FOREKO

Sustainability Report
2022–2023

Foreword

Estonia together with other European Union member states has set the goal of significantly reducing greenhouse gas emissions to slow down global warming. On the one hand, this requires transitioning from fossil-based raw materials to renewable alternatives. On the other, it involves using resources more efficiently and repeatably.

As a representative of the forestry sector, we recognise our important role and responsibility in achieving this goal. Wood is an ideal material to meet these objectives across multiple areas. Growing trees absorb carbon, and using wood as a raw material locks this carbon into wood products.

In heat and electricity generation, wood residues can replace fossil fuels, while at the end of their lifecycle, wood products can also be recycled for heat and electricity production.

This is an excellent example of a circular, and a bio, economy, where we utilise a renewable material that can be used fully and repeatedly. Looking at forecasts for wood consumption, we can already see that demand for wood in our immediate region is set to grow significantly. This presents both a challenge and an opportunity for forest managers. The challenge lies primarily in increasing the resilience of our forests to climate change-related disturbances, such as storms, fungal diseases, and insect damage.
Resilient and healthy forests are more valuable both as sources of high-quality timber and as recreational spaces.

We see the potential to strengthen the forestry sector as an opportunity, which would in turn make a substantial contribution to rural employment. A scientific approach is essential when addressing the forestry sector, enabling us to make more targeted decisions while taking biodiversity into account.

This report covers the activities and metrics of the Foreko Group for 2022 and 2023. We have voluntarily produced our sustainability report for several years and have not followed ESG or medium-sized enterprises' sustainability reporting standards in its preparation. Our report is primarily a tool that provides an overview of the activities, objectives, and operating principles of Estonia's largest private forest management group.

Dear reader, we hope you find this report an engaging read and an opportunity to reflect along with us.

Marti Piirimäe
Head of the Forestry Sector, Foreko OÜ

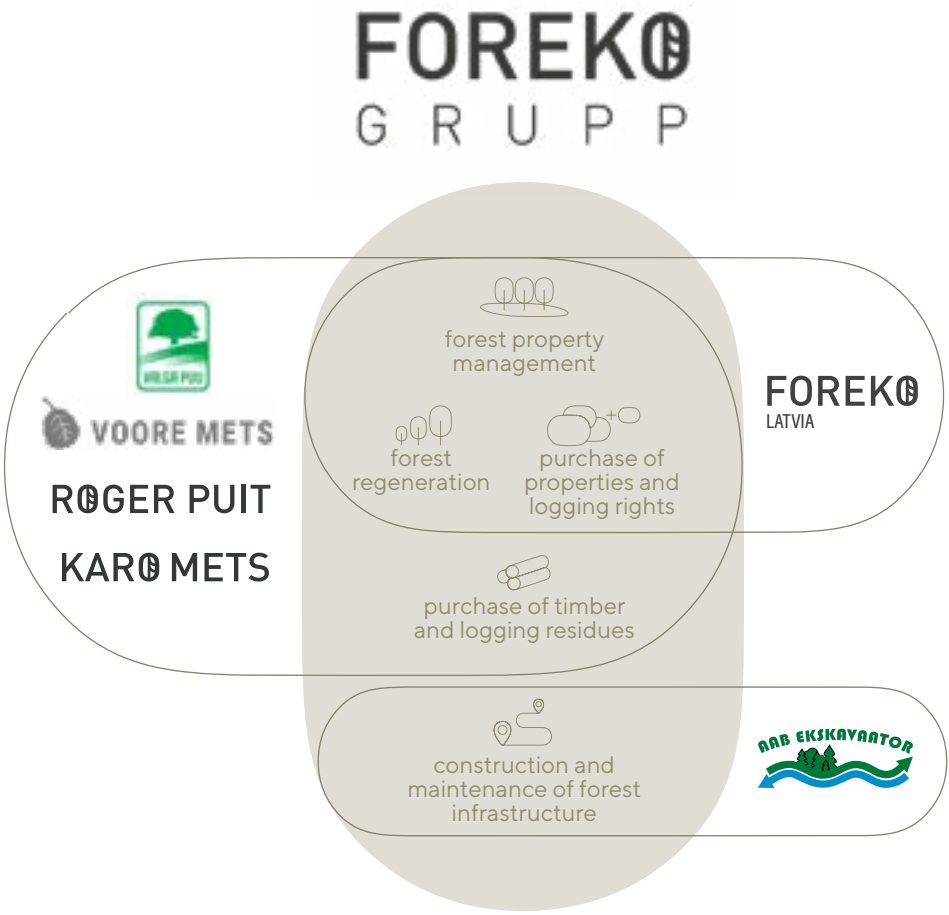
A scientific approach is essential when addressing the forestry sector, enabling us to make more targeted decisions while taking biodiversity into account.

Foreko Group

Foreko Group is a forestry group with extensive experience focusing primarily on sustainable forest management.

Our long-term goal is to develop a diverse, sustainable, and healthy forest portfolio, enabling us to provide nature-based raw materials that support the concepts of the circular and the bioeconomy.

