METSÄHALLITUS
FORSTSTYRELSEN
MEAHCIRÁÐÐEHUS

Metsähallitus Annual and Responsibility Report 2021

We create added value for nature, people and society

Photo: Roni Lehti

Key events

6

Biodiversity

65

Contents

Fostering our Future

We at Metsähallitus wish to ensure that everyone, including future generations, has the opportunity to enjoy nature and the value it creates. This is what we work for every day.

Contents:

Photo: Katri Lehtola

DIRECTOR GENERAL'S REVIEW

A year of many successes

Year 2021 was successful in many ways. We speeded up the implementation of our strategy, Fostering our Future, and achieved the financial and operative goals set for us. Our work also has significant impacts on society at large through value chains.

VRegarding our strategy, the expectations were met in 2021. In financial terms the year was exceptionally good, even if the coronavirus pandemic continued to create uncertainty and made anticipation more difficult. Metsähallitus Group's turnover was EUR 367.4 million, and we made a profit of EUR 119.9 million. The good result was mainly due to a strong demand for timber and its high price. In parallel with the good financial result, business investments in fostering biodiversity and fulfilling our other societal obligations grew to EUR 79.7 million.

The financial result of Metsähallitus Property Development totalled EUR 21.2 million. Increased demand was seen in both site business and wind power project development. The popularity of domestic tourism was reflected in the demand for holiday house sites, and a record number of leisure sites was sold.

The increasing demand for renewable energy manifested itself as a higher number of preliminary studies related to plans for wind farms on state-owned land. Project development for the offshore wind farm to be built off Korsnäs is making headway, and we launched the search for a responsible project partner. We also promote the development of offshore wind power using an auction model approved by the Cabinet Committee on Economic Policy.

Outdoor activities, fishing and hunting continued to

Photo: Mikael Ahlfors

DIRECTOR GENERAL'S REVIEW

be highly popular. The number of visits to national parks exceeded four million for the first time, and around 8.5 million visits were made to outdoor destinations overall. Interest in fishing and hunting also continued at a record-breaking level. This growth in popularity also gives rise to some negative phenomena. The most popular national parks are becoming congested, and permit quotas for hunting are rapidly filled. The increase in visitor numbers also affects the maintenance and service structures of national parks. Future-oriented investments granted to Parks&Wildlife Finland have enabled us to catch up on some of the repair backlog related to hiking structures in national parks.

We worked to promote biodiversity across a broad front. Under the Helmi habitat programme and with LIFE funding, we managed and restored protected areas across almost 13,000 hectares. We also restored fish habitats and carried out active ecological management work in multiple-use forests. Metsähallitus Forestry Ltd launched a demonstration project aimed at safeguarding occurrences of endangered species in multiple-use forests. Storm damage sustained in the summer will significantly increase the volume of decaying wood in the forest, giving biodiversity a vital boost.

Both opportunities and challenges are on the horizon in a near future. The increased need for electricity associated with Finland's carbon neutrality target will boost the demand for wind power. Consequently, we firmly expect both land-based and, in particular, offshore wind power generation to increase in the future.

In addition to the climate, halting biodiversity loss is another major driver in the operating environment. Finland is committed to the European Union's Biodiversity Strategy, which will set EU-level targets for biodiversity and halting biodiversity loss. We must do more to promote biodiversity, and we are currently working on our own biodiversity programme. Demand for wood-based products is growing, and they play a major role in replacing products made from non-renewable materials.

Enthusiasm for outdoor activities, fishing and hunting appears to remain at a high level. At the same time, expectations are growing regarding new types of services, especially digital ones, and we are striving to respond to them. Additionally, we will continue the work to develop sustainable and safe nature tourism that was launched last year. In this field, we wish to be not only a facilitator but also a pioneer.

All in all, it is unlikely that the expectations placed on state-owned land and water areas grow smaller, which is why we must continue to focus on open interaction and responsible reconciliation of different objectives. The results of the latest customer experience survey show a clear improvement compared to the year before, indicating that we are heading in the right direction. Our partners and stakeholders appreciate our expert service and work on responsibility. However, we are expected to engage in even more active interaction with the society around us, and this will indeed be one of our focus areas.

Juha S. Niemelä
Director General

KEY EVENTS IN 2021

Key events in 2021

FOSTERING OUR FUTURE:
Our business activities generated ecologically, economically and socially sustainable profits »


Photo: Katri Lehtola


Photo: Katri Lehtola

RESPONSIBILITY AND CO-OPERATION:
Our partners and stakeholders appreciate our expert services and responsibility work »

CLIMATE CHANGE:
The number of wind power contracts for state-owned areas is growing vigorously »

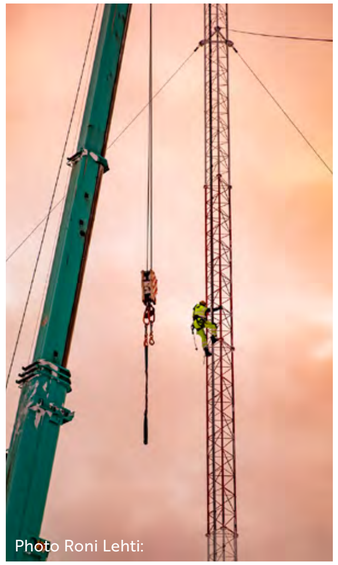


Photo Roni Lehti:


Photo: Suvi Haapalehto

BIODIVERSITY:
We carried out more ecological management and restoration work on state-owned lands than ever »

WELL-BEING:
Nature tourism in national parks and our other hiking destinations was more popular than ever before »


Photo: Katri Lehtola


Photo: Katri Lehtola

BIOECONOMY:
We are developing climate-effective forest planning »

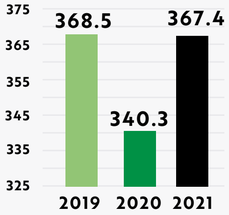
KEY FIGURES IN 2021

Metsähallitus

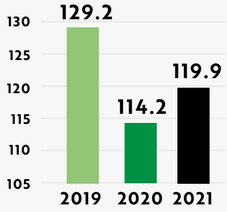
Metsähallitus is a state-owned enterprise that uses, manages and protects state-owned land and water areas responsibly and sustainably. We are committed to promoting the UN's Sustainable Development Goals (2030 Agenda) and the UN Guiding Principles on Business and Human Rights in our work.

We reconcile different objectives and expectations of the owner, stakeholders and customers in our work. We produce renewable raw materials in sustainably managed forests, increase the potential for generating renewable energy, and enable citizens to enjoy nature by hiking, hunting, fishing and staying in holiday houses. We make sustained efforts to simultaneously mitigate both biodiversity loss and climate change.

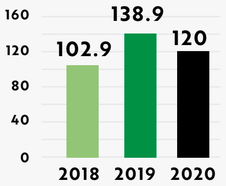
Turnover, million EUR
367.4



Profit, million EUR
119.9



Contribution to state revenue from the previous year's result, million EUR
120



General societal obligations, business investments, million EUR
79.7

Operating profit, million EUR
134.1

Operating profit margin, %
36.5

Investment to turnover ratio, %
7.2

Funding from State budgets, public administration duties, million EUR
75.9

Metsähallitus as an employer (scale 1 to 5)
3.98

Metsähallitus' customer experience (scale 1 to 5)
3.62
(good)

Carbon sink in state-owned forests
12.9
$MtCO_2e$

Carbon storage in state-owned forests
184
million t C

Metsähallitus' carbon footprint
3.3
$MtCO_2e$

Metsähallitus' carbon handprint
0.07
$MtCO_2e$

Person-years, Group total
1,276

KEY FIGURES: BUSINESS IN 2021

Responsible business

We conduct business through our subsidiaries, Metsähallitus Forestry Ltd, MH-Kivi Oy and Siemen Forelia Oy as well as Metsähallitus Property Development, which is part of the state enterprise's parent company.

Our business comprises sustainable management and use of state-owned forests and seed production for forest trees as well as leasing, sales and development of state-owned land and water areas. We create diverse business opportunities on state-owned lands and make it possible to replace fossil raw materials and fuels with sustainably produced wood and wind power.

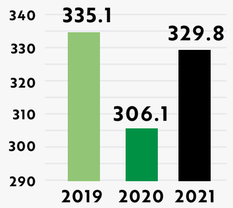
As part of sustainable management and use of natural resources in our business, we fulfil general societal obligations by addressing the requirements of fostering biodiversity, recreational use of nature and job creation. We also reconcile the management, use and protection of natural resources in the Sámi Homeland whilst safeguarding the prerequisites for pursuing the Sámi culture, and in the reindeer herding area whilst fulfilling the obligations laid down in the Reindeer Husbandry Act.

Photo: Katri Lehtola

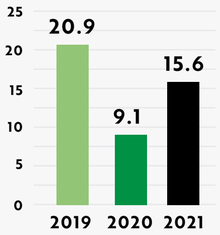
KEY FIGURES: BUSINESS IN 2021

Metsähallitus Forestry Ltd

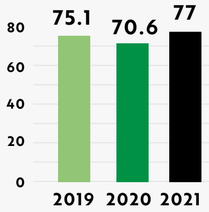
Turnover, million EUR
329.8



Profit, million EUR
15.6



General and societal obligations, inputs, million EUR
77



Compensation for the right to use state-owned forests, million EUR
95

Volume of harvested timber, million m³
6.3

Multiple-use forests in which timber is harvested,%
2

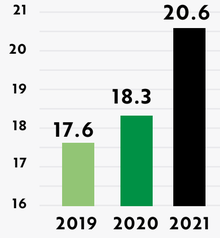
Forest land excluded from forestry or under limited use, ha
812,000

Carbon sink of multiple-use forests $MtCO_2e$
8.6

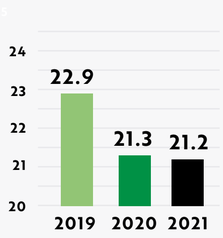
Number of employees (31 December 2021)
384

Metsähallitus Property Development

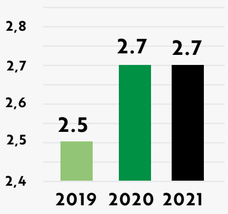
Turnover, million EUR
20.6



Profit, million EUR
21.2



General societal obligations, inputs, million EUR
2.7



Number of wind farms on state-owned land
138

Wind energy produced on state-owned land, GWh
1,000

Leased rock material extraction sites
200

volume of rock extracted from these sites for construction, million t
2

Number of holiday house sites leased
1,644

Number of holiday house sites sold
181

Number of employees
59

KEY FIGURES: PUBLIC ADMINISTRATION SERVICES IN 2021

Public administration services

Metsähallitus' public administration duties are handled by Parks & Wildlife Finland and Wildlife Service Finland. Our tasks include managing the network of nature conservation areas and dozens of cultural heritage sites in Finland, protecting many endangered species, providing free services for hikers, offering opportunities for hunting and fishing by selling permits for these activities, and using the permit revenue to promote sustainable hunting and fishing. Our tasks also include supervising fishing and hunting in state-owned areas.

The public administration tasks are managed separately from business operations and funded by appropriations allocated to them in the state budget and income from permit sales.

Metsähallitus Parks & Wildlife Finland

Total number of visits (national parks, state-owned hiking areas, historical sites, visitor centres and other popular destinations)
9,410,600

Impacts of visitors' spending in areas close to the destinations million EUR
456

Customer satisfaction among users of visitor centres and off-road services (on a scale of 1 to 5)
4.38

Habitat restoration and management work in state-owned protected areas, ha
12,910

of which restored mires, ha
5,254

Number of Saimaa ringed seal pups born
86

Visitors to national parks clocked up
43.6
million km by walking, cycling and skiing,

which is equivalent to
1,087
trips around the world.

