tools that are directly needed are selected in the workplace and those that are not actually used are taken away.

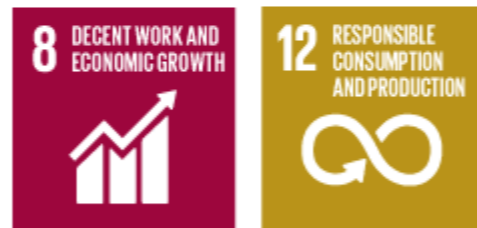
Set in order - Remaining funds/things are arranged to a certain place, keeping in mind the frequency of use and ergonomics.

Shine - Cleans the entire work area and equipment in such a way that it is possible to see when something is out of order (especially for detecting equipment and leaks in industrial areas). This stage also tries to identify the original source of the dirt.

Standardize - Essentially, the previous step is modified as a standard/rule. This, in turn, establishes the so-called best practice regarding the most effective structure of the workplace until it is changed based on analysis.

Sustain - Usually the most ignored stage, as a result of which everything achieved falls apart after a while. Maintenance requires consistent self-discipline and periodic control to maintain the previous four stages.

Safety - This is the newest component in the 6S system, where all activities in work zones must be well thought out and safe. In addition, it extends to mind-set and company culture



What was done to implement 6S at timbeco

Trainings

For the successful implementation of this project, training sessions were held for production workers, where the principles of the 6S system were introduced step by step by the consultant. Practical work also took place during each short seminar, where the necessary activities were carried out on the basis of a sample workplace.



Inventory

Before implementing the 6S principles, an inventory was carried out at the workplaces and everything unnecessary was eliminated. Only the tools necessary for work were left at the workplaces. There is a designation on the stand for each tool.



Labeling

The locations of the ladders are marked in the production hall, forklift paths, waste containers, guaranteed good access to fire extinguishers and first aid equipment.



Placement of small equipment closer to workplaces

In production, "Kanban" shelves have been installed for small equipment. This gives a better overview and reduces time consumption. Checking and filling is done daily by a warehouse employee.

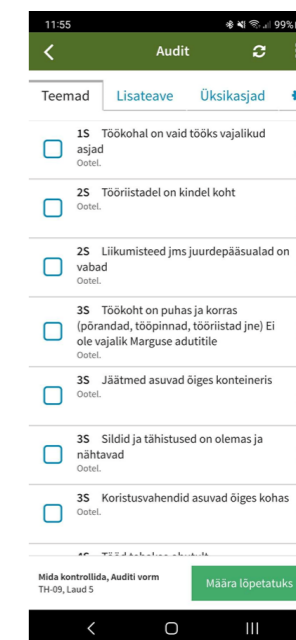


Alldevice tools management

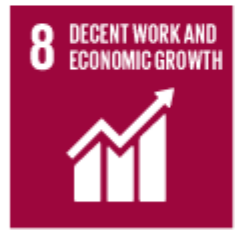
We use Alldevice software for tool maintenance and management. Alldevice (CMMS) is simple and provides an overview of maintenance and repair work that has been or is to come at a glance, and the assurance that everything necessary is under control and nothing has been forgotten. It is an engineer-to-engineer program, the one and only "safe place" to store all equipment-related information and where it is easy to find later. Since Alldevice focuses on the device, after determining which device it is (using the name, serial number, tag number, etc. characteristic), you can find everything you need with a few mouse clicks.

Auditing

The auditing procedure and who and have been agreed upon when do they do it.