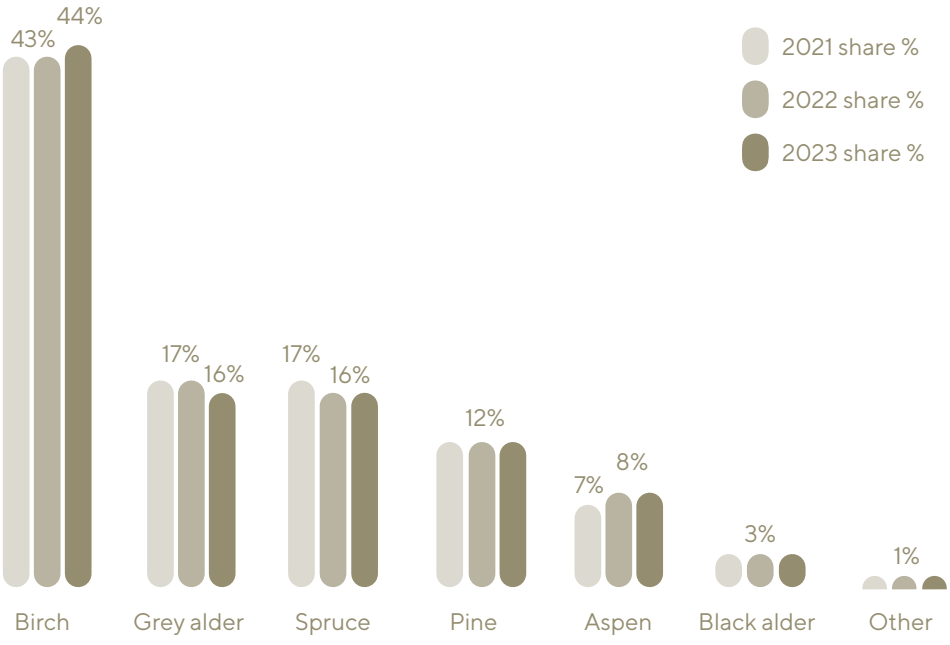
Foreko Group comprises six companies operating in Estonia and Latvia.



1 Foreko Group forest portfolio

1.1 Forest portfolio

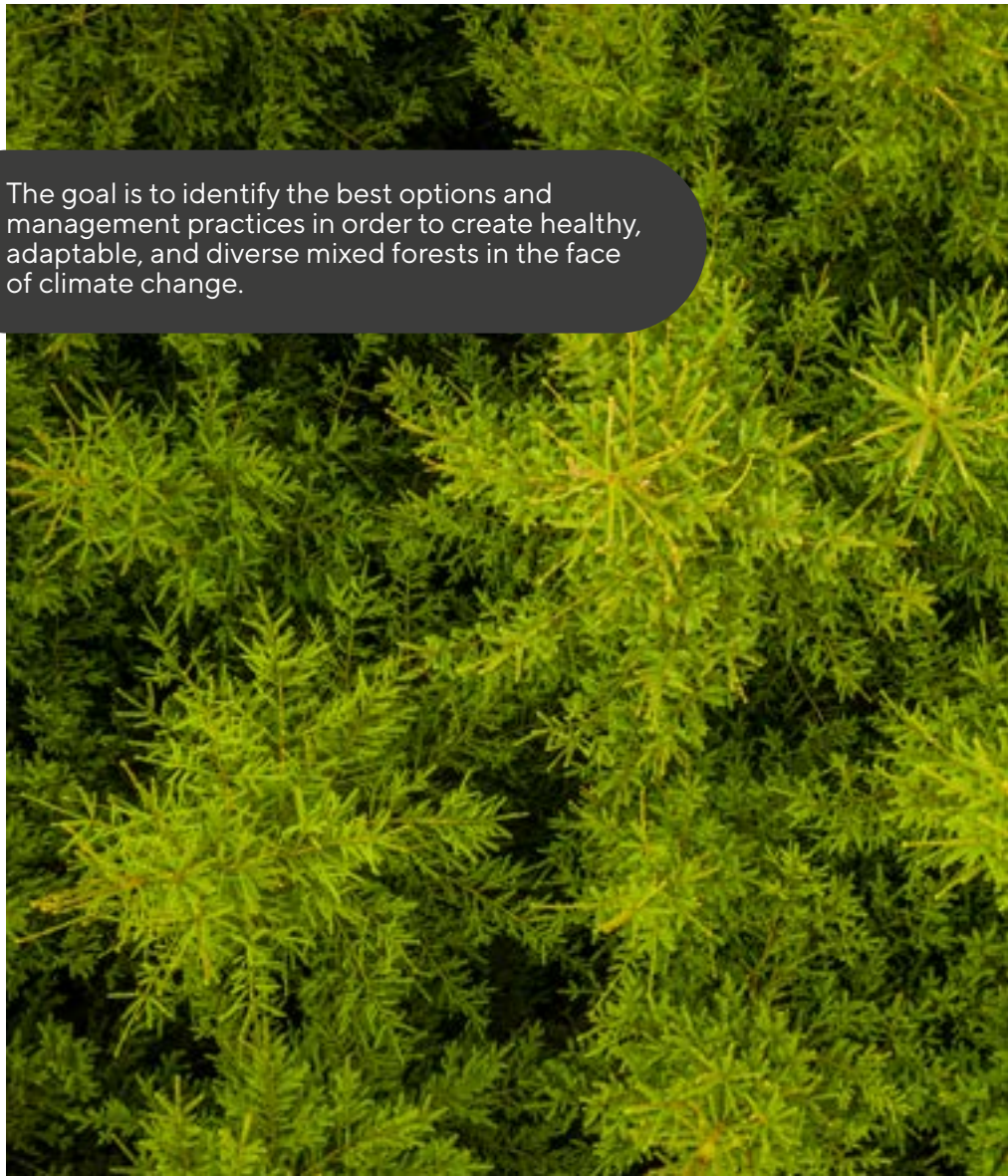
The Foreko Group's forest portfolio includes a total of 77,000 hectares of land in Estonia and Latvia, of which 84% is forest land.



