




29 YEARS OF TIMBECO

TIMBECO WOODHOUSE OÜ  
SUSTAINABILITY REPORT  
**2022**



## | Table of contents

1. Sustainable management
2. Who we are
3. Certificates
4. Product and service

### — Environment

4. Timbeco's sustainable development goals
5. Green Tiger Program and sustainable mission
6. The long prospect of green innovation
7. Turning environmental impacts into a product
8. Drive0
9. Recycling of production residues
10. Waste management

### — Social responsibility

11. Employees are our greatest asset
12. How we contribute to the development of the wooden house industry
13. We invest our knowledge in the field of education

### — Governance

14. Development team
15. IT and cybersecurity

## | Sustainable management

The life and economic environment around us is changing rapidly. Uncertainty and unpredictability are on the rise, and uncertain times are forcing companies to seek support for their values and mission. Timbeco's mission is to create a higher quality of life in an environmentally friendly way. As a team, we want to become the best manufacturer of wooden factory buildings in Europe.

We have seen several economic cycles in almost 30 years of operation and we have always become stronger as we have gone through them. We believe that the future belongs to those who can work even harder and are committed to fulfilling their mission even in difficult times. In recent years, we have expanded our production facilities and equipment rapidly and invested in new digital technologies.

We want to get through turbulent times so that our team maintains a professional level and motivation. That is why we are increasingly contributing to the health and well-being of our employees. In order to balance work and family life, we offer flexible working hours and ways of working. We support sports and recognize long-term colleagues.


We consider the continuous development of services and products and the cooperation experience offered to our customers to be very important. This is the case during the sales process, the design phase and during the implementation of the project. We believe that efficiency can be achieved in this chain of activities, which is not possible with traditional construction methods. By working together, we can design, manufacture and erect public buildings and energy-efficient homes with a smaller environmental footprint.

We perceive that the public sector and real estate development companies are increasingly focusing on the environmental impacts of construction.

Timbeco's strategy is based on sustainable operations, and our goal is to be carbon neutral by 2028. It takes into account the capture of carbon in the buildings we build and the energy produced by the solar panels installed on the roofs of the factory buildings.

We are working on many levels to achieve our green goals. It is important for us as engineers to be able to calculate our carbon footprint and thus find ways to reduce it. Customers also play an important role here, providing us with valuable feedback and encouraging us to continue on our chosen path. Reducing waste and recycling and optimizing processes thanks to IT capabilities are yielding better and better results and we believe we can meet our long-term goals.



 Siim Leisalu  
CEO



# Who we are

timber + ecological = **TIMBECO**

The name Timbeco is derived from the English words "timber" and "ecological", which best describe the basics of our business

## VISION

Leading manufacturer of wooden buildings in Europe

## MISSION

We create quality of life in an environmentally friendly way



Timbeco employs more than 160 people. 80 people are involved in production, 20 on construction sites, 14 designers, 2 estimators and a 6-member sales team



We produce more than 100,000 m2 of wooden elements a year



The production capacity of the modules is up to 260 units per year

### Our values

We keep our promises and build trust through our actions. We guarantee a high-quality result and take responsibility for everything we do.

We highly value a direct, honest, ethical form of communication with clear messages.

Our task is to do something better every day, because only in this way will we ensure that a clean nature, a diverse living environment, happy people and the sustainability of the company are maintained.

#### COOPERATION

#### SAFETY

#### CONFIDENCE

#### TRANSPARENCY

#### SUSTAINABILITY

We highly value good relations between team members, together we look for possible solutions, create preconditions for personal development, involve and acknowledge each other. We only achieve victories as a result of united teamwork.

The manufacturing and construction sectors require high safety standards. We do everything we can to ensure a safe and compliant work environment, because only this will create security for ourselves and our peers.



Timbeco's core business has been the construction of wooden element and modular buildings for more than 29 years. During this time, we have erected more than 3,500 buildings in 25 countries. These numbers speak for themselves. We have proven ourselves to our partners in both Europe and Japan. Cooperation with Timbeco is highly valued and allows us to make long-term plans and forward-looking decisions.

Wood is a building material with thousands of years of history, but above all a bright future. Wooden construction requires knowledge and great input from engineers, and this is where house factories come into play.

We believe that the construction of wooden buildings is moving from construction sites to factories, as it ensures a controlled result, a safer working environment and a work schedule that is independent of weather conditions. As a result, the buildings built in the factories are of a higher quality, which has been proven through a significantly higher level of certification compared to the construction site.

The construction time of industrially produced buildings is many times shorter than the usual construction methods, due to which the erection of a factory produced house disturbs the environment significantly less in terms of time, logistics and noise.

With our services and products, we want to offer sustainable solutions that benefit customers, home buyers, the environment and the Timbeco team. We believe that successful and long-term cooperation is the goal for all parties.

# Who we are

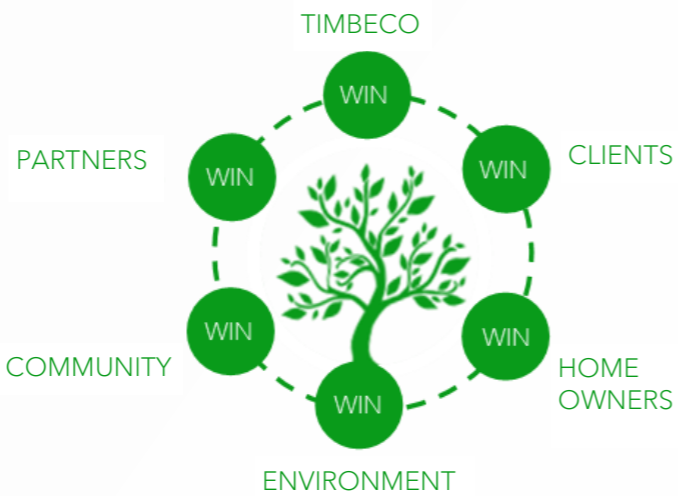
## Why are we doing this?