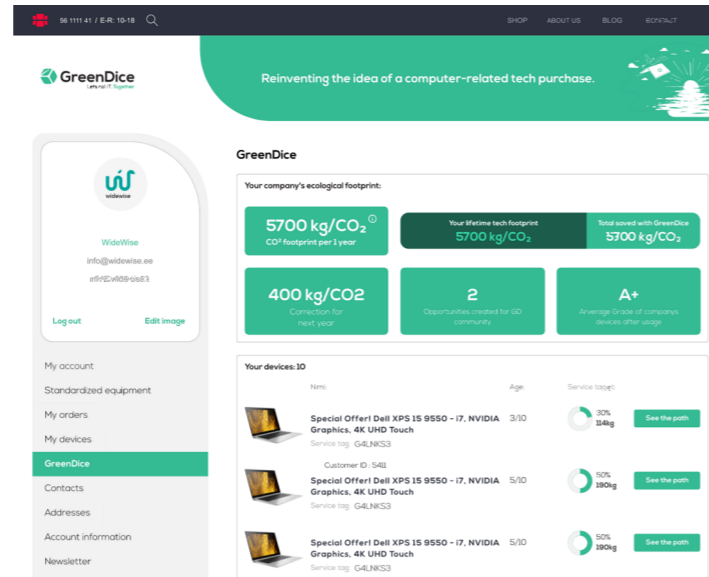
The Greendice tmeasures the Co2 footprint of Timbeco technical equipment and helps to reduce it



■ New IT equipment

With GreenDice, we can guide and monitor the life cycle of IT equipment from production to end of life. Timbeco's goal is to extract the maximum resource from one ready-made IT device. At Timbeco, we use only high-quality equipment, and as a rule, they are in active use for 4-5 years. Since the expected life of one computer is 8-10 years, we send them to GreenDice for inspection after the end of their useful life, and these devices are used again in schools, libraries and other social institutions both in Estonia and in other parts of the world.

GreenDice very precisely monitors the movement of each device in a complete technical circle. Any device that has reached the end of its life cycle is directed to material recycling.



■ Used IT equipment

At Timbeco, we have partially put used tablets and screens on sale. In this way, we give them a longer life and reduce the environmental footprint. At Timbeco, such devices are used for 5 years or until the end of the device's life.

■ Calculating the lifetime carbon footprint of IT technology software

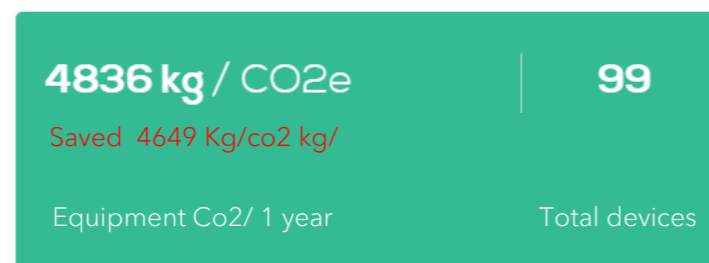
Greendice has developed a system based on which the environmental footprint of each purchased device can be calculated, and on the basis of which it is possible to prepare accurate reports on the effects of all IT equipment.

■ The formula for calculating the carbon footprint of IT technology

- A - Co2 generated during production
- B - Total life of the product in years
- C - Primary user consumption in years
- D - Not purchased by members of the Greendice community

$$\frac{A}{\frac{B}{C}} + D \leq O$$

■ Co2 footprint of Timbeco 2022/2023 IT equipment



Working at Timbeco

■ Timbeco Woodhouse OÜ

2023 employees of the Timbeco group of companies worked a total of 135 people in the I quarter. Timbeco Woodhouse OÜ had a total of 81 team members in the II quarter of 2023.

Production.....	50
Project management.....	6
Projecting.....	9
Sales/advance accounting.....	8
Office/HR/Finance.....	8

■ Trainings

Training is becoming an increasingly important topic in the company's work. We have prepared a comprehensive training calendar where you can find trainings for the entire company, teams as well as personal development programs.

- A. 1x per month professional internal training In-house group trainings, e.g. English and financial training.
- B. 1x per quarter internal training on health. Development programs where the company contributes to ensuring that our employees get very thorough and modern knowledge in their field.
- C. Six times a year, the focus is on different topics, and the trainers are our own employees or external consultants. The training topics are mental health, how to consciously do health sports, financial wisdom, etc.

■ Remote work at Timbeco

During and after the corona pandemic, we have encouraged remote working opportunities. It certainly does not replace contacts between people and teamwork, but it is a good alternative in terms of flexible work arrangements.