The droughts and storms associated with climate change increasingly make us think about which tree species are best suited for our forests.

For this reason, we have joined the LIFE SIPAdaptEst project titled Implementing Climate Change Adaptation Actions in Estonia, under which OÜ Karo Mets is establishing a pilot area of mixed forest on previously unused grassland. The pilot area will feature both native and non-native tree species in various combinations.

The goal is to identify the best opportunities and management practices in order to establish healthy, resilient, and diverse mixed forests that can adapt to climate change.

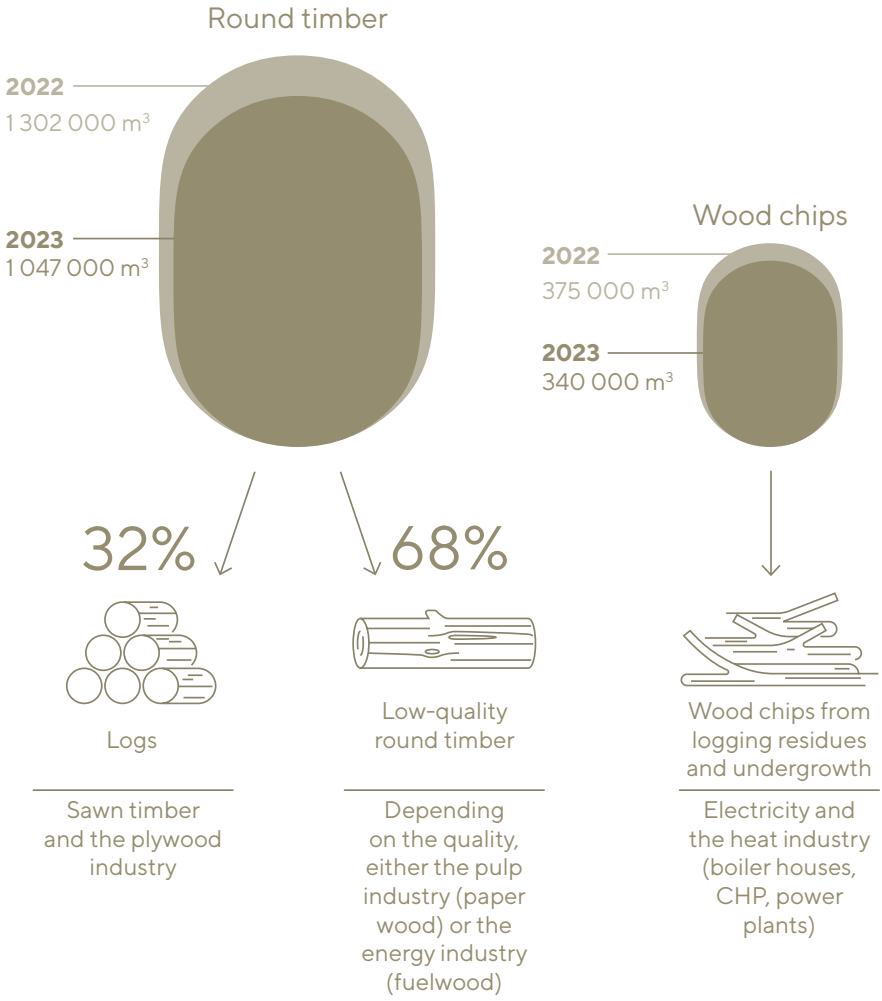


The goal is to identify the best options and management practices in order to create healthy, adaptable, and diverse mixed forests in the face of climate change.

1.2 What kind of timber do we offer?

In 2022, we supplied our partners with 1,302,000 m³ of round timber and 375,000 m³ of wood chips.
In 2023, we provided 1,047,000 m³ of round timber and 340,000 m³ of wood chips. This timber was sourced from both our own forests and the forests of partner landowners, as well as from other landowners whom we assist in marketing their timber.

Timber volumes, quality distribution, and usage areas



1.3 How does Foreko Group manage its forests?

All of the group's forestry companies are committed to managing their forests responsibly and sustainably. To achieve this, we employ best practices and innovative solutions.

The key to sustainable forestry lies in responsible forest regeneration and maintenance. This determines the extent and condition of the forests we leave for future generations. In our region, most forests have either been planted by people or have grown as a result of human activity. Therefore, both current and future forests are our responsibility. Leaving forests unattended is not responsible behaviour.