Number of employees (31 December 2021)
564

Wildlife Service Finland

SOLD

Hunting permits
84,537

Fishing permits
107,585

Number of fisheries management fees paid
202,108

Days spent fishing and hunting
548,898

Number of fishing and hunting inspections
10,845

Number of employees (31 December 2021)
74

We manage one third of Finland's surface area

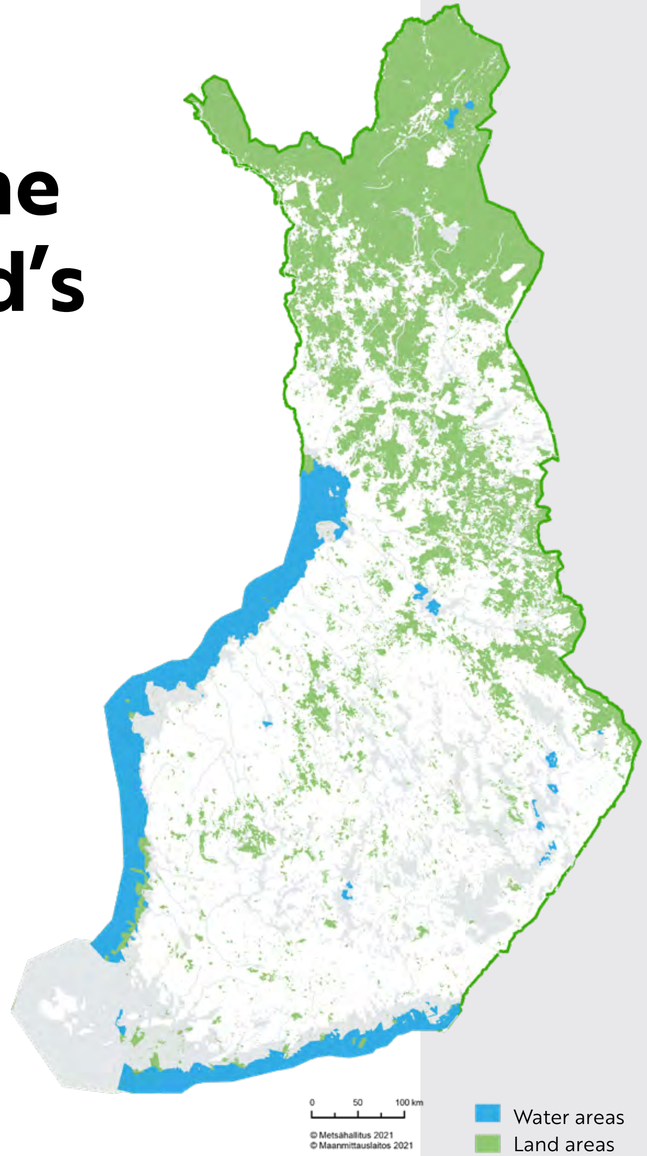
Metsähallitus manages

9,157,000
hectares of land areas and

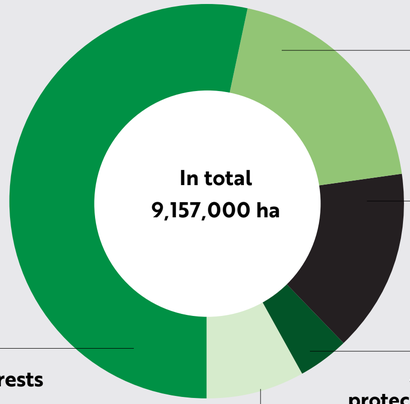
3,419,000
hectares of water areas.

In total, this is

12,576,000
hectares.



Land areas



20 %
Statutory protected areas
1,829,000 ha

15 %
Wilderness areas
1,378,000 ha

4 %
Areas covered by protection programmes
346,000 ha

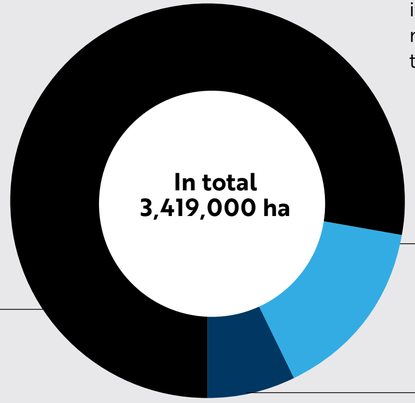
53 %
Multiple-use forests
4,887,000 ha

Forest land in multiple-use forests*
3,494,000 ha (71.5%)
Low-productivity land
711,000 ha (14.5%)
Non-productive land
682,000 ha (14%)

8 %
Other areas of special value
717,000 ha

*Productive forestry land is classified on the basis of the Nordic growth categories of forestry land: on forest land, the average annual growth of the tree stock is at least 1 m³/ha; on low-productivity land, it is 0.1-1 m³/ha, and on non-productive land less than 0.1 m³/ha.

Water areas

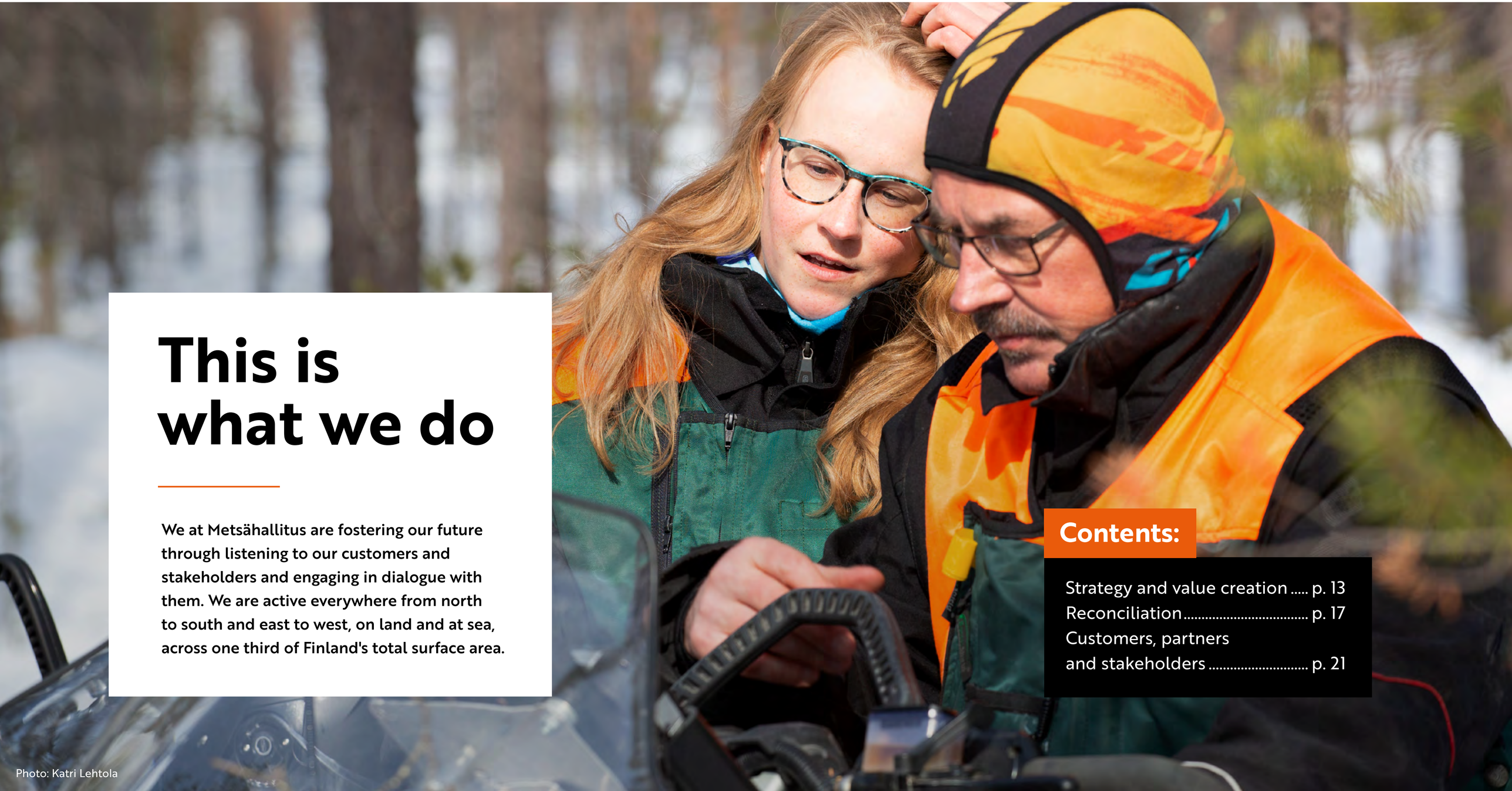


15 %
Other water areas
515,000 ha

7 %
Statutory protected areas
241,000 ha

78 %
Public water areas
2,663,000 ha

of which 2,555,000 ha in sea areas
of which 108,000 ha in inland water areas



This is what we do

We at Metsähallitus are fostering our future through listening to our customers and stakeholders and engaging in dialogue with them. We are active everywhere from north to south and east to west, on land and at sea, across one third of Finland's total surface area.

Photo: Katri Lehtola

Contents:

STRATEGY AND VALUE CREATION

We developed a more agile operating method and working culture

Year 2021 marked the launch of our strategy titled Fostering our Future. To speed up the implementation of the strategy and our Responsibility Programme, we established strategy streams, which helped to put a new operating method and working culture on a permanent footing.

During the year, the streams looked at Metsähallitus' operation and strategic actions from the perspective of synergies and cost impacts, among other things. Additionally, we sought new ideas and innovations. Each stream had an owner in Metsähallitus' Management Group as well as a leader and a core team, and they also served as a driver of change in our transition towards a more unified and customer-oriented Metsähallitus.

As the first themes to be developed through the streams were selected leadership, customer orientation, renewable energy, biodiversity and sustainable tourism. This work ended in early 2022, with the exception of the leadership stream, and the measures and development targets originating in them have been integrated into the strategy measures.

As part of implementing the strategy and responsible operation, we also intensified our efforts to prepare for the changes that will be brought about by international policy and EU regulation over the next few years. A number of national and EU-level regulatory projects that are significant for Metsähallitus were published in 2021. In particular, the EU's Green Deal contains several legislative initiatives that will affect Metsähallitus' operating environment. While the new EU legislative proposals will partly be reflected in Metsähallitus' work indirectly through the value chains, they will also have direct impacts, for example on reporting obligations. We have prepared for future legislative initiatives as part of our foresight work, for example from the perspective of risk management, by opening up a whistleblowing channel for internal and external use in 2019.

Fostering our Future strategy 2021–2024

We speeded up strategy implementation for the part of several pledges:

Main themes of the strategy	Responsibility and cooperation	Climate change	Biodiversity	Wellbeing from nature	Bioeconomy
Our pledge	**We will build trust through open interaction and pledge to develop more customer-oriented and digital forms of cooperation.** We will expand responsible and ethical practices throughout our value chain.	**We will triple our renewable energy production by 2030.** We will achieve a 10% increase in the carbon sinks of state-owned multiple-use forests by 2035. We will increase carbon storage on state-owned lands by 10% by the year 2035.	**We will step up our efforts to actively halt threats to species and habitats.** We will restore 17,000 hectares of degraded habitats in protected areas and 4,760 hectares in areas used commercially by the year 2023. We will strive for world class management of the conservation area network, for example to improve its ecological status. We will improve the sustainability of natural resources use, with the aim of minimising biodiversity loss.	**We will create more opportunities for recreation as well as nature and wilderness experiences that promote health and wellbeing for everyone.** Our business operations will generate EUR 114 million in government revenue by 2024. We will create jobs and boost regional economies, especially in sparsely populated areas. **We will improve our partners' opportunities to develop safe and sustainable nature and wilderness tourism at our destinations.**	**We will develop and produce sustainable solutions for new products and services of the future that will help us transition from a fossil economy to a bioeconomy.** We will be a pioneer of sustainable forestry.

Metsähallitus' purpose:
Fostering natural values and stewarding our shared assets responsibly across generations

STRATEGY AND VALUE CREATION

Value creation model describes the societal impact of our work

Metsähallitus' value creation model is used to measure the success of our strategy and responsibility work. The model describes the impact of our activities and shows what type of value we create for society in terms of the economy, the environment, nature and social perspectives.

The greatest impacts of our work will target five value-generating themes: health and wellbeing, the climate, biodiversity, the economy, and culture. Our work also has strong links with the UN's Sustainable Development Goals. We strive to promote the achievement of these goals by both increasing the positive and reducing the negative impacts.

Recognising our societal impact helps us implement and develop our strategy and creates preconditions for responsible cooperation and sustainable solutions. We will examine the value creation model during the strategy period and develop the indicators and process further.

Recognising our societal impact creates preconditions for responsible cooperation.

Our strategy responds to changes in the operating environment

Our work is guided by different national and international commitments as well as the expectations of the owners, customers and other stakeholders. Such megatrends as climate change, biodiversity loss, technological transformation and demographic trends will affect our activities in the short, medium and long term. In addition, changes in international policy and EU regulation will significantly alter the operating environment over the next few years.

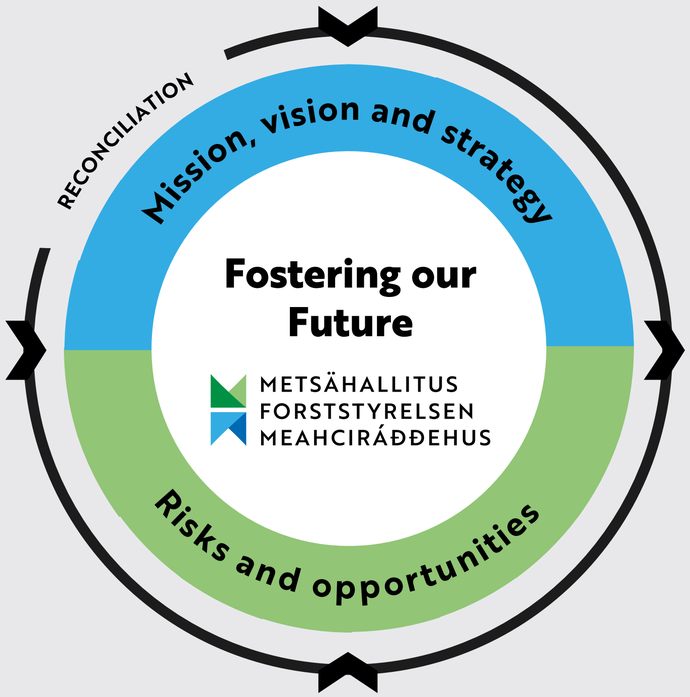
Drivers of change in Metsähallitus' operating environment:

- Climate change and biodiversity loss
- Transformation of working life and digitalisation
- Transformation of communication
- Rethinking leisure time
- Transformation of the economic system and world politics as well as increasing polarisation of values
- Demographic change

Metsähallitus' value creation model

Our key capital types

- Financial capital
- Natural capital
- Human and knowledge capital



Year 2021 – We create added value for nature, people and society.