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

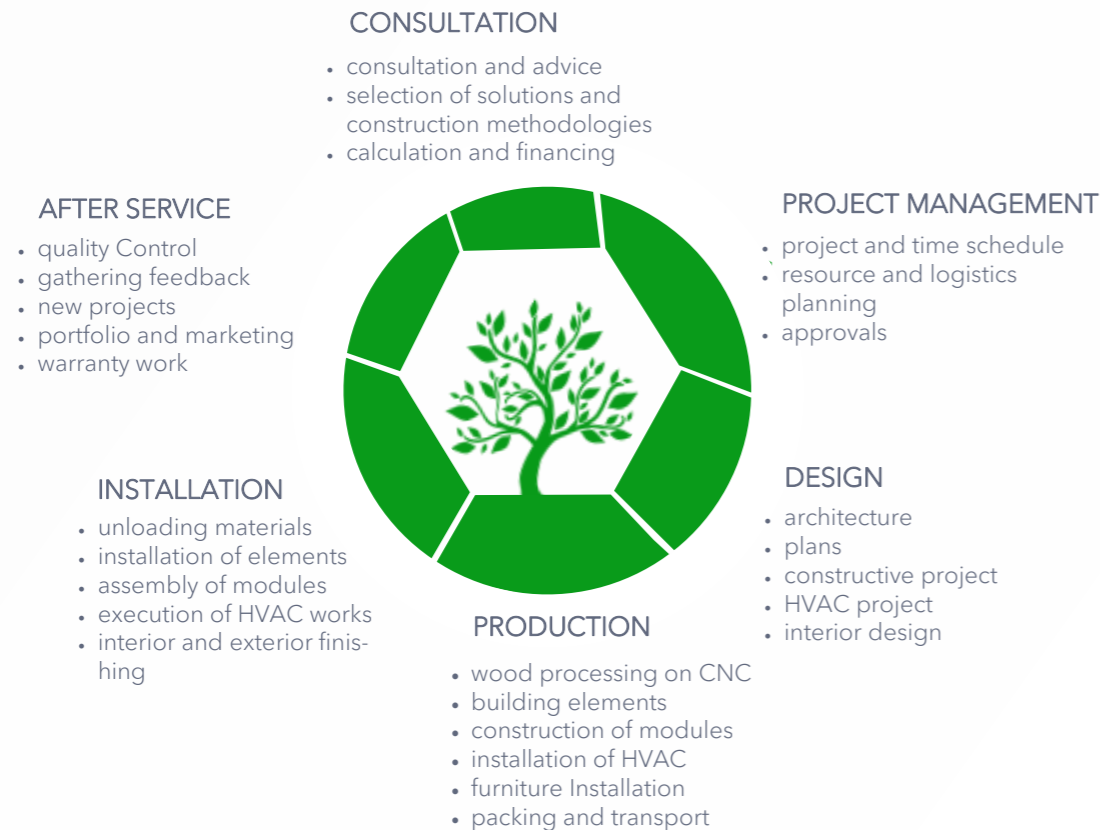
As a result of the cooperation, we want to create visually beautiful and lasting buildings that are part of a modern, happy and diverse urban space where people want to live and build their homes.

## The Timbeco product is a service

How we work has become increasingly important. We need to look at each project as the client's business plan and Timbeco as the service provider in implementing it.



At the heart of our value proposition is the best customer experience we achieve thanks to our comprehensive, transparent and high-quality service. Each aspect of Timbeco's service side illustrates its contribution to the project life cycle in terms of time, value creation and money.



## Our clients

Our cooperation partners are small and medium-sized Northern European real estate developers and construction companies. The Timbeco brand means a guarantee of reliability, professional attitude, the best solution and quality 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.

## Work at Timbeco

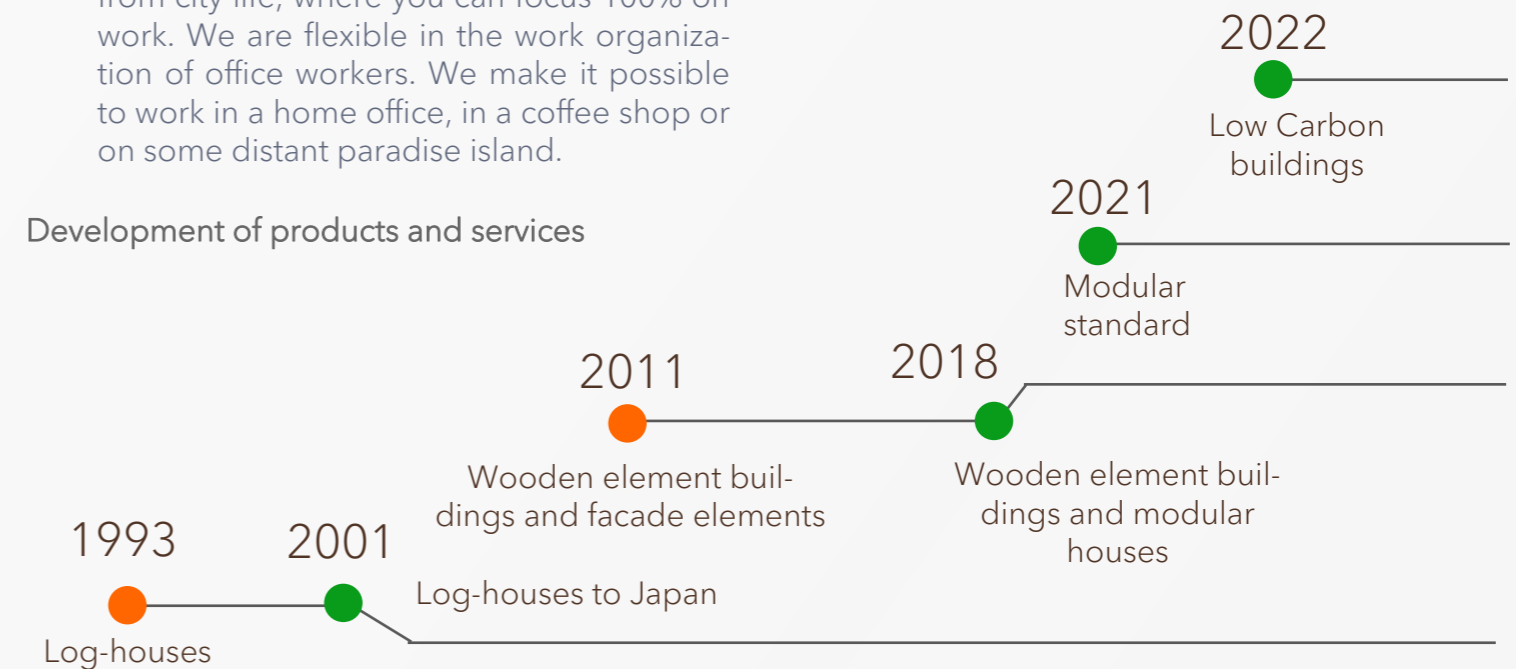
- Timbeco is a modern company based on Estonian capital, with strong and traditional family business roots. Today, however, the company's activities have grown large enough that the company's long-term key employees are also included as managers in both the board and the ownership circle.
- Our management style is modern and inclusive of employees. We make decisions based on discussions and based on long-term experience. We offer a stable and safe working environment.
- Timbeco group companies employ an average of 150 people, and our office and modern production base is located in Tõdva, Saku municipality. This is a workplace away from city life, where you can focus 100% on work. We are flexible in the work organization of office workers. We make it possible to work in a home office, in a coffee shop or on some distant paradise island.