Sustainable forestry means active involvement, continuous monitoring, and the adoption of new approaches. Our operations are based on extensive experience and scientific research. We believe forests have room for rare species habitats, carbon sequestration, foraging, hunters, and cultural activities alike. At the same time, sustainable forestry means harvesting mature forests in a way that provides the greatest value to society, in addition to initiating the new lifecycle of the forest.

It is important to remember that we inherited our forests from previous generations, and that we must leave behind forests that are at least as good, if not better, for the generations to come.

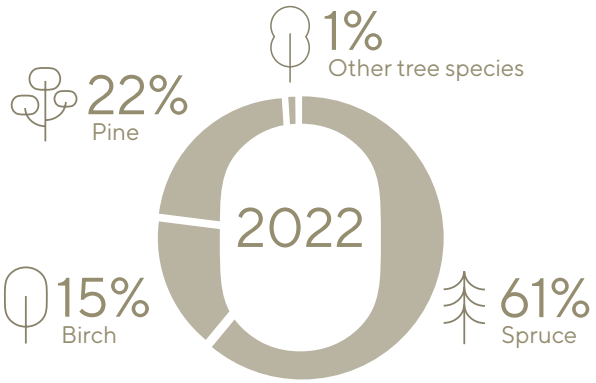
Foreko Group forestry principles

- Thoughtful ‘mosaic’ forest management, which takes into account the condition and unique characteristics of different forest sections. This includes applying the right practices at the right time and using high-quality planting material to ensure the continuation or improvement of biological processes.

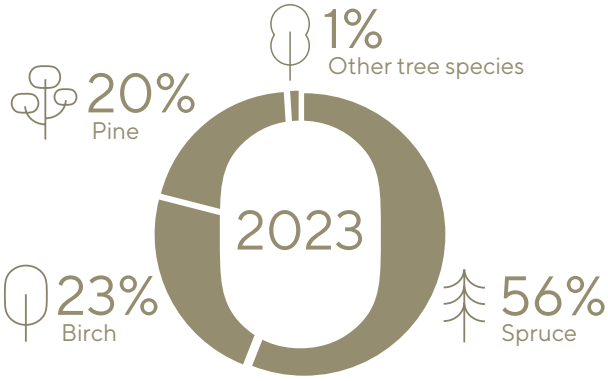
- Improving the health of forests to make them diverse and resilient to climate change.

1.4 Forestry management operations at Foreko Group

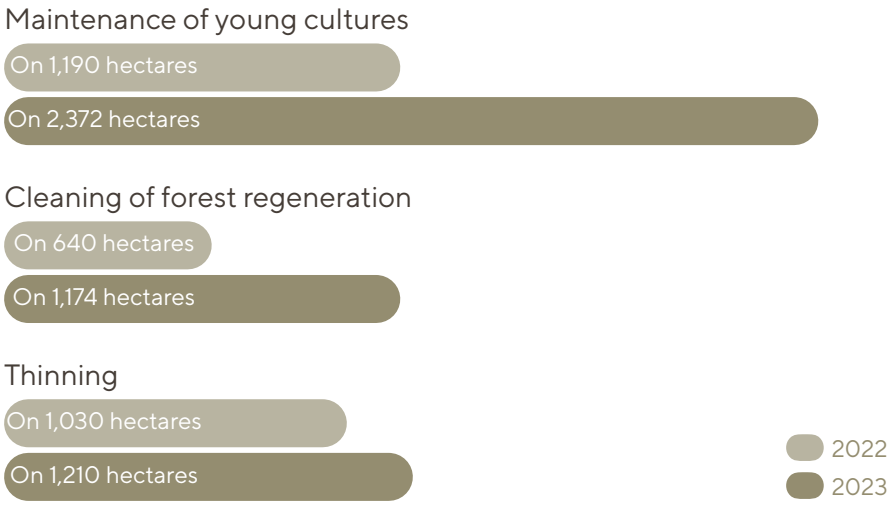
In 2022, we planted 1,490,000 forest seedlings, divided by species as follows:



In 2023, we planted 1,460,000 forest seedlings, divided by species as follows:



Maintenance works in 2022 and 2023



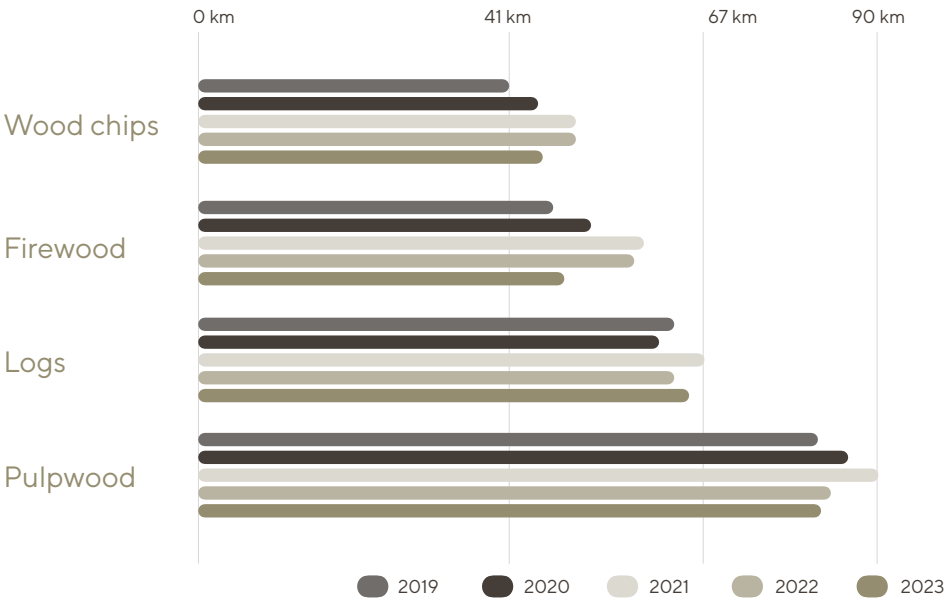
- **To address storm, fungal, and insect damage** we carried out sanitary cutting on 360 hectares in 2022 and 362 hectares in 2023. The volume of sanitary cutting remains consistently high, indicating that the spruce bark beetle continues to damage new areas.