Health and wellbeing

- **10 million** visits to nature on state-owned lands
- **0,5 million** days of fishing and hunting

Climate

- Carbon sink **12.9** $MtCO_2e$
- Carbon storage **184** million t C
- Carbon handprint **3.3** $MtCO_2e$
- Carbon footprint **0.07** $MtCO_2e$

Biodiversity

- Ecological management and restoration work across more than **16 000 ha**
- **71 million m³** or more than one half of the total volume, of all decaying wood in Finland is found on state-owned lands
- Preservation of ecological sites in regenerative felling of multiple-use forests **100 %**

Economy

- Revenue generated for the state **120** EUR million
- Procurements of materials and services **179.2** EUR million
- Personnel salaries and fees **61.7** EUR million
- Taxes **62.5** EUR million
- Indirect impacts on regional economies EUR **3 billion**

Culture

- **Over 1.8 million** visits to visitor centres and cultural heritage sites
- **65,000 people** reached through guidance, events and nature education

- 11 Sustainable cities and communities
- 13 Climate action
- 14 Life below water
- 15 Life on land
- 8 Decent work and economic growth
- 12 Responsible consumption and production
- 16 Peace, justice and strong institutions
- 17 Partnerships for the goals

RECONCILIATION

Planning the use and management of state lands requires cooperation

Our work is based on successfully reconciling a wide range of needs and wishes in collaboration with our stakeholders. This reconciliation relies on a multi-stage planning process, the highest levels of which comprise natural resource plans and the landscape ecological planning linked to them. From these levels, the planning progresses all the way down to detailed action planning. The starting point for all planning is accurate geospatial data. To accumulate this data, we work together with both Finnish and international parties.

Natural resource planning – a tool for sustainable use

Through natural resource planning, we can ensure the economic, ecological, social and cultural sustainability of our work. As part of the planning process, we draw up a natural resource plan together with our stakeholders and partners. This plan is an action plan that outlines the long-term use of state-owned land and water areas and reconciles the needs of different forms of land use. These plans, which are drawn up for five years at a time for each area, also contain the goals of sustainable natural resource use specified in Metsähallitus' strategy, such as fostering biodiversity and climate change mitigation and adaptation. As we draw up the plans, we also strive to find new opportunities for using state-owned land and water areas for business and other purposes.

One of the issues to be agreed upon in the natural resource plans is the planned cut in state-owned forests. The sustainable planned cut in multiple-use forests for 2021 set out in the natural resources plans was 6.6 million cubic metres, whereas the actual harvesting volume was 6.3 million cubic metres. This volume was 5% smaller than planned. Over the five-year planning period, the harvesting volume was 1.94 million cubic metres (6.2%) less than planned. The total area in which felling was carried out in 2021 was more than 91,000 hectares, of which intermediate felling accounted for 74% and regeneration felling for 26%. The exceptionally high share of continuous cover fellings is explained to a significant extent by

RECONCILIATION

management, intermediate and regeneration fellings necessitated by the extensive storm damage in Ostrobothnia and Kainuu and actions required under the Forest Act. The actual volume of regeneration fellings was 12% less than planned. While the actual felling volumes may be more or less than the planned cut at the annual level, they do not exceed the sustainable planned cut determined for the entire five-year plan period.

The current natural resource plans predict that the planned cut will increase from the current 6.7 million cubic metres to 7.6 million cubic metres by 2030. A prediction based on the 12th National Forest Inventory and the natural resource plans indicates that carbon storage on all state-owned lands will continue to grow during this period.

More than one half of all forests are state-owned multiple-use forests going through their best and most vigorous stage of growth, and 50-year-old forests can thus be seen as a peak in the age class distribution. We will work to ensure that the age class distribution levels out significantly over the next 30 years; this means that the forests will be sturdier and the volumes of older age classes will increase.

Our key goals in natural resource planning include reconciling different forms of land use and offering state-owned land for the use of local companies and communities. Many activities would be impossible to organise without large-scale use of state-owned areas. In 2021, our lease system contained about 19,700 different contracts on using state-owned areas.

Natural resource planning also creates a framework for zoning. Zoning makes it possible for our partners to build in areas we control. The zoning of sites is guided by Metsähallitus' own planning principles, through which we ensure sustainable and responsible zoning on state-owned lands, taking natural, recreational and cultural values into account. Zoning is always carried out in cooperation with municipalities, and the municipalities have the final say in zoning matters. We participate in the preparation of regional and local master plans by contributing comments and reminders.

Natural resource plan for Sámi Homeland completed »

The natural resource plan that will direct Metsähallitus' activities in the Sámi Homeland in 2022–2027 was completed in 2021. In the planning process, the Akwé: Kon operating model was used for the first time, and an Akwé: Kon working group assessed the impacts of the plan. As a result of this process, an extensive action plan consisting of 94 measures was completed.

RECONCILIATION

Landscape ecological network secures ecological sites

Landscape ecological planning is closely connected with natural resource planning. In landscape ecological planning, the natural environment in an extensive forest area is examined as an ecological network, or a coherent entity at the landscape level. The network consists of conservation areas and valuable ecological and special sites in multiple-use forests, as well as of ecological corridors and so-called stepping stones that link them, through which species can spread between conservation areas and ecological sites in multiple-use forests. Ecological sites in multiple-use forests include those referred to in the Nature Conservation Act and Forest Act, and other sites that are valuable for biodiversity, including areas around small water bodies. The criteria applicable to such sites are described in the Environmental Guidelines of Metsähallitus Forestry Ltd. Ecological sites are excluded from forestry use, whereas measures aiming for maintaining or improving them may be taken.

Landscape ecological planning safeguards the preservation of habitats and other ecological sites of particular value referred to in the Forest Act and the Nature Conservation Act as well as secures possibilities for species to spread between conservation areas and ecological sites in multiple-use forests. The network is also used for efforts to reconcile the needs of game habitat management, preservation of landscape values and cultural heritage sites as well as recreational use while taking the objectives of overall sustainability into account.

The network has a long history going back more than two decades and, in addition to fixed-term separate projects, we constantly update it in connection with other activities. Up-to-date geospatial data concerning such sites are maintained in Metsähallitus Forestry Ltd's planning system, Silvia.

An update of the landscape ecological network covering the entire country was completed in 2020, and in 2021, ten planners worked on complementing the network in multiple-use forests. Geospatial data analyses and feedback from stakeholders were used to target inspections in the field. New ecological sites were located both in Southern Finland and in Ostrobothnia-Kainuu region across 1,500 hectares in each area, and in Lapland across 4,500 hectares, totalling 7,500 hectares in the whole country. We also included in the inspection sites areas that were highlighted in interaction processes with nature organisations, such as spruce mires, landscape sites and ecological corridors. To foster biodiversity, 206,500 hectares of forest land were excluded from forestry activities or their use was restricted in 2021.

Regarding species information, we supplemented the geospatial data with observations supplied by nature organisations, field inspections carried out on different sites, and inventories performed by Metsähallitus' own species experts. We will continue this work in summer 2022 with a special focus on natural spruce mires. Any endangered species we

RECONCILIATION

know about are always taken into account in fellings planned by Metsähallitus. We map ecological sites based on the structural features of the forest and, if necessary, carry out a more detailed inventory of species.

Management planning helps reconcile objectives in protected areas

We also add detail to natural resource plans by drawing up management plans for individual special areas, including national parks, hiking areas and Natura 2000 sites. These plans are used to reconcile the objectives of nature conservation, recreation and other uses over a period of 10 to 15 years. The plans are drawn up in cooperation with local residents and other actors.

In 2021, we published management plans for the large Natura 2000 sites of Vintilänkaira-Koitelainen-Pomokaira and Käsivarsi Wilderness Area. A similar plan for Helvetinjärvi National Park was completed and sent to the Ministry of the Environment for approval. We initiated the process of drawing up a management plan for the new national park in Salla. Due to the forthcoming overhaul of the Nature Conservation Act, we will also update the principles of managing and using protected areas.

Preparation of a management plan for Salla National Park was was lauched (in Finnish) »

On the first day of 2022, Finland's 41st National Park was established in Salla. A cooperation group consisting of key stakeholder will be set up to support the planning process and discuss the outlines and core issues of the plan. Throughout the planning process, stakeholders and all citizens will have opportunities to express their opinions and preferences regarding the planning area.

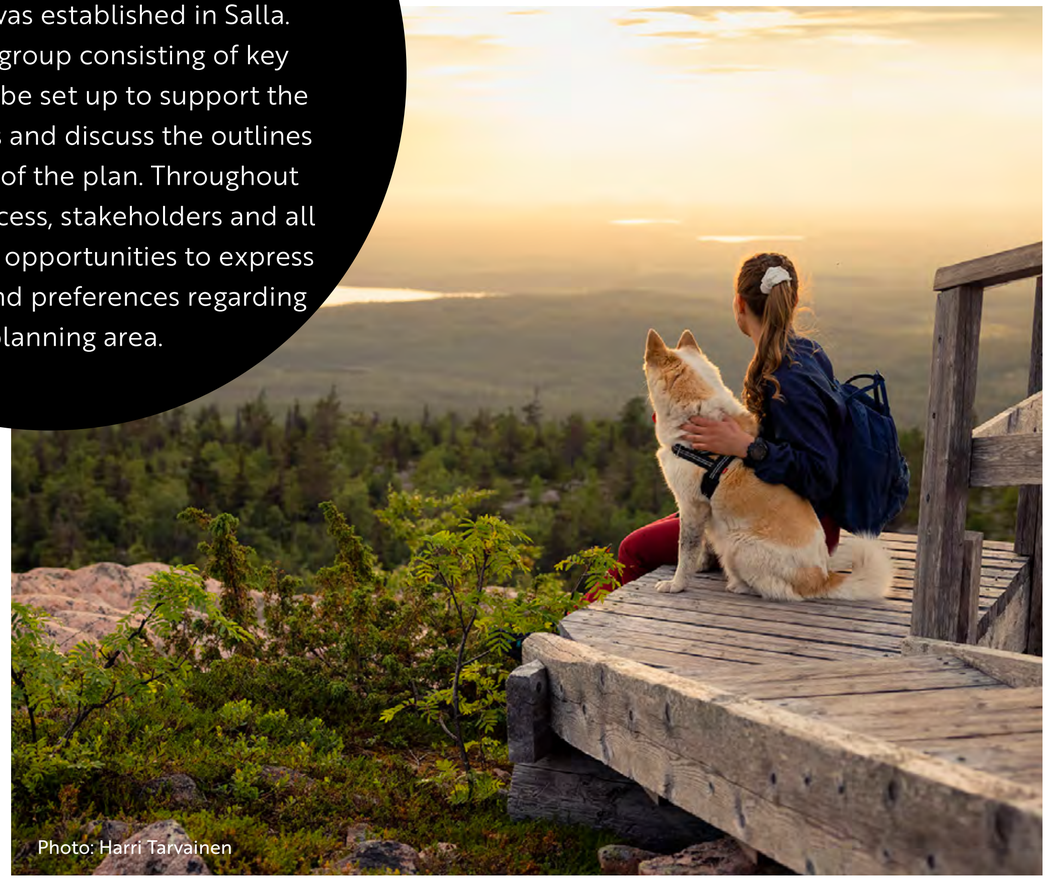


Photo: Harri Tarvainen

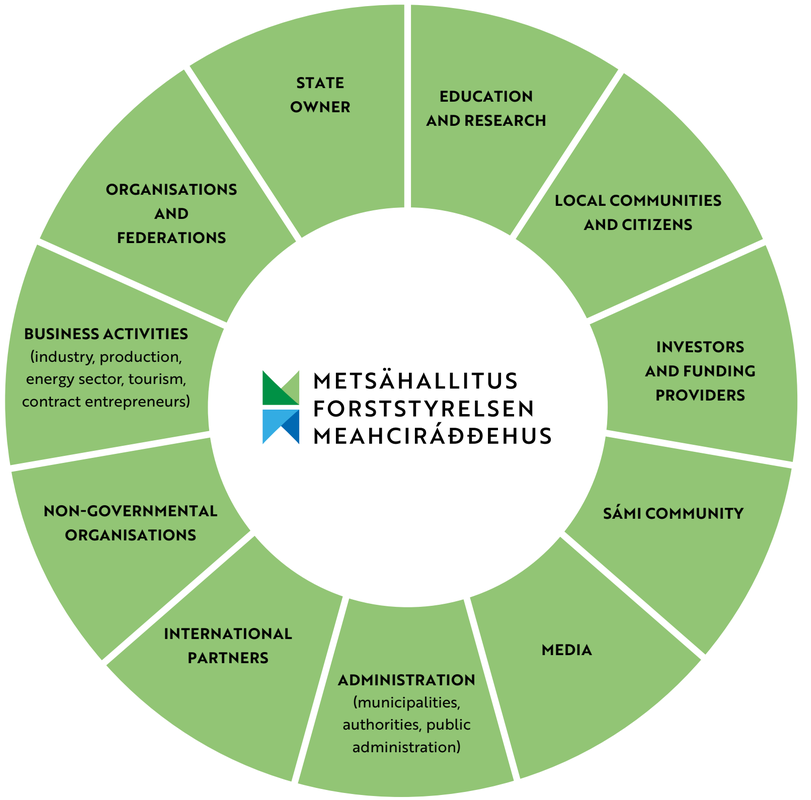
CUSTOMERS, PARTNERS AND STAKEHOLDERS

Building the future together

Responsibility and cooperation define all our activities. We have a wide range of customers and stakeholders, and consequently also services and forms of cooperation. National parks and hiking areas, fishing and hunting permits, roundwood and energy wood as well as lease and right of use contracts are the services that our customers and the general public are the most familiar with. Important forms of interaction include natural resource planning with stakeholders, collaboration on projects and innovations with partners, different cooperation groups and, for example, negotiations with reindeer herding cooperatives and environmental organisations.