The integrity of Timbeco's 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 believe that big projects do not require a big organization*

- Timbeco's goal is to keep its team currently large enough to maintain the interpersonal connection and trust that enables the best collaboration. Every employee's contribution is important to us.
- The strength of the Timbeco team lies in the high level of our specialists. Our company has experienced designers, top-level project managers, sales consultants with an engineering background, and experienced builders. This is what ensures professional cooperation with our customers.
- We always welcome specialists in their field who value wood as a valuable building material and sustainable construction methods.

## Development of products and services



# 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 are 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 management of emissions and industrial waste, as well as the logistically efficient transportation of products.

## ISO 45001 health and safety control systems

The occupational safety system is a very important part of company management, which creates the basis and framework for targeted, transparent, effective, fact-based and employee-inclusive occupational health and safety activities. Implementing an understandable and verifiable occupational safety system also helps to manage and reduce potential risks and injuries.



## ETA European Technical Assessment since 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.

## Varmennustodistus certificate since 2017

We have a certificate issued on the basis of the Finnish Varmennustodistus method 3b, which proves that our production complies with the requirements of the standard, according to Inspecta. With this certificate, the manufacturer certifies that its products can be used in construction and that these products comply with Finnish construction standards.



## SINTEF certificate since 2022

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

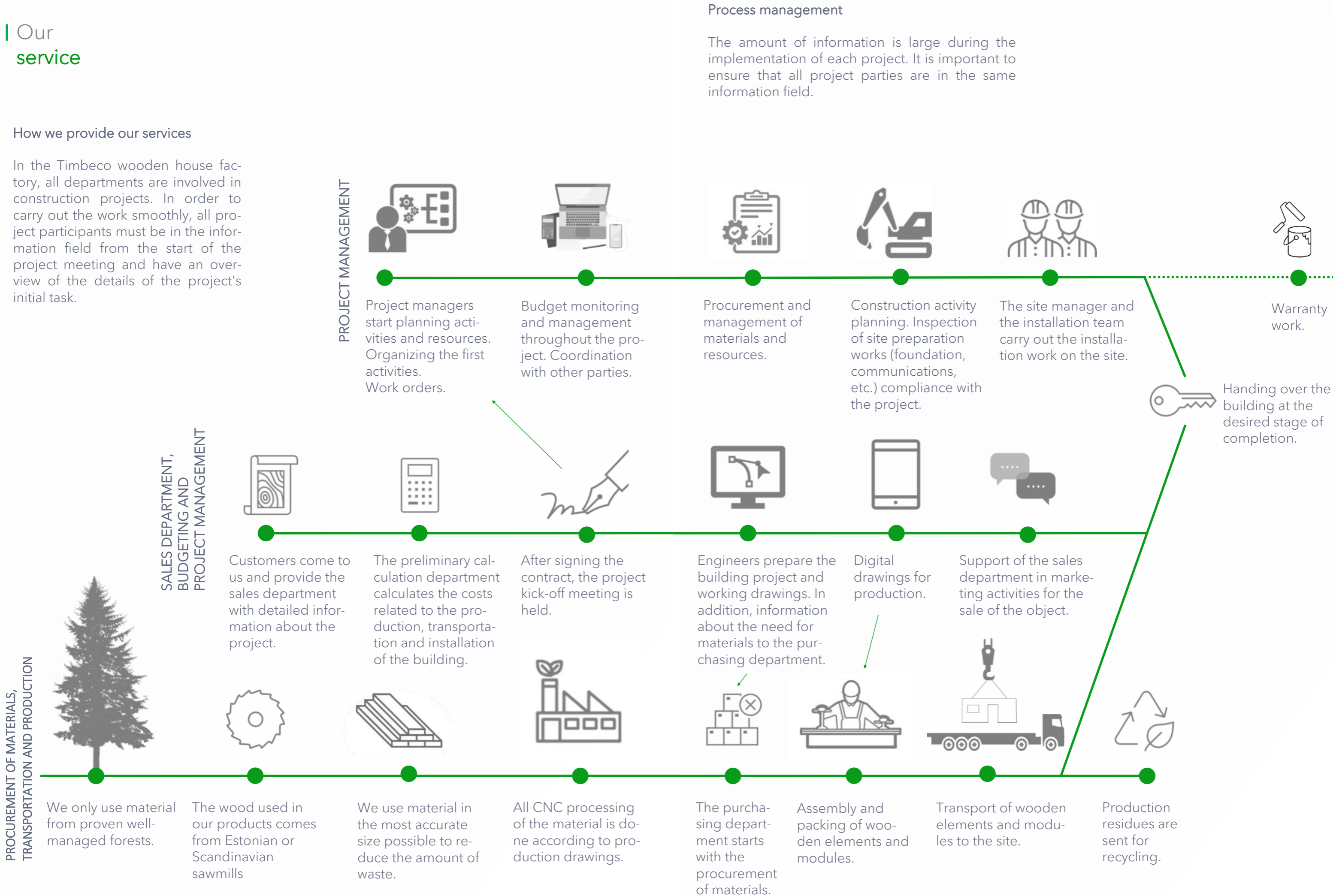
Sintef confirms that the Timbeco element and modular building construction system consisting of design, manufacturing and construction solutions is suitable for use in the Kingdom of Norway and complies with the Norwegian Building Code. The approval covers buildings of up to 4 floors and covers areas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



# Our service

## How we provide our services

In the Timbeco wooden house factory, all departments are involved in construction projects. In order to carry out the work smoothly, all project participants must be in the information field from the start of the project meeting and have an overview of the details of the project's initial task.



## Process management

The amount of information is large during the implementation of each project. It is important to ensure that all project parties are in the same information field.

## I Timbeco sustainable development goals



The concept of sustainable development sounds familiar, but its content is often incomprehensible. In short, it's about finding a balance between the limited ecological resources of the planet and creating well-being for people. In September 2015, the Sustainable Development Goals for the next 15 years were globally agreed upon. United Nations member states, including Estonia, are expected to follow these goals when formulating policy - it is important that everything we do does not cause even more damage to the earth or the people living here.

Sustainable development goals (ESG Environmental, social and corporate governance) are one of the most common global frameworks for conceptualizing and targeting sustainable development. They help to put their activities in a big context and to create connections with other organizations and fields. Among the sustainable development goals, we have highlighted for ourselves those where we want to create the greatest impact. We believe that these are goals where we can actively help create real change.

### 8. employment and economic growth

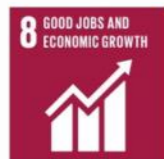
Challenge: To achieve greater economic productivity; make the use of resources more efficient.

### 12. sustainable production and consumption

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

### 13. measures against climate change

Challenge: Improve awareness raising and corporate role in climate change mitigation.



## I Timbeco green mission

### PRINCIPLES

- The success of our company depends on our own 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 if necessary and construction materials can be used again;
- We would like to build new buildings in cooperation with our customers in such a way that the best possible living conditions (humidity, ventilation and sound) are guaranteed indoors;
- We build in a controlled 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.