- We also continued **maintaining drainage systems and improving access roads** to enhance property management conditions and tree growth. In 2022 we maintained 131 km of ditches, and in 2023, 161 km.

1.5 The journey of timber at Foreko Group

- We prioritise domestic wood processors
- We prefer wood processors located as close to the forest as possible, we have cooperation agreements with most major wood processors across Estonia
- The exception is birch and conifer pulpwood. As the numbers show, due to insufficient local processors this wood is transported to ports, resulting in longer transport distances

The journey of timber in kilometres

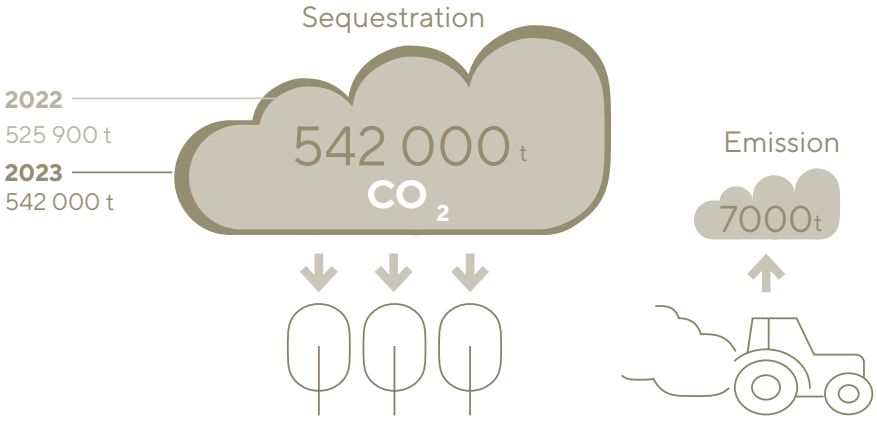


2 Foreko Group carbon footprint

The forests owned by Foreko Group companies fixed approximately 542,000 tons of carbon dioxide from the atmosphere in 2023. In 2022, this figure was 525,900 tons. The emissions associated with our forestry operations amounted to approximately 7,000 tons of carbon dioxide in both years.

The increase in carbon sequestration in 2023 was primarily due to the addition of new land to the portfolio.

Foreko Group
carbon footprint



Increasing climate goals

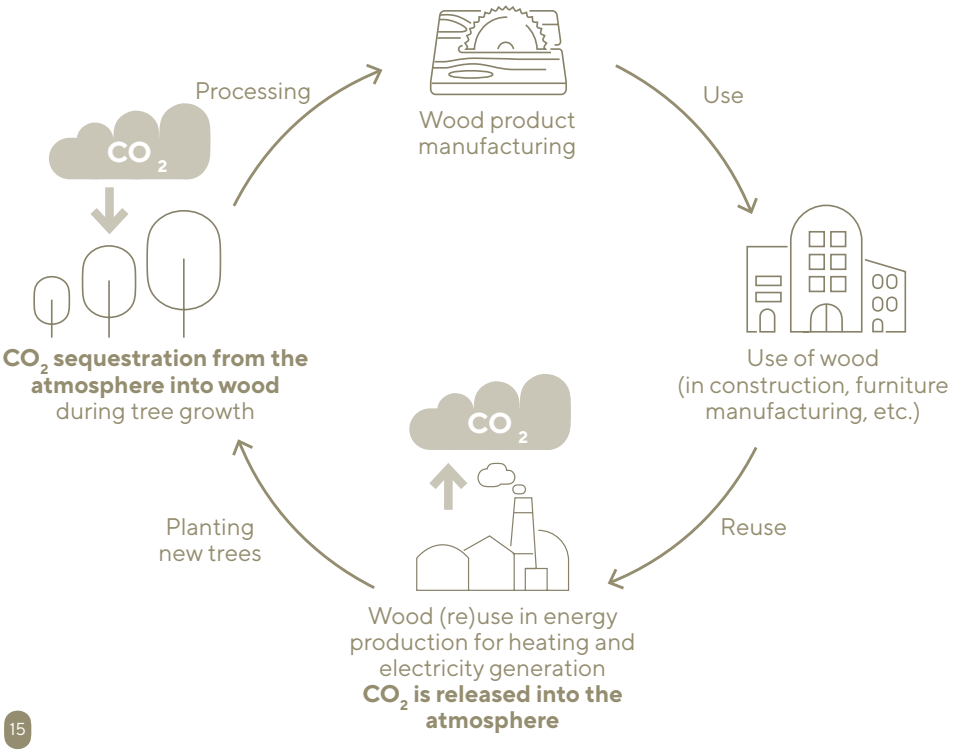
The European Union and Estonia have set very ambitious carbon emission reduction and additional carbon sequestration targets for the coming years. Healthy forests play a key role in achieving these goals as quickly as possible, as does increasing forested area by planting trees on abandoned, overgrown, low-value agricultural land and grasslands.