In our strategy, we put customer orientation at the core of cooperation and interaction in our role as an authority, in business, and in the fulfilment of our corporate social responsibility alike. Our goal is ensuring that our customers and stakeholders meet a unified Metsähallitus that develops the value of nature responsibly across generations and feel that their needs are met by reconciling the welfare of nature, humans and society.

Metsähallitus' customers, partners and stakeholders



CUSTOMERS, PARTNERS AND STAKEHOLDERS

Metsähallitus was a key partner for SuomiAreena in summer 2021 (in Finnish) »

Open societal discussion on reconciling different viewpoints is crucial for our work. We discussed nature and natural resources as well as their fair use on SuomiAreena. We also organised participatory events around Finland.

Sustainable services are underpinned by customer insight and engagement as well as continuous dialogue

During the year, we both improved the customer orientation of our activities and defined a shared mindset and concepts. At Metsähallitus, customer orientation means developing and providing human-centric products, services and activities underpinned by in-depth customer insight. It covers all customer, partner and stakeholder work across a broad front.

For example, we developed operating models that respond to the land use needs of other central government actors during the year. We also established a fixed-term online forum based on the principles of service design and co-creation for developing safe and sustainable nature tourism together with our partners. This forum was very well received.

We also improve our services by developing our information systems. During the year, we developed a joint digital sales channel, customer relationship management system and contract management system. In 2022, we will introduce Metsähallitus' joint contract management system, which will harmonise processing and operating models and improve customer experience.

We have additionally promoted an experimental operating culture. Students of service design examined, among other things, the service package comprised by Metsähallitus' telephone exchange and websites and suggested improvements in it. We also built our customer insight concerning customers for rock materials, especially from the perspective of responsibility.

A good level of reputation and customer experience

We measure our customers', partners' and other stakeholders' experiences of our activities and their views of our reputation annually. Based on the re-

CUSTOMERS, PARTNERS AND STAKEHOLDERS

sults obtained in 2021, the levels of both Metsähallitus' reputation and customer and stakeholder experience are high.

In the customer experience survey, 2,784 responses were received from private, corporate and community customers, and a good overall response rate was achieved at 35%. A sample of 997 people represented the general public in the survey. The survey indicates that customer experience improved slightly from last year in all customer groups, reaching the overall level good (3.62 on a scale of 1 to 5).

Metsähallitus was assessed by 667 respondents who represented our partners and stakeholders. This was the first time all groups responded to the same survey.

The most impressive strengths for Metsähallitus turned out to be expert service and wellbeing impacts for citizens. These areas, in which the level excellent was almost reached, have a significant impact on the support we receive from our stakeholders. All customer groups also share the same view of the high quality of Metsähallitus' services.

In addition to open interaction, our most important development possibilities from the perspective of customers and other stakeholders alike include promoting equality, reconciling the needs of different customers and stakeholders, and developing services based on feedback.

In terms of reputation, openness and responsibility emerged as the most important factors for all groups. We will continue to have a sharp focus on these areas – across the entire value chain.

Cooperation process with civil society continued

The process aimed at improving co-development and interaction skills between Metsähallitus, the Finnish Association for Nature Conservation and Greenpeace launched in 2018 continued in 2021. We continued the process independently along the path outlined by Akordi, an expert company specialising in interaction development.

During the year, we continued our regular cooperation at both the national and regional level to pinpoint common operating methods and the best practices for challenging forest sites based on common criteria. As a result of the negotiations, some sites identified in the conservation proposal of the Finnish Association for Nature Conservation and Greenpeace were included in Metsähallitus' landscape ecological network. Similarly, consensus was reached on returning sites of minor ecological value included in the proposal to forestry use. A shared view has so far not been reached on all the subjects under negotiation, however, largely due to different interpretations of the definitions used. During this process, it was also observed that some of the data

on the landscape ecological network are inaccurate. We will continue to work on this issue. We also focused on providing our personnel with training on identifying ecological sites.

The practices created in the cooperation process will be applied extensively in our activities, for example in the natural resource planning process in the Sámi Homeland and the Flying Squirrel LIFE project, which are thematically closely related to identifying commercial forestry areas and conservation sites. A good dialogical connection was established during the process, and the cooperation will continue in 2022.

Heated discussion on biodiversity loss

Discussions on safeguarding biodiversity and halting biodiversity loss became more heated in 2021 and will continue with equal intensity in early 2022. The backdrop to these discussions includes the EU's Biodiversity Strategy published last year, which sets EU level targets for fostering biodiversity and mitigating biodiversity loss. National commitments related to implementing this strategy will be prepared in 2022 by a working group appointed by the Ministry of the Environment. The commitments concern the network of protected areas and the conservation status of species and habitats listed in the Annexes to the Habitats Directive and Birds Directive. In addition, natural and old-growth forests must be strictly protected. The greatest differences of opinion have concerned the targets for the surface areas of protected sites contained in the strategy as well as the definitions of conservation and natural forests. The national conservation objectives in hectares or percentages, or definitions of natural and old-growth forests, contained in the strategy are not known at the moment. The extensive discussion on this subject, especially in social media, has focused on state-owned lands and Metsähallitus Forestry Ltd's activities as their steward.

The Natural Forests working group funded by the Kone Foundation continued to map valuable forest sites on state-owned lands around Finland based on remote sensing data in 2021. Metsähallitus has been informed of such sites both directly and through the social media. Activists have also sought to prevent forestry work at logging sites in a few cases. In these situations, we have resorted to discussions with different parties and tried to achieve a shared view. If no shared view has been reached, logging has been suspended for the time being. The Natural Forest working group's key message is that the ecological values and species of state-owned commercial forests have not been inventoried systematically. The group is expected to publish its next report on forest sites with valuable species requiring protection in spring 2022.

We have built up our expertise related to species and resources for species inventories carried out in commercial forests by recruiting more experts. This is something we will also focus on in the future. A project titled Occurrences of species in planning for multiple-use forests (Lajidemo) is also underway. This project aims for better reconciliation between forest

CUSTOMERS, PARTNERS AND STAKEHOLDERS

management and safeguarding species. In addition, Metsähallitus Forestry Ltd organised in November a seminar and discussion panel on the situation of endangered species in the forests with the aim of promoting open and constructive discussion. The introductory speakers at this event included experts conducting assessments of endangered species, leading researchers in forest ecology, forest sector operators and NGO representatives.

The seminar was recorded, and the presentations can be viewed on **Metsähallitus' YouTube channel.**

A citizens' initiative opposing clear-felling was discussed by the parliamentary Agriculture and Forestry Committee in autumn 2021. While banning clear-felling on state-owned lands was not considered necessary, the Committee found that continuous cover forestry should be promoted. This initiative has sparked a great deal of discussion, which has helped to promote research in continuous cover forestry and the diversification of forestry techniques. We will continue to manage observation sites for continuous cover forestry and develop their systematic monitoring further.

In addition, the principles of openness and disclosure of forest resource data concerning state-owned multiple-use forests were discussed in early 2022 in the context of the information request addressed to Metsähallitus by the Finnish Environment Institute (SYKE) in order to support project activities. Open data concerning landscape ecological sites in state-owned multiple-use forests, which are also publicly available in the Excursionmap.fi service, were disclosed to the researchers who had requested them under a right of use contract. Metsähallitus Forestry Ltd's policy is that the company uses public data concerning other areas besides landscape ecological sites in its business operations, and they consequently fall within the scope of business secrets. Metsähallitus Forestry Ltd also considers that to ensure the consistency and compatibility of the data produced, open forest resource data available on all forest owners' properties should be used in research projects concerning forests and their use.

Social sustainability of fishing and hunting emerged as a discussion topic

Social sustainability of fishing and hunting emerged as a topic of extensive discussion in Lapland in autumn 2021. In September, local hunters felt that hunting permits had been issued to too many outsiders. Members of Parliament from Lapland also commented on the topic, and the media in the north published 30 news items on it. We produced extensive information packages on the sustainability of hunting as well as on hunting and hiking, which we published to support public discussion and to provide information for policy-makers. These documents are publicly available on the web services Eräluvat.fi and Nationalparks.fi. A decision was also made not to issue guest permits for elk hunting for September 2022.

Responsibility

Responsibility is a cross-cutting theme in everything Metsähallitus does. It is integrated into our strategy, work and development efforts. By working responsibly, we promote the welfare of the environment, people and society and can offer solutions to global challenges.

Contents:

Photo: Katri Lehtola

RESPONSIBILITY

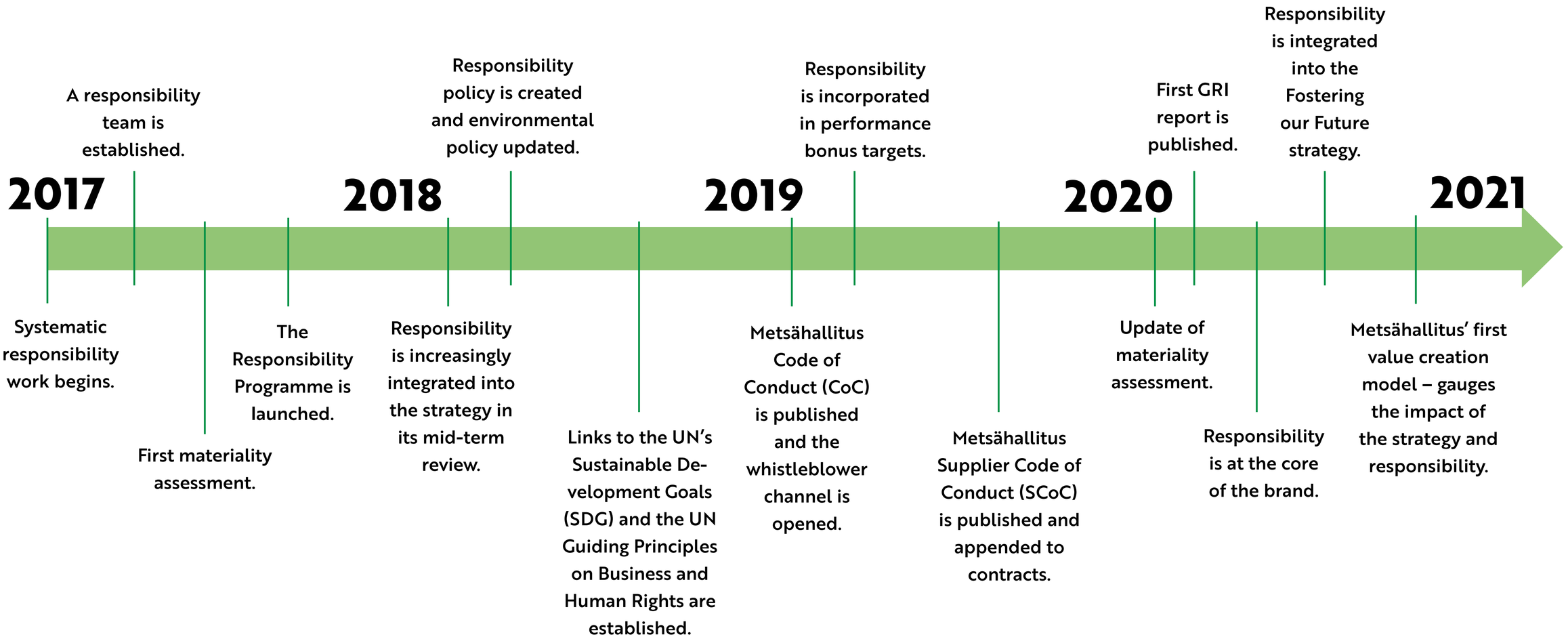
Metsähallitus' work is guided by responsibility

Responsibility is a strategic value for Metsähallitus. It has been integrated into our Fostering our Future strategy, where it guides our strategic choices and helps us achieve our goals. Responsibility also plays a part in everything we do – in the way we talk and in the way we encounter our customers, partners and stakeholders. Good governance, compliance and our practices provide an ethical and responsible foundation for our work.