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





# Green Tiger Program and the long view of green innovation



When Timbeco joined the Green Tiger program in the fall of 2021, our goal and focus was on the development and relaunch of the "Timbeco Low Carbon" product. This desire was primarily related to the Smart Small House eco-house project and almost 10 years ago, when "Thermolog" was developed as a product. We are still able to offer these solutions, but it did not develop into an ambitious enough goal and did not have a great weight for the company's green innovation and development.

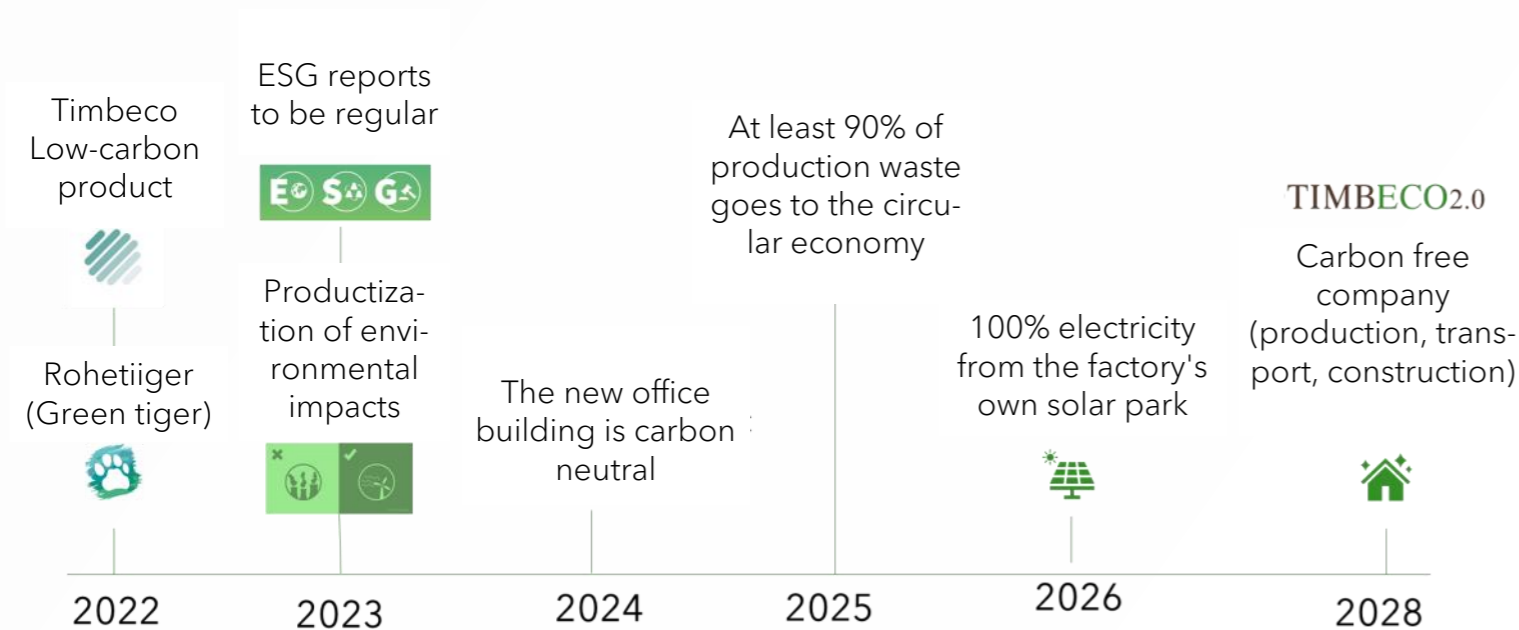
In the middle of the program, it became clear that the chosen direction does not correspond to the principles of the Green Tiger and also to our own goals. Thanks to Anu Ruul and Markus Vihma, who were mentors, we managed to track down the real challenges of the field, and therefore we chose "Environmental Impact Productization" as a new direction and also created Timbeco's long-term sustainability program. Our goal is to make all activities in the factory and construction site carbon neutral by 2028. We have set several major milestones on this journey, such as the establishment of our own solar park on the roofs of production buildings and the construction of a new carbon-neutral office building, which would also

## Productization of environmental impacts = calculation of carbon footprint

The purpose of introducing the carbon footprint calculation methodology is to reduce greenhouse gas emissions generated by Timbeco, increase awareness of the climate impacts of constructed buildings, and support the competitiveness of the entire Estonian wooden house sector by improving the environmental impact of products.

One Click LCA software is the best tool in the markets of both Estonian and Scandinavian countries. A simple Excel-based calculator designed for the Estonian market can also be found on the theme website [www.eehitus.ee](http://www.eehitus.ee). This is a project completed in collaboration between TalTech researchers and experts from the Finnish company One Click LCA, the goal of which was to develop an initial calculation methodology for the carbon footprint of Estonian construction, which can be introduced, tested and further developed in the Estonian construction sector. The calculation method is based on the ISO 14040 standard, the European standards for environmental sustainability assessment EN 15804 and EN 15978, the European Level(s) framework and international best practices for carbon footprint assessment.