■ Benefits for employees

- We recognize learning, we pay a graduation bonus for bachelor's and master's degrees
- On September 1, elementary school parents have a paid day off so that our people can send their youngest children to school.
- Joint events - both those of the team and those of the company, at least 5 times a year there is an opportunity to undertake joint activities and adventures with colleagues
- To balance work and family life, we offer flexible working hours and ways of working
- A healthy mind in a healthy body, sports are honored at Timbeco and of course we also pay a sports subsidy
- For personal bereavement events, we provide 5 paid days off to take time off and focus on yourself and your family
- We financially support both sad events (funerals) and happier ones (birth of a child)
- We celebrate and rejoice together with our employees on their personal events (graduation, birthdays, etc.)
- We maintain the salary of the employees for the duration of the training sessions of the Defense Forces
- We value the long-term employment relationship, we recognize achievements of seniority.

Joint activities in Timbeco

■ Doing sports together

Regular active events contribute to the formation of a strong team feeling. We organize joint running training and disc golf competitions. We regularly go to the world's largest rowing marathon in Võhandus



■ Participation in RMK's forest planting works

For several years now, we have taken part in RMK's forest planting plots and thereby made our small contribution to the growth of new trees.



Contributing to community development

■ Power generators to Ukraine

Timbeco sent a power generator to Ukraine to deal with power outages. The collection of electric generators was organized by Lions Club Saku. In total, the regional charity contributed 7 electricity generators as its own donation.



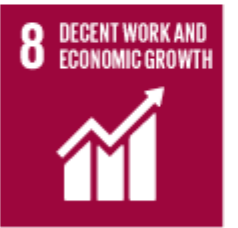
■ We support Tõdva Volunteers Rescue commando

We maintain and protect the community by supporting local rescue efforts. It is an assurance to our small local community as well as to the Timbeco factory that rescuers will be there when they are needed.



■ The Ministry of Defense gave Timbeco "Supporter of the National Defenders" award

We value national defense and the contribution and participation of employees in national defense. We maintain the average salary for employees during the training sessions.



A company management model that takes into account changes in the sector

■ The flexibility of the sales strategy

Changing the company's sales strategy is continuous and requires the contribution of the entire management team to find the most optimal courses of action. There are many reasons for changing the strategy and all of them must be taken into account

In 2022 and 2023, the risks related to the currencies of the target countries have materialized. Falling exchange rates have put Estonian wooden house manufacturers in a difficult situation and forced them to actively look for new target markets. At Timbeco, we have actively tried to find partners in new markets.

The demand for residential real estate has decreased significantly, and therefore we have started more and more community building projects. In addition, we have also continued to offer facade solutions.

Since the renovation market of apartment buildings has become significantly more active and the price level of industrial renovation is reaching the same point as traditional renovation methods, we see a great opportunity for growth here and invest more and more in this field.

■ The company's management team

In the management model of the company, the management group, which includes the managers of all departments, has a leading role. The goal is to discuss the questions that have arisen and offer solutions to them every week.

In the extended management group, quarterly meetings are held, where there are summaries of the previous quarter and activities are planned for the next three months or longer periods.

■ Product development

The company deals with the development of products and services on a daily basis, and the product development manager, module product manager, design team and sales department play a big role here.

The task of the product development department is to create and manage a system that enables the company's product and service to become more competitive. The head of each direction is responsible for substantive development activities.

The trend of building from modules is gaining more and more attention in our target markets, and therefore we have set the focus here at the moment. We develop TMS (Timbeco Modular Standard) projects and work consistently with the substantive development of this service.

Since the field of industrial renovation is offering more and more opportunities in Estonia, we are also making preparations for possible developments here.

Contributing to the development of the wooden house sector

■ Developing the competitiveness of the Estonian wooden house sector through the wooden house cluster

The CEO of Timbeco, Siim Leisalu, is one of the members of the council of the Eesti Puit house cluster. The cluster was created in order to increase the international competitiveness and export turnover of the sector's companies through international cooperation between companies, research and development activities and educational institutions in the field of joint marketing activities, product development and competence enhancement.

■ Participation in various seminars, conferences, industry competitions and workshops

We want to take care of vocational and higher education in the field of construction. We help young people find their way into the wood sector by holding lectures in (university) schools and offering the opportunity to do internships and write theses in the field of the wood industry. The best theses will be awarded. The winners of the wood sector of the BuildIT competition received a special prize, where the team could spend a day in Timbeco and learn about the company's work.