Systematic work on responsibility

Metsähallitus has been working on responsibility systematically. Our first Responsibility Programme was launched in 2018, and its measures extended till the end of the previous strategy period in 2020. This programme laid the foundation for corporate social responsibility in Metsähallitus: we identified the key themes of responsibility and created a responsibility policy, responsible and ethical practices and a GRI reporting framework and integrated them into our leadership and operation. We also created the key policies for our work on equality and non-discrimination and updated our responsible brand. In 2020, we integrated responsibility into our strategy. We also prepared Metsähallitus' first value creation model. Recognising our societal impact helps us implement and develop our strategy and creates preconditions for responsible cooperation and sustainable solutions.

Work on strategic responsibility at Metsähallitus



RESPONSIBILITY

Metsähallitus' Responsibility Programme

Our responsibility work is based on understanding the impact of our activities and the needs of our stakeholders. In the materiality analysis, we identified ten key themes that guide responsibility and define the goals whose impacts we measure and report on each year.

Key responsibility themes:

- Ethical leadership practices
- Ensuring compliance
- Safeguarding biodiversity
- Climate change mitigation and adaptation
- High-quality expertise and a good workplace
- Human and labour rights in our and our partners' operations
- Reconciling the needs concerning state-owned land and water areas
- Sustainable use of natural resources
- Regional vitality
- Recreational use of nature

Our Responsibility Programme contains four focus areas: leadership, the environment, people and society. The Responsibility Programme for the strategy period, Fostering our Future, both directly supports the achievement of our strategic objectives and anticipates and stimulates future efforts to develop responsibility in such areas as compliance, human rights and information.

Key measures of the Responsibility Programme in 2021

We implemented the Responsibility Programme both in connection with our strategic objectives and, in particular, by anticipating future national and international regulation and the general development of responsibility.

In the focus area of leadership, we continued to implement the operating model for compliance. We conducted an analysis during the year in which we identified and prioritised risks related to compliance and responsibility. Alongside the Supplier Code of Conduct, we drew up a Partner Code of Conduct, which will be appended to Metsähallitus' cooperation agreements and applied to other contractual relationships. As part of compliance with the Code of Conduct and fight against corruption, we additionally provided training for our personnel and published a game that illustrates the principles of acceptable hospitality. EU and national regulation, including ESG regulation, are particularly relevant for the natural resources sectors and undergoing strong development. They were actively monitored during the year, and their impacts were assessed in Metsähallitus' various operations.

In our work on customer orientation, we defined the basis for Metsähallitus' shared customer experience. We translated Metsähallitus' responsible brand and brand family into practice by producing brand tools and materials, creating preconditions for strong brand communication through the reorganisation of our communications, responsibility and strategy unit, and in separate implementation projects.

In the focus area of the environment, we developed the ISO14001 environmental management system as part of Metsähallitus' leadership system. The envi-

RESPONSIBILITY

ronmental system was re-certified in the spring, and the certificate will be valid until 31 May 2024. During the year, Metsähallitus Forestry Ltd began using an EES+ energy efficiency system, which was certified separately in late 2021. The commissioning of this system, which will be introduced stepwise in all units of Metsähallitus, is one of the objectives set out in Metsähallitus' Climate Programme.

In protected areas and multiple-use forests, we managed nature and improved the status of habitats across a larger area than ever before. In our strategy work, we improved the coordination of biodiversity objectives with the aim of fostering biodiversity and halting biodiversity loss. Our goals support the achievement of the UN's Sustainable Development Goals.

In the focus area of people, we launched training in shared competence areas as set out in the strategy and created the first leadership principles for Metsähallitus. We developed the personnel survey, especially from the perspectives of equality and non-discrimination, and asked the staff about their experiences of respect for diversity, equal treatment and discrimination. We also made preparations for launching an assessment of human rights impacts at Metsähallitus. This work will begin in autumn 2022.

In the focus area of society, Metsähallitus' first offshore wind farm project in Korsnäs progressed as planned. The preparation of an environmental impact assessment was initiated, and the first nature surveys were also started in the spring. This work will continue in 2022. We defined the ESG (Environmental, Social and Governance) criteria for selecting a partner for the offshore wind park project and prepared for an ESG Due Diligence process that meets international requirements. The partner selection process began in late 2021.

A natural resource plan that will direct Metsähallitus' activities in the Sámi Homeland in 2022–2027 was completed. In the planning process, the Akwé: Kon operating model was used for the first time, and an Akwé: Kon working group assessed the impacts of the plan. As a result of this process, an extensive action plan consisting of 94 measures was completed.

The Responsibility Programme for the current strategy period, Fostering our Future, both directly supports the achievement of our strategic objectives and anticipates and stimulates future efforts to develop responsibility.

Metsähallitus' Responsibility Programme

Fostering our Future – Metsähallitus' strategy 2021–2024

Responsibility and cooperation	Climate change	Biodiversity	Wellbeing	Bioeconomy

Fostering our Future strategy streams

Responsibility Programme

Key measures in 2021

Leadership

- We launched a compliance model for use in all units of Metsähallitus.
- We completed a comprehensive responsibility and compliance risk analysis.
- We provided staff training on fighting bribery and corruption.
- We drafted a Supplier Code of Conduct for Metsähallitus' partners.
- We identified the foundation of Metsähallitus' shared customer experience.
- We translated our responsible brand and brand family into practice.

Environment

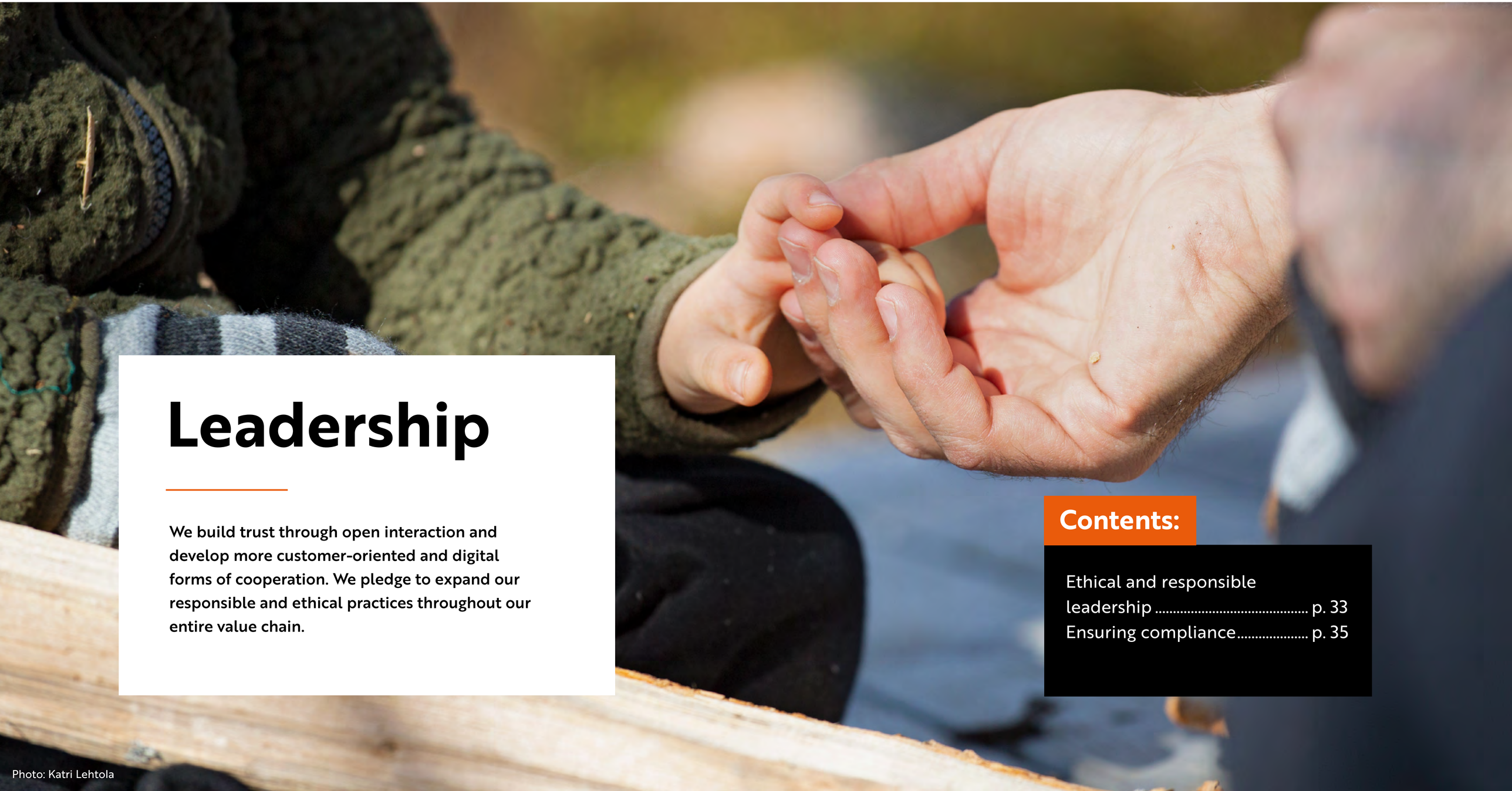
- We developed our ISO14001 environmental management system as part of Metsähallitus' leadership system. The environmental management system was re-certified.
- The energy efficiency system EES + was introduced in Metsähallitus Forestry Ltd.
- We carried out ecological management work and improved the status of habitats across a larger area than ever before.

People

- We launched training related to shared competence areas across the entire organisation of Metsähallitus.
- We created the first leadership principles for Metsähallitus.
- We developed the personnel survey from the perspectives of equality and non-discrimination.
- We prepared for an assessment of human rights impacts at Metsähallitus.

Society

- We made preparations for the process of selecting a partner for the Korsnäs offshore wind energy project by defining ESG criteria and preparing for an ESG Due Diligence process that meets international requirements.
- Together with our stakeholders, we will prepare a natural resource plan for the Sámi Homeland for 2022–2027.



Leadership

We build trust through open interaction and develop more customer-oriented and digital forms of cooperation. We pledge to expand our responsible and ethical practices throughout our entire value chain.

Contents:

Photo: Katri Lehtola

ETHICAL AND RESPONSIBLE LEADERSHIP

Responsibility integrated into the strategy and incentive systems

Metsähallitus' work is guided by the Act and Decree on Metsähallitus, the ownership policy guidelines and the strategy, rules of procedure and policies. In Metsähallitus, social responsibility is integrated into the strategy and incentive systems. A unified and responsible Metsähallitus is one of the criteria for our performance bonus, which is measured by the successful implementation of the Responsibility Programme and the customer perspective indicator.

Key guidelines informing responsibility in Metsähallitus are the responsibility policy and environmental policy, which are strategic polices adopted by the Board of Directors and apply to the entire Metsähallitus organisation. The policies define the joint activities between our business and Group units, the links to the strategy and its implementation, the main goals, key principles, principal roles and responsibilities, and reporting procedures.

Compliance is ensured extensively in Metsähallitus. In addition to compliance with statutes and regulations, we make sure that our activities are ethical and responsible. We regularly monitor compliance with Metsähallitus Code of Conduct and values, aiming for continuous development.

We also ensure and develop environmental responsibility in our work through a certified environmental management system (ISO 14001). Commercially exploited multiple-use forests are PEFC certified, and the timber supplied by us also meets the FSC Controlled Wood criteria. We are a pro member of the corporate responsibility network FIBS.

ETHICAL AND RESPONSIBLE LEADERSHIP

Leadership of responsibility at Metsähallitus

Our Director General is in charge of leadership and goal attainment in responsibility and environmental matters. Metsähallitus' Board of Directors sets the common strategic targets for responsibility and environmental issues based on the Management Group's proposals. The Management Group ensures that these targets are achieved in its areas of responsibility.
The Director of the Communications, Strategy and Responsibility Unit directs the development and implementation of the Responsibility Programme and chairs Metsähallitus' environmental group. These activities are supported by the Group and business units, or the responsibility team and environmental team consisting of experts from Metsähallitus Forestry Ltd, Metsähallitus Property Development, Parks&Wildlife Finland and Wildlife Service Finland. The Legal Affairs and Compliance unit is responsible for compliance and Metsähallitus Code of Conduct as well as for promoting ethical and responsible practices.

The business and Group units ensure that our responsibility and environmental principles are visible in our work with customers, partners, suppliers and other stakeholders. Every Metsähallitus employee has the duty to ensure that the Responsibility Programme, the instructions of the environmental management system and the Code of Conduct are followed in their work.

One of the criteria for our performance bonus is a unified and responsible Metsähallitus.

Key risks associated with responsibility

Metsähallitus' key responsibility risks include the potential negative impact of its activities on biodiversity, climate change and the rights of indigenous peoples, failure to reconcile the different needs of society and ensure equality, possible shortcomings in the realisation of human rights throughout the value chain, and deficiencies in compliance. In addition, possible deviations from the agreed and communicated operating models have been identified as both responsibility and reputation risks. Competence related to responsibility and compliance has been developed by providing additional instructions and training.

ENSURING COMPLIANCE

Compliance operating model introduced throughout Metsähallitus' organisation

During the year, we reviewed the current state of our activities by conducting a comprehensive responsibility and compliance risk analysis. In this analysis, we identified and prioritised risks related to compliance and responsibility. On the basis of this work, we also took development measures to improve compliance, for example in the areas of procurements as well as contract and supplier management.