### Timbeco's green goals until 2028

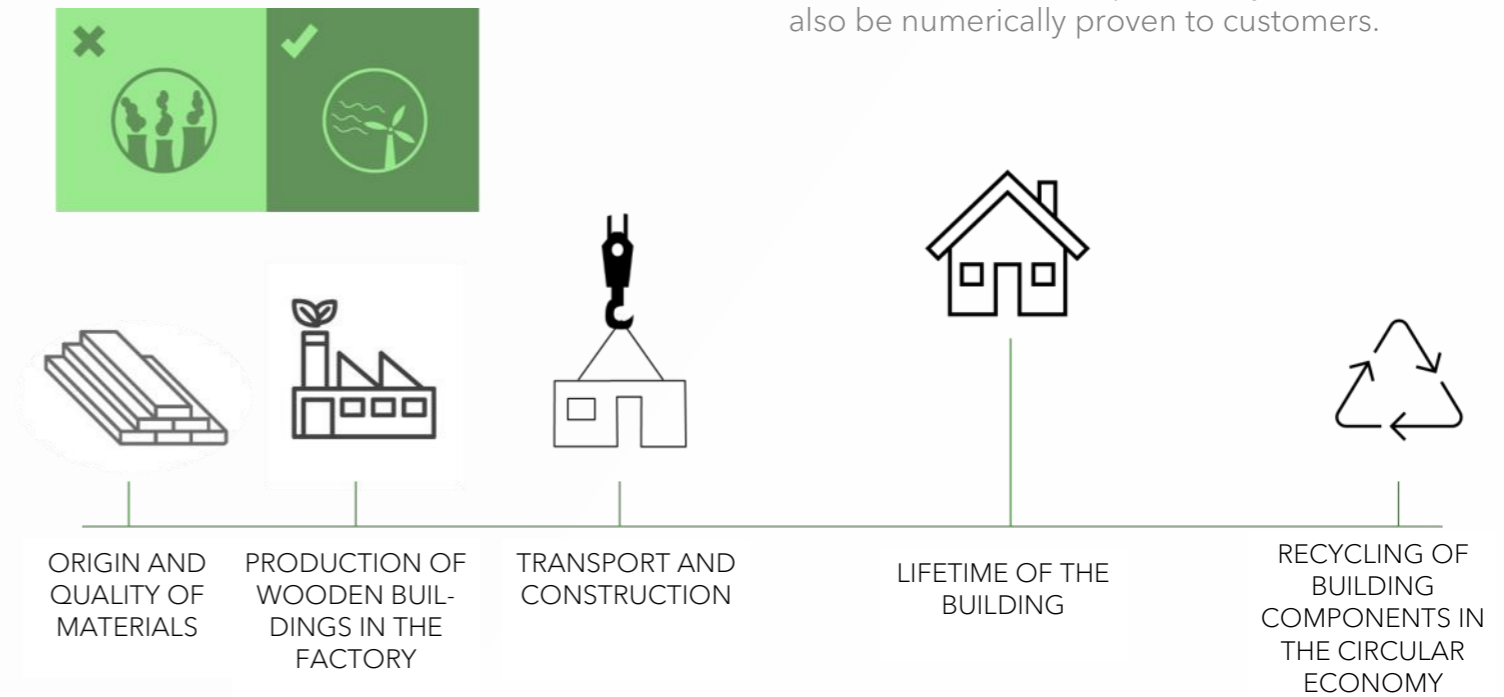


# Green Tiger Program and productization of environmental impacts

## Environmental impact components

Everyone can reduce the environmental impact of human activities. Consumption habits, garbage generation, transport, travel, etc. are in our own hands and it can always be directed towards a smaller environmental impact.

It is possible to find the best possible balance and also numerical proofs of the environmental impact in the production, erection, later exploitation and reuse of the building/recycling of the components of wooden buildings.



## The effect of manufacturing environmental impacts

In the coming years, the environmental impact associated with the construction of new buildings will become increasingly important. We already perceive this based on the signals coming from the export markets. We have tested the ability to calculate the environmental impact at customer meetings and it has had a positive effect and we see great potential in it. Above all, it is intended to be used as a marketing tool, and its thoroughness is appreciated for the introduction of various alternative materials, the practicality of which could also be numerically proven to customers.

## What One Click LCA allows you to calculate

The most important tools that a wooden house manufacturer can use from the One Click LCA toolbox are: a) environmental impact analysis used in early phase building design; b) possibilities and effects of directing buildings to the circular economy; c) calculation model of the environmental impact of the life cycle of the building. Since we are still in the early stages of introducing this program, we first need feedback and information from our customers about what kind of analyzes they need in particular and how they can successfully implement it in their business.



# Drive0 - circular economy testing ground



With the project "Decarbonising EU buildings - innovative approaches and affordable solutions that change the building renovation market", launched under the Horizon 2020 programme, the European Commission is looking for innovative and affordable solutions to reduce the carbon dioxide emissions of buildings in the EU. The project should help accelerate the improvement of the energy efficiency of buildings across Europe.

## Drive0 concept

Drive0 is a unique concept that offers efficient solutions in terms of energy, materials and costs within innovative consumer-centric circular economy renovation processes. By implementing this concept, Drive0 encourages the transition from a linear economy to a circular economy. This transition is urgently needed if we want to reach a zero-energy living environment. The Drive0 project wants to motivate and convince building owners to undertake a thorough renovation process of buildings. Throughout the development of the renovation plan, the focus is on the development of circular economy business plans and the involvement of end users.

## Circular economy

A circular economy is an economy where the emphasis is on the reuse/reuse of non-biological resources and materials. Collecting products at the end of their life cycle and separating the materials allows them to be used to build new products and, in the construction process, new buildings.

## Drive 0 strategy

Drive0 focuses on three strategies that should help to develop and implement renovation solutions for the existing housing stock:

- reuse and recycling of on-site materials (urban mining).
- use of renewable, environmentally friendly materials
- introduction of natural materials

Drive0's approach and methods are being tested in seven European countries, all with different cultures and housing stock. During the renovation process, local building practices and techniques are taken into account and appropriate business models are tested.

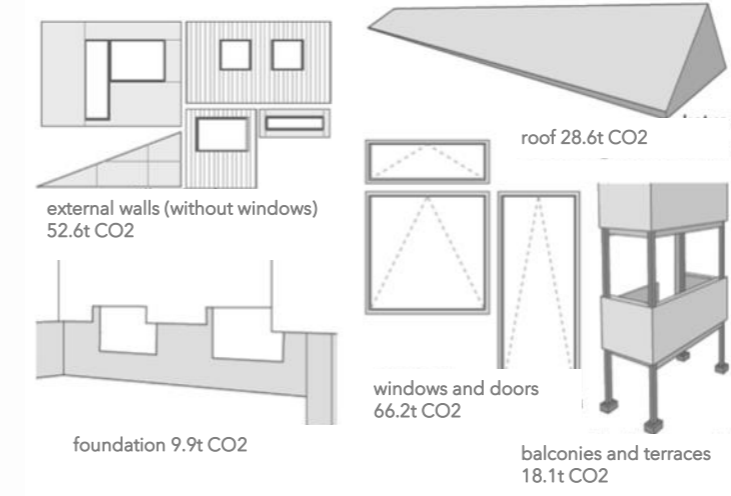
## Timbeco participates in the Drive0 circular economy project in cooperation with Taltech

Timbeco Ehitus OÜ and TalTech have joined the Drive0 innovation project, which was approved by the European Commission and officially started on October 1, 2019, and will have its planned end in September 2023. The goal of the project is to provide effective solutions within the framework of innovative renovation processes, where attention is directed to saving energy, materials and costs

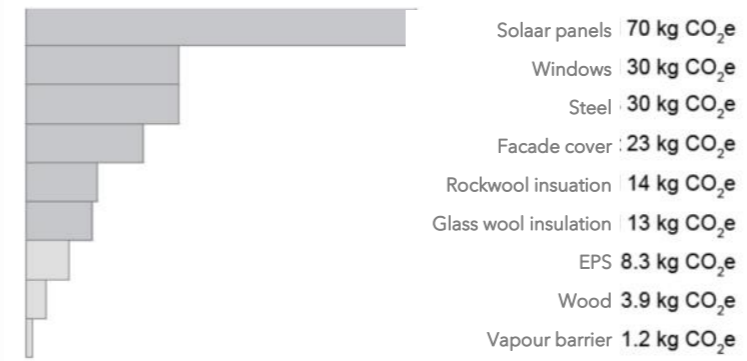
At the beginning of 2021-2022, we completely renovated the first apartment building, which is located in Saue, Harju County. The building was selected as a member of the Drive0 innovation project and we try to learn as much as possible during the process and share our knowledge.