Planting on abandoned farmland

In 2022, we planted trees on 153 hectares, and in 2023, on 165 hectares of abandoned farmland. The amount of carbon dioxide fixed by these trees might initially seem very small, but the recently planted trees are still young. The amount of carbon sequestered in this way can be compared to a tree starting from a seed—it is small at first but grows significantly over the years. Planting trees on abandoned land is an activity we will continue to pursue as the positive effects increase over the decades.

We continue to prioritise the replacement of fossil fuels with renewable biomass. In the case of fossil fuels (such as oil shale, petroleum products, etc.), additional so-called 'new carbon' is released into the atmosphere. When using renewable biomass, carbon is indeed released into the atmosphere, but it is part of the natural carbon cycle, just like natural processes, and does not increase the total amount of carbon in circulation. Furthermore, carbon stored in high-quality, long-lasting wood products is removed from the carbon cycle for an extended period.

The lifecycle of carbon in wood



3 Foreko Group nature conservation

The Foreko Group's principles of nature conservation

- In matters of nature conservation, we follow the local legal framework and the requirements of the international PEFC sustainable forest management standard.
- We do not carry out forestry operations in strictly protected areas or in the habitats of endangered species, which we have volunteered to protect.
- In forests where forest management restrictions apply, we follow the guidance of the Environmental Board.

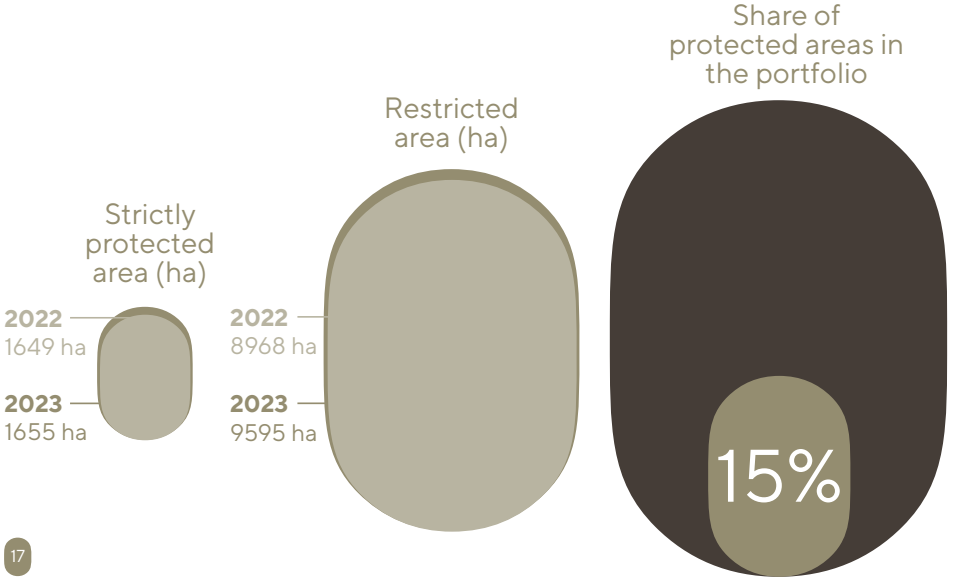
Lisaks säästlikult majandatavatele metsadele on meil kaitsealuseid alasid ligi 15%. Osad nendest aladest on range kaitsega, kus majandamist ei toimu mingil viisil.
There are species for which forest management activities are not suitable, but there are also species where humans can do a lot to help. In this way, we have contributed to the improvement of the habitats of several protected species.

Hen and chicken's houseleek (Jovibarba sobolifera)

We carried out conservation work at the rolling hen and chicks habitat in Tepripalu. Rolling hen and chicks, classified under the second protection category, is a light-demanding angiosperm. Primary threats to this plant include the overgrowth of its habitat, which necessitates active habitat management to ensure suitable light and growth conditions. Conservation efforts included habitat restoration, undergrowth removal, and clearing fallen trees to improve conditions for this vulnerable species.