A number of national and EU-level regulatory projects that are significant for Metsähallitus were published. The EU's Green Deal contains several legislative initiatives that will affect Metsähallitus' operating environment. In order to respond to the increased regulation at the EU level, in particular, we launched efforts to develop the monitoring of regulation. This allows us to anticipate the impacts of new regulation and influence the regulatory process. As part of monitoring regulation, we also prepared a review of current EU regulatory projects for Metsähallitus' Board of Directors.

In the next few years, the volume of ESG (Environmental, Social, Governance) regulation put in place by the EU will increase, strengthening the judicialisation of corporate responsibility. We actively monitor and influence future regulation, for example by participating in stakeholder cooperation and statement procedures in legislative processes.

As part of the fight against corruption and bribery, we published an online training course in the form of a hospitality game for Metsähallitus personnel at the end of the year. The training follows on the hospitality guidelines published last year. The game uses example cases to clarify the criteria on the basis of which Metsähallitus employees should assess the acceptability of receiving and offering hospitality.

ENSURING COMPLIANCE

Alongside the Supplier Code of Conduct, we prepared a Partner Code of Conduct in 2021 to be appended to Metsähallitus' cooperation agreements and applied to other contractual relationships. The purpose of the Partner Code of Conduct is to ensure that Metsähallitus' contracting partners undertake to follow the same principles of responsibility and ethics to which Metsähallitus is committed in its own Code of Conduct. We first introduced the Partner Code of Conduct in cooperation and rights of use contracts of the wind power sector.

We continued to develop responsible information management in many fields in 2021. We reorganised information management tasks and continued to implement the Act on Information Management in Public Administration. Our information management model and description of document publicity were introduced at the beginning of 2021.

We produced case management principles to strengthen the steering of case management. This has helped us manage the digital life cycle of data and address the future changes in case

management practices. We also developed contract management in Metsähallitus as part of major information system projects. In summer 2021, we made our electronic signature service available to a wider user group.

As we introduced the Teams application and transitioned to cloud environments, we also updated the instructions for processing confidential documents. We provided the personnel with training on data protection and information security as well as the processing of data sets of different types and identification of data sets that require different processing methods. Some of these online trainings and online courses that employees can take in their own time were linked to the personnel's performance bonuses.

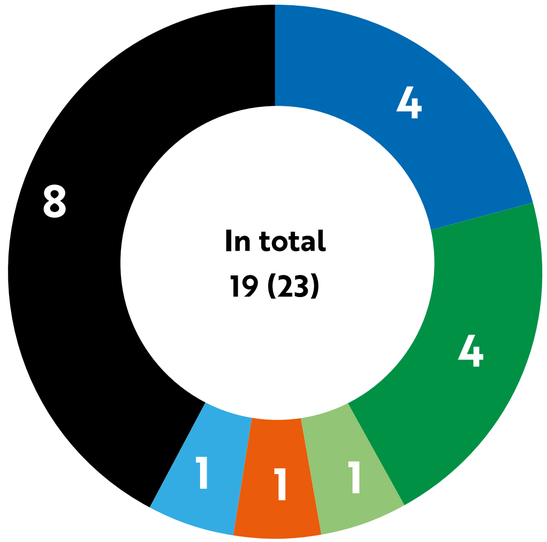
The minimum information security requirements under the Act on Information Management in Public Administration have been incorporated in Metsähallitus' ICT procurements. In Metsähallitus' workstation environment, we introduced M365 information security features, which can effectively protect access rights to files regardless of the processing environment. In addition, we improved our ability to detect information security incidents and established good daily practices together with our basic IT supplier.

We launched efforts to formulate Metsähallitus' data strategy and, in this context, discussed the value of information capital, the significance of information quality and the potential for its use, also in new application areas. The development and follow-up measures of the data strategy work continue Metsähallitus' systematic efforts to develop responsible information management.

ENSURING COMPLIANCE

The whistleblower channel operated as normal in 2021. This channel introduced in 2019 can be used to report suspected abuses related to Metsähallitus' activities or situations in which the responsible and ethical practices set out in our Code of Conduct are not followed. Should the person making the report so wish, they can submit their report anonymously. In 2019–2021, the number of reports has decreased from year to year.

A total of 19 reports were received through the whistleblowing channel in 2021 (2020: 23, 2019: 28), most of which were appropriate. The largest number of reports were relevant to personnel themes (4) and environmental issues (4). One report on human rights concerned equality when granting off-road traffic permits. The matter was investigated, and it was concluded that the granting of permits is based on legislation and that equality had not been compromised. No reports related to discrimination or privacy protection were received during the year. The reports were processed by the legal affairs, human resources and risk management functions and the necessary measures were taken as a result. We regularly monitor the development and improvement activities motivated by the reports.



Reports submitted to the whistleblowing channel by theme in 2021

- Personnel matters 4
- Environment 4
- Conflicts of interest 1
- Human rights 1
- Compliance (laws and commitments) 1
- Procurements 0
- Corruption or bribery 0
- Asset and information management 0
- Security and data protection 0
- Irrelevant other issue 8

In total 19

Operating model for compliance in Metsähallitus' activities

The compliance operating model was launched at all units of Metsähallitus during the year. The model is based on the themes of our Code of Conduct.

Management's responsibility and supervision

Responsibility and compliance

Foresight

- Compliance organisation from the beginning of 2021.
- EU and national legislative projects (ESG): monitoring, opinions and working groups.
- Assessment of responsibility and compliance risks.
- Risk-based compliance development measures.

Prevention

- Organisation and development of procurement.
- Training related to contracts and procurement.
- Launch of the reform of authorisations.
- Anti-corruption practices: Metsähallitus hospitality guidelines.
- Partner Code of Conduct (PCOC).
- Principles of information and case management.

Integration

- Development of contract systems and processes.
- Compliance in contract drafting.
- Development of responsible information management practices.
- Progress in applying the Act on Information Management in Public Service.
- Consistent policies on representation of interests in cadastral surveys

Response, continuous development

- Maintaining and using the whistleblowing channel as part of developing activities.
- Data protection and information security issues.
- Monitoring data concerning core themes of compliance for the management.
- Legal processes and disputes.
- Expanding the big picture of risk management.

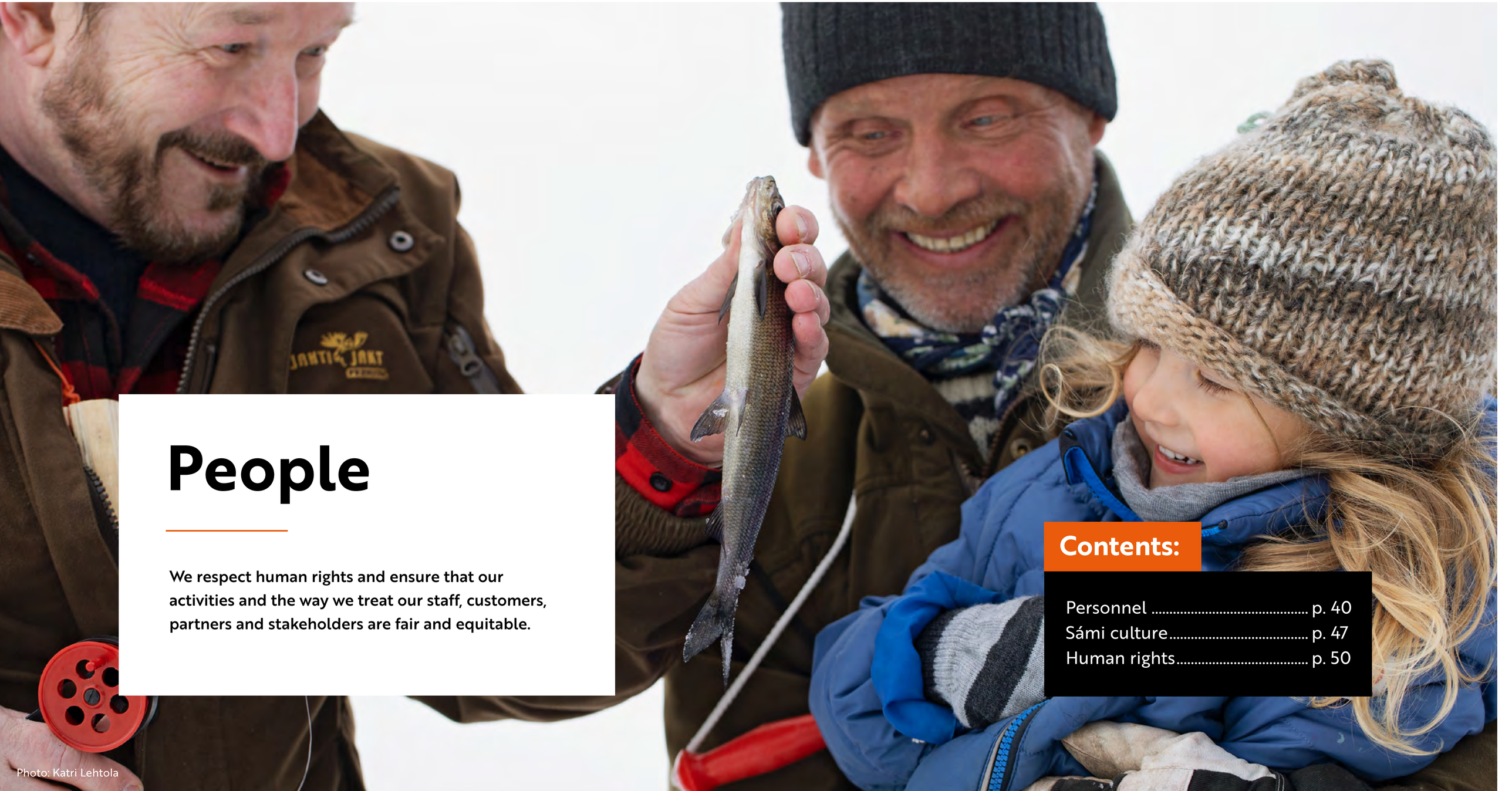
Verification Internal audit

Audits set out in the Internal Audit Plan approved by the Board of Directors.

Audits conducted in 2021 included:

- Compliance with the strategy in action plans
- Procurement and supervision of Metsähallitus Forestry Ltd's contracting activities
- Financial control of Parks&Wildlife Finland
- The risk management process

Photo: Mikko Törmänen



People

We respect human rights and ensure that our activities and the way we treat our staff, customers, partners and stakeholders are fair and equitable.

Photo: Katri Lehtola

Contents:

PERSONNEL

Personnel competence and wellbeing at the centre of the strategy

To implement our strategy, Fostering our Future, successfully in a changing operating environment, we must identify and develop the requisite competence. Nine common competence areas were identified in our strategy process, and in 2021, we launched training and competence development related to them across the entire Metsähallitus organisation.

We promoted shared strategic competence relevant to leadership, supervisory culture, digital skills and work community skills through training provided for the entire personnel of the Group. Due to the coronavirus pandemic, it was delivered as online training on eOppiva, Ahjo and Wistec learning platforms. In order to secure the development of shared competence, the strategic competence training was integrated into the personnel's performance bonus criteria. In 2022, we will carry out a personnel competence survey as a first step towards continuous follow-up and measurement of competence. In addition, we will map the personnel's competence development needs.

The number of trainings completed on digital platforms increased in 2021. The most popular courses included the induction course One of us – an intro-

Common competence areas that support our strategy

- Understanding Metsähallitus as a single, unified organisation
- Work community skills – managing your own work
- Leadership and supervisory culture
- Corporate social responsibility
- Customer orientation & customer, partner and stakeholder experience
- Reconciliation: interaction, networking and cooperation
- Digital and data skills
- Change capability
- Continuous learning and development

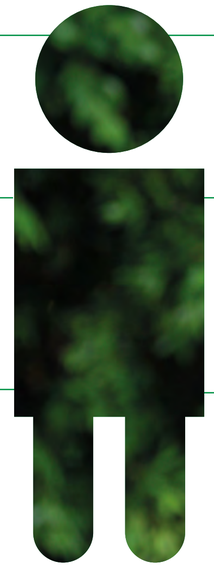
PERSONNEL

duction to Metsähallitus on eOppiva and various courses for improving digital and interaction skills. A total of 4,532 training performances were completed on the digital platforms.

We are developing our leadership and supervisory culture

During the year, we created the first leadership principles for Metsähallitus. These principles set the course for Metsähallitus' leadership culture, serve as guidelines for supervisory work and determine how our personnel are led. Our values lay a strong foundation for these principles and show how we seek to attain the goals defined in the strategy.

To underpin the principles, we examined the current status of supervisory work by conducting a survey addressed to the entire personnel. Based on the survey results (n = 361), supervisory work at Metsähallitus was considered good or excellent. While 85% of the respondents were satisfied with the amount of support their supervisor provides, 15% felt that the support provided by their supervisor for their work is passable or poor. There were major variations in the need for support and the amount of feedback received – some respondents felt that their supervisor's work was exemplary, while others found that the supervisor was unable to provide any support for the daily tasks. According to the respondents, the ideal supervisor would be a person who could be trusted, who listens and who is present.



IS REACHABLE
Keeps in touch
Gives feedback +/-

LISTENS
Asks questions, responds and is present

TRUSTS
and is worthy of trust

IS OPEN
Is honest and genuine, easy to approach, a person like any other

IS FAIR
Sees the big picture and is able to direct the team's work on this basis

SUPPORTS
Is interested in what the personnel are doing. Has a personal and genuine desire to work as a supervisor. Understands his or her position and knows how to leverage it.