# Drive0 life cycle of the fully renovated Kuuma 4 building

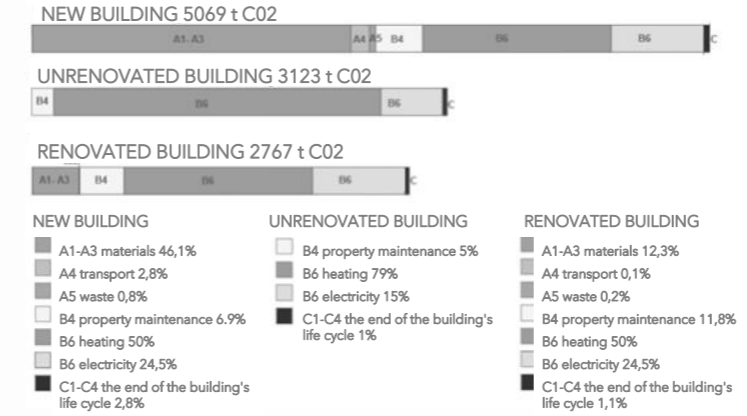
The carbon footprint of the main building parts during the life span of the building



## Materials with the largest carbon footprint in the building during the construction process



## Carbon distribution during the life cycle of a building



Source: TALLINNA TEHNIKAÜLIKOOI LIGNULLENERGIAHOONETE UURIMISRÜHM

## Energy efficiency

Before the renovation, the Kuuma 4 apartment building was in the same condition as many other unrenovated apartment buildings: external fences with high heat loss, a non-functioning ventilation system and a heating system that does not allow apartment-specific regulation. The building's heat source is district heating. The energy label class was D.

During the renovation, the goal was to achieve the energy efficiency level of the new building (energy label class A).

## Main renovation measures:

- insulation of external walls U 0.14 W/(m2K) (200 mm insulation)
- attic insulation U 0.08 W/(m2K) (500 mm bulk wool)
- replacement of windows U 0.90 W/(m2K) (glass unit with three panes)
- installation of a ventilation system with heat recovery (η-75%)
- installation of a new heating system (radiators with thermostats)
- installation of solar panels (with a total capacity of 50 kW)

With the renovation, based on energy calculations, more than 50% heat energy savings and more than 20% electricity savings are achieved. The ventilation system installed during the renovation increases the building's electricity consumption somewhat, but the total electricity consumption decreases with the help of solar panels. The total production of solar panels is ~60% of the annual electricity consumption of the entire building. It is not possible to use all the produced energy on site and the surplus is sold to the electricity grid.



Sustainability partners:



# Drive0

## a summary of the entire renovation project



The goal of the project is to reconstruct the apartment building in the most optimal way possible, doing it in a short period of time and to use building materials in such a way that they can also be reused after the end of the life of the reconstructed building. During the project, as many products and materials of domestic origin as possible were used, for example, facade elements and windows were produced in Estonia. In addition, we wanted to reuse the materials generated during the renovation as much as possible.

Before the start of the renovation work, the building was laser scanned. The result was a point cloud of the facade and surroundings of the apartment building, on the basis of which a digital 3D baseline model of the building was created in Autodesk Revit software.

Before starting the facade work, the heating, water and sewage systems of the building were also replaced, and ventilation with heat recovery was installed. The electrical system of the building was partially reconstructed.

In the renovation of the building, insulated facade elements produced in the factory were used. Before installing the elements, milling of larger window openings was also carried out in some rooms. Facade elements are covered with mass-painted cement fiberboard and combined wooden boards. In the production of the elements, as many cross-sections as possible were used, which were glued together from production scraps using the finger jointing method. The old windows were removed and replaced with triple-glazed plastic windows that were previously installed in wooden elements at the factory. An external wind barrier and an internal vapor barrier tape were used for the installation of the windows. The element structures are designed in such a way that they can later be removed from the walls and used for the same purpose on another building or disassemble.

The old gable roof was removed, the roof structure was checked, insulated and a new rolled profile sheet was installed, which has a 40-year guarantee for technical durability. The exterior doors of the building were replaced with new insulated metal doors.

### Construction-demolition waste disposal-reuse

We utilized the construction-demolition waste generated on the construction site in a way that allows us to recycle as many materials as possible during the construction process:

- Bike racks were built for the residents of the house from the old pipes used in the heating system
- Concrete with recycled filler is used to pour the building plinth
- The roof sheet removed from the building was reused on the roof of a farm in southern Estonia
- Old windows are recycled and partially used in apartment owners' cottages and in the construction of greenhouses
- The old cast iron radiators were partly reused in the corridors of the apartment building. Previously, the inside of the radiators was washed, the external surface was cleaned with sandblasting and then painted over.

The complete reconstruction of Kuuma 4, Saue with prefabricated external wall elements in the factory was a challenging and very educational experience. During the nine months of work, we had to contend with both material supply difficulties and labor shortages due to the coronavirus, not to mention price increases. As a pilot project, it was a very successful project where a lot of data and lessons were collected so that future projects would be even more successful and smoother.

Apartment building before renovation 2021 spring



Renovation process 2021 summer



Renovated building winter 2022



The wooden elements used in the renovation can be dismantled if necessary in the future and used for the construction of 1-2 storey terraced and multi-storey houses.

## Recycling of wood production residues



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.

Sorted wood waste (wooden blocks + sawdust) is collected in a separate container.

Chemically treated wood waste is collected in a separate designated place.