Siberian flying squirrel (Pteromys volans)

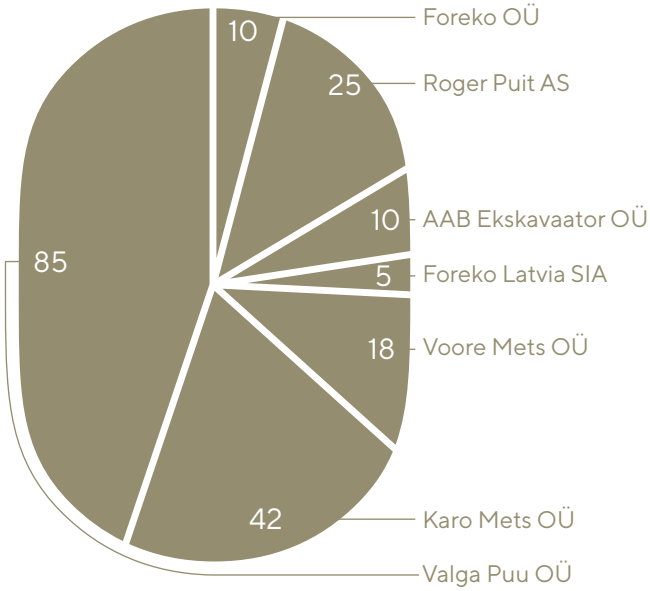
Conservation activities were undertaken at the Siberian flying squirrel species protection site in Roogendiku following the Flying Squirrel Project Area Design Plan, which is a part of the Co-operation for Improving the Conservation of the Flying Squirrel in Europe joint initiative between Estonia and Finland. This project focuses on preserving and restoring habitats for the Siberian flying squirrel, classified under the first protection category. The aim is to secure a viable population of this species by maintaining and improving its habitat.

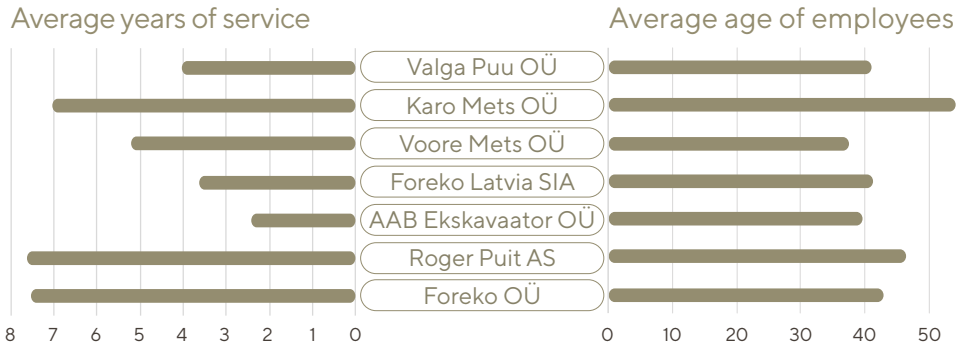


4 Foreko Group socioeconomic impact

4.1 Employment at Foreko Group

Total number of employees as of 31/12/2023





Valued employers beyond urban centres

We prioritise ensuring that our subsidiaries are recognised as respected and valued employers in areas outside urban centres. A 2022 analysis by Ernst & Young Baltic of the socio-economic impact of Estonia's forestry and timber sector highlighted the sector's significant contribution to rural livelihoods.

- The forestry and timber sector is a critical employer in rural areas, providing jobs to over 30,000 people.
- For example, in central and southern Estonia—regions where Foreko Group companies predominantly operate—the sector accounts for approximately 14% of the employment. Additionally, wages in the sector are reported to be 35% higher than the national average.
- The average gross salary at Foreko Group companies in 2023 was 34% higher than the Estonian national average.

4.2 Foreko Group as a supporter of local life

The forestry companies within Foreko Group actively support cultural and sports events, as well as initiatives that enhance local communities. When allocating support, special attention is given to local characteristics, people, events, and efforts to improve regional life.

OÜ Valga Puu is a major sponsor of **the Tartu Marathon**. "For young families to want to live in southern Estonia, there needs to be more than just jobs and schools—there should also be activities for leisure. The Tartu Marathon is the most prestigious and popular skiing event in Estonia, and supporting it is a great honour for us," explains the Chairman of the Board of Valga Puu, Andres Olesk.

Beyond its role as a major sponsor, Valga Puu has contributed to various other initiatives, including Tõrva Football Club, Võru Volleyball Club, the Estonian Ski Association, and the Estonian Cyclists Union, among others.

OÜ Karo Mets has supported the activities of the **Estonian Forestry Students' Society** and promising local athletes for over ten years. They have been long-term sponsors and fans of **Pärnu Kalev Sports Association** and have supported the **Kaisma hiking trail** since 2019. In addition, they provide Christmas gifts to local **children's homes.**

AS Roger Puit has been a strong supporter of local sports, particularly youth sports, ensuring that as many people as possible benefit from their sponsorship. Over the years, their support has reached organisations such as the non-profit association Suure-Jaani United, Tääksi Sports Club, DORPAT Sports Club, Viljandi Cycling Club, Viljandi Future Football Club, DiscHulls, and Saag Racing. They have also supported youth interest in science through programs like Science School for Smarties and Rakett 69.

OÜ Voore Mets has contributed to the development of local youth athletes, for example the **Jõgva SK Noorus** football club, and has also supported the **Estonian Forest Society** non-profit association.