Our leadership principles will ensure that leadership and supervisory work are guided by the same principles at all levels. The principles consist of three leadership pledges, the main headings of which are We work together, We show appreciation and trust, and I care about others and myself. These principles also point the direction for ensuring the development of supervisory work in the organisation. In 2022, we will prepare a competence

development package for supervisory work that will help each supervisor improve and translate the principles of leadership into concrete terms in daily life.

Commitment, humanity and development orientation as key strengths

We monitor our personnel's job satisfaction and the work community's development needs by conducting a yearly personnel survey. Six key indicators are used to measure overall satisfaction: content of the employee's own work, supervisory work, the work community's activities, the activities of Metsähallitus management, Metsähallitus as an employer, and customer orientation of our activities. The response rate among the personnel was 69% in 2021.

The survey results indicate that the level of meaningfulness in the work remains high from year to year, and that Metsähallitus has a human operating culture. Equality is an established practice, diversity is respected, and colleagues support one another. The respondents find Metsähallitus a genuinely development-oriented workplace, as the results have improved even over a short period. The management is human, and supervisors recognise good work performances.

As development areas the survey pinpoints improving engagement in development and giving feedback as well as encouraging renewal. One of the concerns that came up in the survey was coping at work.

The findings of the personnel survey, both strengths and development areas, will be discussed in each team, and the identified development measures will be discussed by Metsähallitus' Management Group.

Survey questions about respect for diversity and experiences of equality

In 2021, we developed the personnel survey, especially from the perspective of equality and non-discrimination, and asked about the personnel's experiences of respect for diversity, equal treatment and discrimination. As in previous years, the survey additionally looked at attention paid to equality in our operating methods, experiences of the supervisors' fairness, and support and assistance provided by colleagues. The survey also contained questions about bullying.

Based on the results, 76% of the respondents feel that diversity is respected in the work community, and 66% find that paying attention to equality is part of the way we do things. In addition, 75% of the respondents feel valued in the work community. Two per cent had experienced discrimination in the past year, and approximately one per cent had had the matter resolved. Experiences of bullying were less common than in the previous year, and in one half of the cases, the situation involving bullying had been dealt with by the time the survey was conducted.

Metsähallitus has zero tolerance for harassment, and no inappropriate or discriminatory language is

PERSONNEL

accepted. We prevent harassment in the work community as set out in our Non-discrimination and equality plan, and we have appointed two contact persons for harassment among the occupational safety and health personnel. The contact persons offer low-threshold advice and support for those who have encountered or observed harassment, molestation, bullying, discrimination or other unequal treatment. In 2021, these persons were contacted around 20 times. Employees can also report harassment and inappropriate behaviour on Metsähallitus' whistleblowing channel, anonymously if they prefer. In 2020 and 2021, no reports related to harassment were received through the whistleblowing channel.

We provided more flexibility for employees during the second pandemic year

The coronavirus pandemic continued to affect our work in 2021, too, and most Metsähallitus employees became familiar with multilocational work. In order to evaluate the situation and changes ensuing from the pandemic, we conducted two surveys to assess the personnel's wellbeing and coping at work as well as to identify and promote good practices. The results indicate that most of the employees had been able to work well in the exceptional situation, and there was no significant difference to the pre-pandemic situation. Around 15% of the respondents struggled in their work more than before the exceptional circumstances, and 5% found reconciling work and private life a problem.

During the year, we focused on improving wellbeing at work and the preconditions for reconciling work and private life by providing more flexibility regarding working hours and places of work. We created principles for multilocational work at Metsähallitus that define the practices and responsibilities from the employer's and the employee's perspective. Multilocational work means new modes of work and leadership for the entire organisation; it requires a strong culture of trust, cooperation, leadership and supervisory work.

We also held six webinars for the personnel on different areas of wellbeing, including physical and psychological coping, work ergonomics, and sleep, rest and recovery. Working time arrangements were developed by introducing a working time bank, in which the employees can twice a year save the balance of working hours they have accumulated within the agreed framework. More than 50 working time bank agreements were concluded as soon as the system was launched. In addition, we introduced a more flexible practice for reporting sickness absences by extending from three to five days the period for which the employees may be absent without a medical report. Regarding employee benefits, the scope of the Epass was extended to include wellbeing services, such as massages.

Number of occupational accidents increased but absences only went up slightly

At Metsähallitus, we are developing our occupational safety culture with the aim of promoting the entire

PERSONNEL

personnel's engagement in occupational safety issues. A good level of safety at work is something we can all influence.

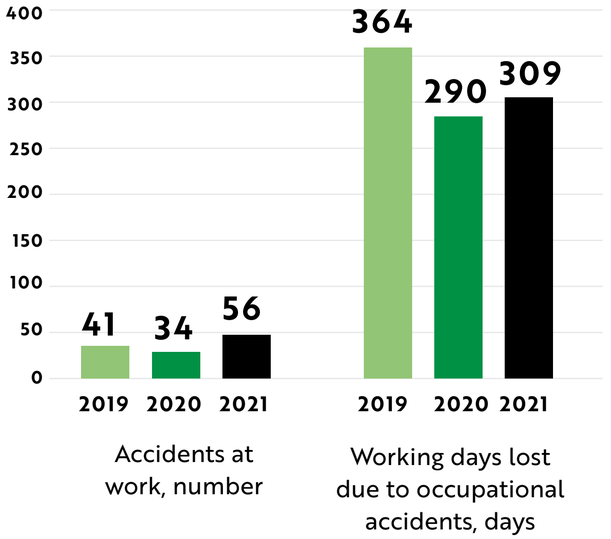
In autumn 2021, we introduced Regon, a mobile tool for assessing occupational safety risks as well as collecting occupational safety observations and reporting accidents and near misses. This tool makes it possible to submit reports immediately, which means that shortcomings in occupational safety can be addressed faster.

In 2021, there were 56 occupational accidents, representing a year-on-year increase of 22. While the number of accidents at work increased, absences only went up slightly; the number of working days lost because of accidents was 309, or 19 days more than in 2020. In addition, eight accidents at work that did not result in sick leave days were reported.

The reported sick leave days added up to 35 person-years. The coronavirus pandemic did not manifest itself as increased absences in 2021, and the share absences resulting from infectious diseases dropped from almost 8% to 3.3% of all absences. However, absences related to musculoskeletal disorders and mental health disorders are about to return to their pre-pandemic levels. In 2020, we introduced low-threshold mental wellbeing services, which we believed would make it easier to contact experts on time, reducing long absences due to illness.

During the year, 52 people completed a refresher first aid course, and ten persons completed occupational safety card training. Two training courses for operating snowmobiles were organised, with a total of 16 participants. Wildlife Service Finland's personnel also received training in coping with difficult customer interactions. More than 15,000 customers contact Wildlife Service Finland's service number each year.

Accidents at work and working days lost due to them



Personnel 2021 (2020)

Number of employees
1,218 (1,154)

Number of employees outside the head office
1,043 (996)

Average age of employees, years
51 (52)

Staff training

Training, days
1,056 (1,609)

Number of employees who participated in training
524 (652)

85 %
of the personnel worked outside the Helsinki metropolitan area.

Offices with the highest numbers of employees

Oulu
83
(73)

Turku
39
(30)

Rovaniemi
129
(120)

Lieksa
45
(43)

Jyväskylä
46
(49)

Vantaa, head office
175
(158)

Turnover of permanent employees

Employment relationships begun
37 (51)

Employment relationships ended
57 (86)

Total turnover, %
-1,6 (-3,5)

Old-age pension, average retirement age
63,8 (64,7)

Disability pension, average retirement
60,1 (60,4)

Recruitments

Number of anonymous recruitments
14 (14)

Trainees 202

Women, %	Men, %	Average age of trainees
38 (40)	62 (60)	22,5 years (21)

Permanent, %	Fixed-term, %
78 (82)	22 (18)

Gender ratios, %

METSÄHALLITUS GROUP

Women **37** (36) — Men **63** (64)

METSÄHALLITUS BOARD OF DIRECTORS

Women **38** (38) — Men **62** (62)

MANAGEMENT GROUP

Women **50** (42) — Men **50** (58)

GROUP UNITS

Women **69** (72) — Men **31** (28)

METSÄHALLITUS FORESTRY LTD

Women **11** (11) — Men **89** (89)

METSÄHALLITUS PROPERTY DEVELOPMENT

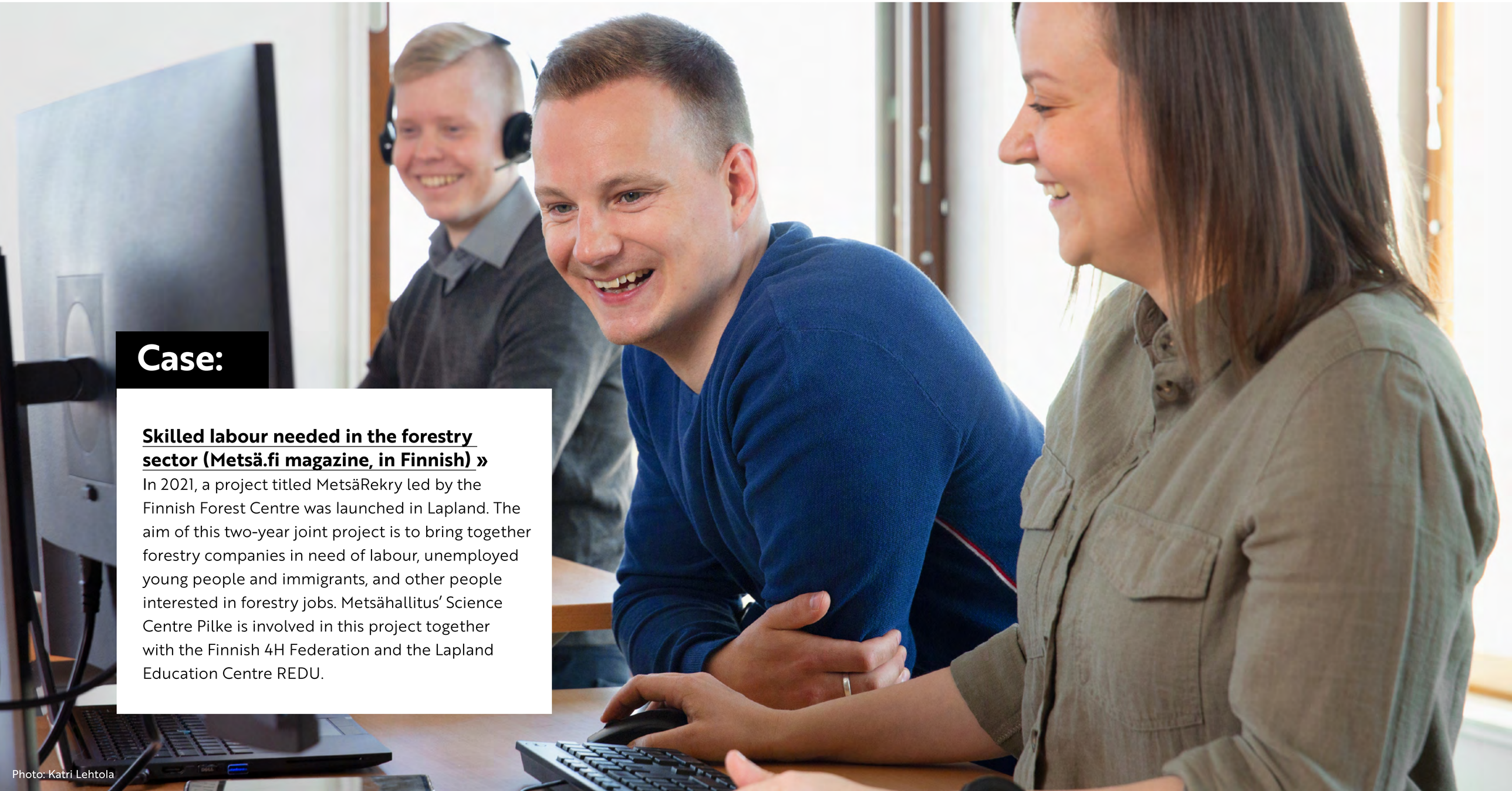
Women **37** (30) — Men **63** (70)

PARKS&WILDLIFE FINLAND

Women **50** (50) — Men **50** (50)

WILDLIFE SERVICE FINLAND

Women **23** (27) — Men **77** (73)



Case:

Skilled labour needed in the forestry sector (Metsä.fi magazine, in Finnish) »

In 2021, a project titled MetsäRekry led by the Finnish Forest Centre was launched in Lapland. The aim of this two-year joint project is to bring together forestry companies in need of labour, unemployed young people and immigrants, and other people interested in forestry jobs. Metsähallitus' Science Centre Pilke is involved in this project together with the Finnish 4H Federation and the Lapland Education Centre REDU.

Photo: Katri Lehtola

SÁMI CULTURE

Securing preconditions for a viable Sámi culture

SThe Sámi Homeland comprises the municipalities of Enontekiö, Inari and Utsjoki as well as the area of Lappi reindeer herding cooperative in the municipality of Sodankylä. Metsähallitus manages over 90% of this area, 69% of which comprises protected and wilderness areas, 11% areas used for traditional livelihoods and 19% multiple-use forests, of which about one half are used for forestry activities.