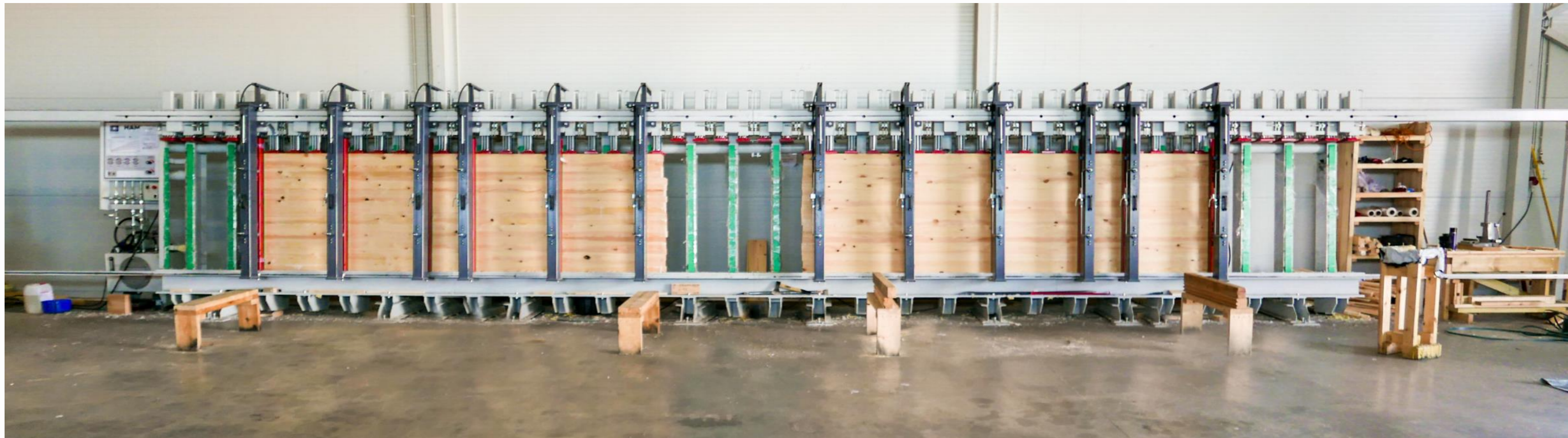
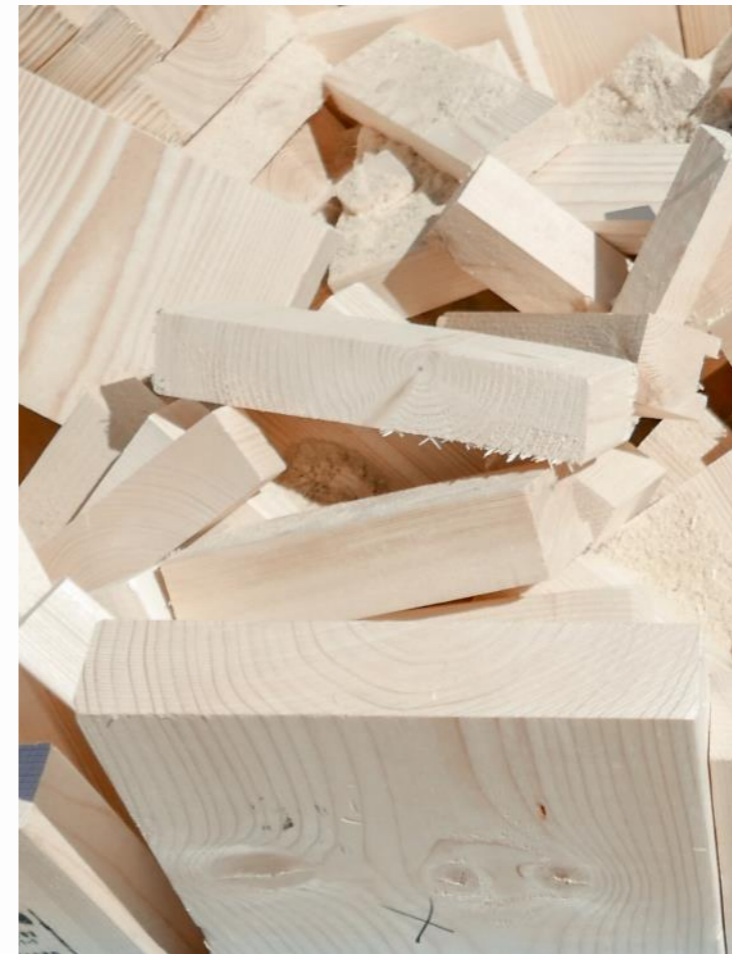
Wood waste included in the glue - Kerto, plywood, OSB, Forestia finishing boards, etc.

Painted and impregnated wood waste - decking and other impregnated wood waste.

Wood scraps containing metal.

We press sawdust into heating blocks and sell directly to consumers. The sawdust is given added value on site at the factory and therefore there is no need to transport it.

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



# Waste management office and factory



## GOALS

- Reduce waste generation by 15% by 2028
- Reduce the amount of mixed construction waste by 80% by 2028
- The goal for 2022 is to direct 60% of waste to recycling. By 2028, 80% of generated waste should be sent to circular economy companies for recycling
- In 2022, the goal is to equip all commonly used offices with waste sorting cabinets
- Reduce water consumption by 5% per year

2020 ->2021

- Total waste generation decreased by 7%
- Sorting helped reduce the amount of mixed construction waste by 24%
- Waste recycling increased from 43% to 50%
- Through sorting, the amount of household waste in the office was reduced by 11%
- Water consumption decreased by 7%

Sorting waste by type and, if possible, re-using it is very important to us. The waste is collected and sent for recycling by our contractual partners.



Rockwool scraps



Garbage sorting in the office



Plasterboard scraps



Metal and hazardous waste

OHTLIKUD JÄÄTMED

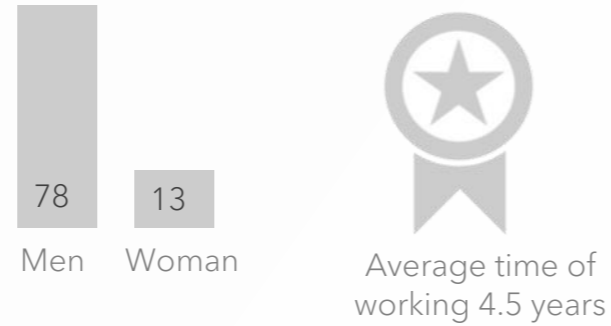
OHTLIKUD JÄÄTMED

FORSVARET 3950-25116-525

# The employees are the most important asset



A total of 165 people will work in Timbeco companies in 2022. Timbeco Woodhouse OÜ has a total of 91 team members. We are actively expanding our production capacity, which in turn means an increase in the number of engineers, project managers and installation teams.



- We recognize learning, pay a graduation bonus for bachelor's and master'
- 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 allowance
- 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 value the long-term employment relationship, we recognize achievements of seniority

## We are active together

Regular active events contribute to the formation of a strong team feeling. We move through the landscape on foot and by cycling. We regularly go to the world's largest rowing marathon in Võhandu.



## Timbeco Scholarship

In order for the wood sector to develop and for young people to find their way into the sector, we have motivated university graduates with 1,000 euro scholarships. Several engineers working at Timbeco have also linked their thesis on the basis of Timbeco and contributed to the development of the company.



## Volunteering provides an opportunity to contribute

We have taken part in forest planting and thereby made our small contribution to the growth of new trees.

Timbeco's sales and project management department also contributed to helping Ukrainian refugees. We helped move furniture from one warehouse to another at the collection point.

## We support wooden house sector development and community

### Development of the wooden house sector

We promote the Estonian wood industry. Timbeco (formerly Palktare) is a founding member of the Estonian Wooden House Association. The association was created by 19 sector companies in 1999, and today 58 companies are members. We work closely with TalTech University with practical lectures and the international Drive0 circular economy project.