4.3 Foreko Group as a collaboration partner

The forestry companies within Foreko Group actively collaborate with and contribute to sector associations and organisations:

- Karo Mets OÜ, Roger Puit AS, and Valga Puu OÜ are members of the **Estonian Forest and Wood Industries Association.**
- Foreko Group works closely with the **Estonian Private Forest Union**, with Andres Olesk, the head of Valga Puu, participating in its board activities.
- Voore Mets OÜ is a member of the **Estonian Chamber of Commerce and Industry.**
- Roger Puit AS and Voore Mets OÜ belong to the **Union of United Forest Owners' Cooperative.**
- Karo Mets OÜ is a member of the **Vändra Forest Association.**
- Foreko Latvia SIA is a member of the **Latvian Forest Owners' Association.**

4.3 Foreko Group collaboration projects

Overview of scientific projects, by Reimo Lutter

Assistant Professor at the Estonian University of Life Sciences

In 2023, the first phase of the scientific collaboration between the Estonian University of Life Sciences and Valga Puu OÜ concluded. A new agreement was signed with the Foreko Group, expanding the collaboration to include Karo Mets OÜ and Roger Puit AS. This new joint project has a duration of six years. In 2023, the Estonian University of Life Sciences, Fibenol, and Foreko OÜ launched their first international Horizon Europe project, ECOLOOP. This project focuses on developing a carbon calculator for forest plantations and evaluating the chemical properties of wood derived from plantations for value-added processing.

Between 2022 and 2023, the collaborative research project between the Estonian University of Life Sciences and Valga Puu OÜ continued with the establishment of new experimental forestry plots.

In 2022, research was expanded to compare mixed spruce and birch stands with monocultures. The study emphasised root competition, carbon sequestration, biodiversity, and the effects of thinning operations.

To study root competition an innovative stable isotope tracing method is being employed. This technique enables the description of nitrogen and water movement within forest ecosystems without disrupting the system itself. These novel insights into nutrient and water uptake enhance understanding of resource use in mixed forests, refining forestry practices to cultivate productive and climate-resilient stands.

Between 2022 and 2023, research began on black alder, a tree species that has seen limited use, to explore its potential for afforestation in wet habitats. New black alder experimental plots were established to study the effects of soil preparation and an organic nitrogen-based biostimulant on the successful establishment of black alder stands.

In addition to tree growth rates, biodiversity studies are also being conducted in these plots.

In 2023, offspring trials were established using the best-performing birch trees collected from plantations with the aim of identifying progeny with superior trunk characteristics and growth rates for the development of new plantations. A total of 26 progeny lines are being compared.

Additionally, in 2023, Tamar Püve completed his master's thesis on fertilisation experiments in birch plantations, a collaborative project between the Estonian University of Life Sciences and Valga Puu. The findings reveal that by applying nitrogen and phosphorus, the ecosystem's carbon sequestration capacity can be increased by 50% by the end of the third growth year.

A new research agreement was signed between the Estonian University of Life Sciences and the Foreko Group in order to conduct this scientific project.

4.4 Legal framework and sustainability standards

Foreko Group is committed to ensuring that its operations comply with all applicable legal regulations. The main challenges include:

- The rapidly evolving and expanding legal framework.
- Ambiguities and multiple interpretations of certain requirements,
- which can lead to abrupt changes in established practices and interpretations.

Adapting to new regulations often requires adjustments and, in some cases, a reorganisation of work practices.

In 2022–2023 several legislative acts were adopted at both the Estonian and European Union levels, whose impact on Foreko Group will only become apparent over time.

For instance:

- From 1 January 2024 new, higher, land tax rates will apply.
- Starting on 1 July 2024, a state fee will be introduced for the examination of a forest notice submitted regarding cutting.
- From 20 December 2024, the EU Deforestation Regulation will come into effect, prohibiting the market release of timber gathered in certain ways.
- In connection with the implementation of the Renewable Energy Directive (RED II), new requirements for biofuels, liquid biofuels, and biomass-based renewable energy came into effect in 2023. However, these did not directly affect our work, as we had already been fulfilling the RED II requirements in relation to sustainable forest management certification.

In addition to new requirements, **challenges also arose in the implementation and interpretation of existing regulations.**

For instance:

- Due to infringement proceedings initiated by the European Commission, the Environmental Board suspended logging in all forest habitat types within Natura 2000 areas for 28 months starting in early 2022. During this period, logging was prohibited in areas where it had previously been permitted.

- Questions arose regarding the Environmental Board's authority to go beyond the limits outlined in the conservation action plan for a protected species (the greater spotted eagle). Specifically, this concerned defining habitat and associated restrictions more extensively than specified in the plan. To address this issue, Foreko Group took the matter to court. As of 2024 the court has ruled in Foreko Group's favour, and the decision is now final.

- A legal precedent was set establishing that the Environmental Board can no longer rely solely on the general planning of a local government unit when registering forest notice permitting logging in green network areas. Instead, it must also evaluate the compatibility of the general plan with the preservation of the green network. In practice, this could make the logging permit process less transparent and reduce legal clarity for forest owners.

In addition to meeting mandatory requirements, all companies within the Foreko Group have voluntarily committed to adhering to the PEFC sustainable forest management standard. The standard, updated by the PEFC-Estonia working group in May 2022, is based on the principle that sustainable forest management in Estonia should maintain biodiversity, forest productivity, regeneration capacity, and vitality.

It also ensures forests can fulfil ecological, economic, and social functions without harming other ecosystems. The updated standards requirements took effect on 4 May 2023.

Forest is
our passion

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