### We support the Tõdva Volunteer Rescue Command

We maintain and protect the community by supporting local rescue efforts. It is an assurance to our small local community, as well as to ourselves, that rescuers are there when needed.



## We support the field of education

### Education and youth

We have given wooden material to a local kindergarten to build playhouses. In the factory, we have organized workshops on building birdhouses and introduced the working principles of woodworking equipment.

Our heart is 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 conducting lectures in (university) schools and by offering the opportunity to do an internship and write theses in the field of Timbeco and/or the wood industry. We have awarded the best theses.



## Development team

## IT and cyber security



### PRODUCT/SERVICE DEVELOPMENT

Product/service development is the most broad-based field of development at Timbeco. At the weekly development meetings, the heads of all departments and development areas are at the table, where everyone has the opportunity to make their own contribution to the development of the product and service. As a house factory, we sell both a product and a service for each building. The product may be 100% identical for different house manufacturers, but by offering the best service, we can clearly stand out from others and support long-term customer relationships.

### IT

The main projects in the field are related to the implementation of new software and the integration of databases. The most important challenge is ensuring a smooth and loss-free information flow between the software in use and harmonizing the databases. Major projects have been the development of HAM (price calculation model), implementation of EZIIL (production software) and Bauwis (project management software).

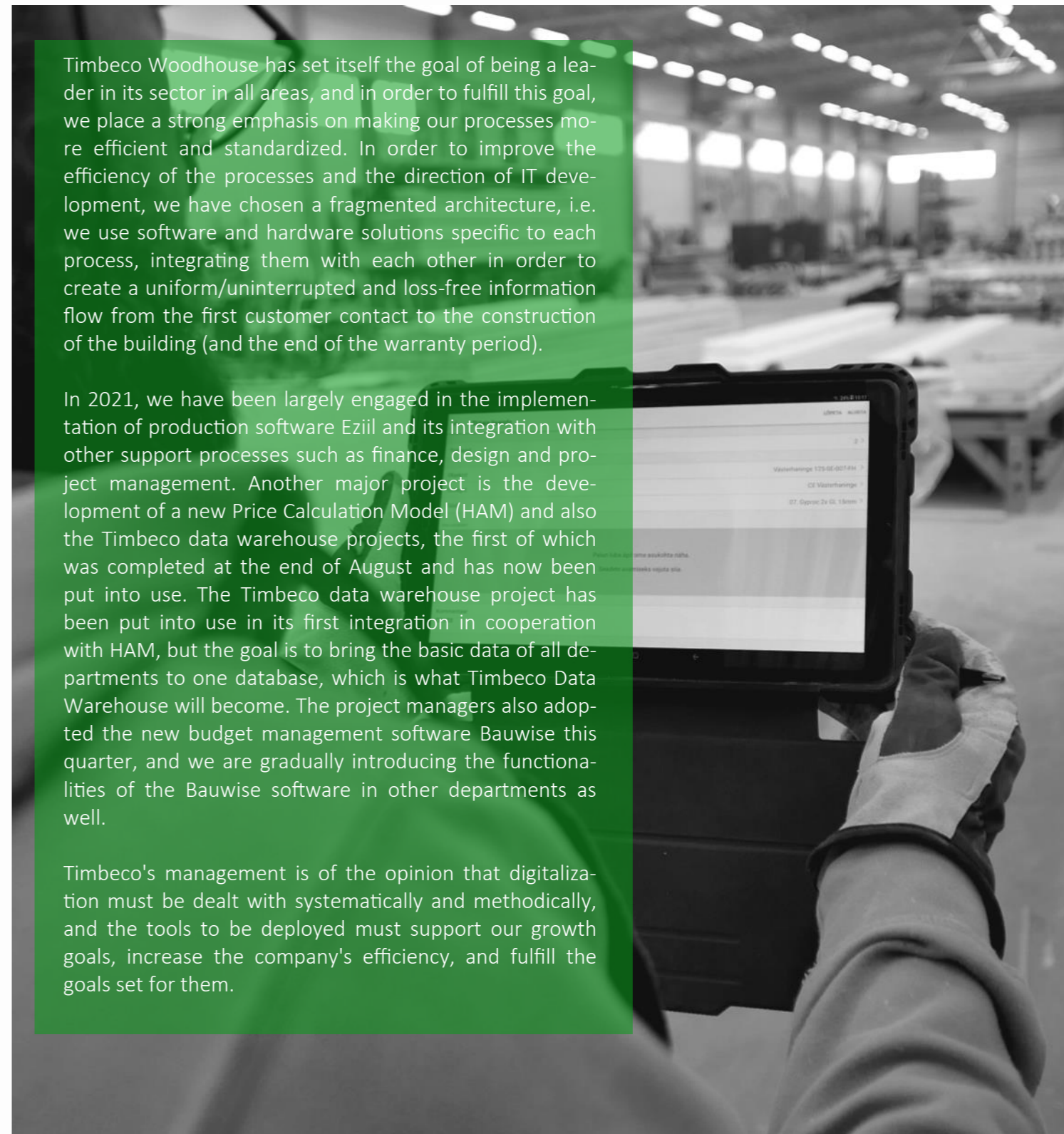


### DEVELOPMENT OF MODULAR BUILDINGS

The development of modular buildings is divided into two: Timbeco module production and service development. The topics are primarily related to production resource planning, work organization of subcontractors, quality control, etc. In the development of the service, the focus has been directed to topics related to the sales capacity of modules and the management of large module projects.

### ENGINEERING

The main goal is to continuously increase the capacity of the design department. The range of topics includes building materials, building physics, building laws, specificities of target markets, external consultants, etc.



Timbeco Woodhouse has set itself the goal of being a leader in its sector in all areas, and in order to fulfill this goal, we place a strong emphasis on making our processes more efficient and standardized. In order to improve the efficiency of the processes and the direction of IT development, we have chosen a fragmented architecture, i.e. we use software and hardware solutions specific to each process, integrating them with each other in order to create a uniform/uninterrupted and loss-free information flow from the first customer contact to the construction of the building (and the end of the warranty period).

In 2021, we have been largely engaged in the implementation of production software Ezil and its integration with other support processes such as finance, design and project management. Another major project is the development of a new Price Calculation Model (HAM) and also the Timbeco data warehouse projects, the first of which was completed at the end of August and has now been put into use. The Timbeco data warehouse project has been put into use in its first integration in cooperation with HAM, but the goal is to bring the basic data of all departments to one database, which is what Timbeco Data Warehouse will become. The project managers also adopted the new budget management software Bauwise this quarter, and we are gradually introducing the functionalities of the Bauwise software in other departments as well.

Timbeco's management is of the opinion that digitalization must be dealt with systematically and methodically, and the tools to be deployed must support our growth goals, increase the company's efficiency, and fulfill the goals set for them.



PRODUCTION INTELLIGENCE







29 YEARS OF TIMBECO