The management, use and protection of the natural resources Metsähallitus stewards are reconciled while safeguarding the prerequisites for pursuing the Sámi culture in the area. We secure the Sámi people's right to maintain and develop their language and culture through agreements and negotiation procedures and by supporting Sámi-language communications and cultural projects.

As laid down in section 9 of the Act on the Sámi Parliament, Metsähallitus consults the Sámi Parliament on all far-reaching and important measures which may directly and in a specific way affect the status of the Sámi as an indigenous people. In 2021, negotiations on the natural resource plan for the Sámi Homeland were conducted in compliance with section 9 of this Act.

The work to secure preconditions for a viable Sámi culture is also reported on annually in Metsähallitus' General social obligations report.

Sámi Homeland

SÁMI CULTURE

Natural resource plan for the Sámi Homeland was prepared relying on the Akwé: Kon operating model

Following a process initiated last year, a natural resource plan for the Sámi Homeland for 2022–2027 was completed in November 2021. The Akwé: Kon working group assessed the impacts of the plan on the preconditions of the Sámi people to practise their culture. The Akwé: Kon operating model, which has been used by Metsähallitus since 2016, was now applied for the first time to natural resource planning.

In this planning process, the management, use and protection of natural resources were reconciled with goals set by the owner and local objectives while safeguarding the preconditions for pursuing the Sámi culture. The joint planning work was carried out in close collaboration with a cooperation group consisting of Metsähallitus' customers, partners and stakeholders, the Sámi Parliament and the Skolt

Natural resource plan for the Sámi Homeland 2022–2027 (julkaisut.metsa.fi, in Finnish) »
The natural resource plan contains 94 actions that will guide Metsähallitus' activities in the Sámi Homeland. A large number of Sámi Homeland residents and Metsähallitus stakeholders participated in the preparation of the plan.

Photo: Tarja Länsman/Arctic Photos

SÁMI CULTURE

village meeting. Dedicated working groups on reindeer husbandry, forestry, tourism, the municipalities, hunting and fishing, nature conservation and cultural heritage also participated in the planning work.

Continuity of forestry in the area as well as security of supply emerged as important themes during the planning process. A forest plan prepared for each reindeer herding cooperative underpinned the planned cut as well as the forest management methods and their scaling. Negotiations were concluded with five of the eight reindeer herding cooperatives that use the forests in the area, while with three others, the talks will continue during the planning period.

As a result of this planning process, an extensive action plan consisting of 94 measures was completed. The measures of the Action Plan describe in practical terms how the main outlines of activities based on Metsähallitus' strategy will be carried out in the new planning period.

We will monitor the implementation of the plan in close cooperation with local actors and the Sámi community. We will organise a mid-term review event for the cooperation group that participated in the planning. In addition, we will meet with the Sámi Parliament and the Skolt village meeting every two years to assess the implementation of the plan.

We safeguard traditional livelihoods and respect cultural heritage

Reindeer husbandry is an important and significant industry in northern Finland. We reconcile the needs of reindeer husbandry and other forms of land use in the reindeer herding area in keeping with an agreement concluded between Metsähallitus and the Finnish Reindeer Herders' Association. An update process of this agreement began in 2020 and was completed in early 2021. In the Sámi Homeland, we only operate on sites where a joint understanding has been reached in advance with the reindeer herding cooperative.

To secure the preconditions for a viable Sámi culture, forestry operations in multiple-use forests have been restricted across 125,079 hectares. Metsähallitus' input in safeguarding a viable Sámi culture as part of our general social obligations amounted to EUR 4.4 million.

We manage Sámi cultural heritage sites in cooperation with the Sámi Museum Siida.

Renovations of the Sámi Museum and Northern Lapland Visitor Centre Siida began in 2021 and will be completed in 2022. Harri Koskinen, an internationally esteemed designer, serves as the lead designer in this project. In addition, the section on the natural world in Siida's main exhibition has been updated. In the new exhibition titled "Enâmeh lää mii párnääh – These lands are our children, culture and nature are intertwined. The section looking at the natural world highlights climate history, especially in the period after the last Ice Age, and also explores the future of the climate.

HUMAN RIGHTS

We respect human rights

Metsähallitus respects and observes human and fundamental rights, including linguistic rights. Our work is based on internationally recognised social responsibility guidelines and principles, such as the UN Guiding Principles on Business and Human Rights and 2030 Agenda for Sustainable Development.

Our principles regarding respect for human rights are set out in our responsibility policy and Code of Conduct. Our Equality and non-discrimination plan ensures that human rights are respected in our activities. As set out in our Code of Conduct, we also require all our suppliers and contracting partners to respect fundamental and human rights.

We do not tolerate any discrimination on the grounds of age, gender, origin, language, belief, religion, opinion, disability, health, sexual orientation or other reasons related to the person in our activities, services, work community or supply chain.

We safeguard preconditions for a viable Sámi culture in the Sámi Homeland by negotiating on important issues with the Sámi Parliament in advance, striving for a mutual understanding. Since 2016, Metsähallitus has been using the Akwé: Kon operating model base on the UN Convention on Biological Diversity. In natural resource planning, this operating model was used for the first time in the preparation of a natural resource plan for the Sámi Homeland. This plan, which covers the years 2022–2027, was completed in 2021.

Launching an assessment of human rights impacts

In 2021, we made preparations for assessing Metsähallitus' human rights impacts. We have examined our responsibilities for realising human rights in the context of our personnel, indigenous peoples, risk management and procurement in the past.

The aim of these efforts is to carry out a systematic assessment of human rights impacts covering the entire Metsähallitus organisation in compliance with the due diligence obligations and to integrate the ensuing measures into our activities. This work will be carried out together with a partner to be selected in a competitive tendering process in spring 2022. The assessment is due to start in August 2022.

HUMAN RIGHTS

Training for contractors and partners

Metsähallitus' contracting partners are committed to responsible and ethical action as defined in Metsähallitus' Supplier Code of Conduct. The Code covers respect for fundamental and human rights, prohibition of discrimination, and taking labour rights as well as occupational health and safety aspects into consideration.

In 2021, we used a digital learning environment to provide training for our forestry contractors and partners. A total of 2,838 courses were completed by contractors' employees and a total of 3,527 by teachers and students at forestry institutes. The most important courses completed by these groups were related to timber harvesting, road transport and forest management. The most popular individual courses were titled Occupational safety – timber harvesting and Metsähallitus' Supplier Code of Conduct. In addition to legislation, the Code of Conduct course covers the good governance principles followed by Metsähallitus, generally recognised good ethical and responsible practices, as well as Metsähallitus' role and diverse activities as part of society.

Audits discovered occupational safety deviations

Six occupational safety deviations were detected in Metsähallitus' internal audits. The greatest shortcomings were associated with expired first aid courses. This deviation concerned not only contractors' personnel but also Metsähallitus employees and forestry workers. The pandemic had made it necessary to cancel scheduled courses. Not all inspected machinery, or all company representatives present at the audits, had the appropriate personal protective equipment, especially helmets. Machine operators of several contractors had not had the required health checks, even though occupational health care had been arranged by the companies. One machine operator did not have a written employment contract. Observations on shortcomings in occupational health care and employees with no written contract were also made in an external PEFC audit.

Environment

We work systematically to protect the environment and safeguard sustainable use of natural resources. Reconciling ecological, economic, social and cultural sustainability is a principle that guides all our work. We aim to be a pioneer of responsibility and sustainable development.

Contents:

Photo: Katri Lehtola

ENVIRONMENT

A certified environmental management system

The management of environmental issues at Metsähallitus is underpinned by an ISO 14001 certified environmental system.

The environmental team of Metsähallitus, which includes representatives from all business and Group units, together with the business units' environmental teams prepare matters related to the environmental system for Metsähallitus' Board of Directors, the Management Group and the business unit's management groups. Metsähallitus' environmental team is also responsible for managing, monitoring and developing the implementation of the environmental system. Metsähallitus Environmental Group is chaired by the Director of the Communications, Strategy and Responsibility Unit, who presents matters to the Management Group and the Board of Directors.

The management is committed to responsible environmental governance based on Metsähallitus' environmental policy. Our aim is to strike a balance between the environment, society and economy, enabling us to carry out the tasks assigned to us optimally and following the principles of sustainable development, and to improve the status of the environment and natural resources on state-owned land.

Our strategic environmental goals for 2021 were

- climate change adaptation and mitigation
- preserving and developing biodiversity.

These goals are part of the ISO 14001 environmental management system, and they are based on Metsähallitus' shared environmental goals set out in the strategy. The achievement of the goals is assessed during the year in internal and external audits. A summary of goal attainment is discussed annually by Metsähallitus' Management Group.

In 2021, we developed the ISO14001 environmental management system as part of Metsähallitus' management system. The environmental system was re-certified in the spring. The renewed certificate will be valid until 31 May 2024.

ENVIRONMENT

Audits and environmental monitoring help uphold standards

An external audit of the environmental management system conducted in 2021 found no deviations. The audit included both an office-based assessment of environmental management and field visits. For Metsähallitus Forestry Ltd, continuous cover forestry and regeneration felling sites as well as soil preparation were assessed. The audit also focused on the environmental impacts of harvesting and transport as well as energy efficiency. The audit of Parks&Wildlife Finland was carried out in Pallas-Yllästunturi National Park. In addition to environmental issues, the audit themes included visitor surveys and cooperation with entrepreneurs. The auditors also examined fisheries issues and fishing supervision in Northern Lapland as well as the new organisational model of Metsähallitus Property Development's land use unit and its effectiveness. The audit reports were discussed by Metsähallitus' environmental group, and the results were examined in management reviews of Metsähallitus' Management Group and the business units. The audits were conducted by Kiwa Inspecta. The standard of operation required by the environmental management system is also checked in annual internal audits.

Three audits of Property Development were conducted in 2021. They focused on examining environmental aspects related to leases, leased areas and sites (Property Business team), the safety and landscaping measures of a closed mining and rock material extraction site (Aggregates and Mining team) and the wind power procurement process (Wind Power team). The audits found 0 deviations and made 9 development proposals, one observation and 7 positive observations.

An internal audit of Wildlife Service Finland focused on the process of granting regional permits for elk hunting. The strengths revealed by the audit included the fact that the process works as described and intended and in compliance with the issued instructions. Four development areas related to the application process and two associated with the actual audit process were found. The development areas related to the application process concerned the permit application system and working methods. One quality deviation related to the effectiveness of the permit application system was discovered in the audit. It was corrected immediately. No environmental deviations were detected.

The reorganisation of Parks&Wildlife Finland also brought about changes in the steering of processes and their roles. From the beginning of 2022, the coordination of internal audits will be transferred to the Parks&Wildlife Finland's Lakeland unit. The organisation of environmental matters will be examined in 2022. Due to the reorganisation, one internal audit was carried out in 2021, which focused on reviewing an operating model for returning water to protected mires. However, the operating model was not yet ready for auditing in this region.

ENVIRONMENT

As planned, 21 internal audits were carried out at Metsähallitus Forestry Ltd. The audits revealed 13 deviations and made 99 observations, 6 positive observations and 61 development proposals. Six of the deviations concerned occupational safety, four shortcomings in the condition or equipment of contractors' fuel tanks, two failures to comply with or breaches of instructions issued by the unit, and one the length of stumps left on the harvesting site, which deviated from the work instructions.

Two thirds of the observations concerned knowledge of and need to revise Metsähallitus' own guidelines, including the Environmental Guidelines and various practices, such as the procedure for processing feedback; possibilities for closer cooperation between processes; and general operative development, for example by requiring contractors to systematically record game thickets in geospatial data systems in the future. More than a half of the development proposals concerned the same themes. In particular, a need to harmonise the interpretation of guidelines given to contractors in different regions and many types of proposals for improving the systems came up.

Three minor deviations in PEFC standard external audit

All state-owned multiple-use forests are PEFC certified, in addition to which the certification scheme includes a PEFC Chain of Custody system for timber. Additionally, the timber we supply meets the FSC Controlled Wood criteria.

A deviation related to compliance with the criterion concerning forest use declarations was observed in an inspection of forest use declarations conducted by the Finnish Forest Centre. No declaration had been submitted for three forest management sites. One of these cases was due to human error and the other two to a system failure. To avoid a reoccurrence of similar cases, modifications that reduce the possibility of errors were made as part of the information system's version update in spring 2021. In addition, a map layer was implemented in Metsähallitus Forestry Ltd's planning system Silvia which allows the planner to check visually if a forest use declaration has been submitted.

The second deviation concerned the harvesting of energy wood. Too little felling residue had been left on sites where energy wood had been harvested. As a corrective measure, the instructions in the Environmental Guidelines and PEFC certification will be reviewed with contractors in different contexts in 2022. Metsähallitus' environmental goals for 2022 also include provision of training related to the Environmental Guidelines and ensuring that both employees and entrepreneurs are committed to complying with them.

The third deviation concerned employer's obligations. The employees of two contractors did not have written employment contracts, and in one company, shortcomings were found in the effectiveness of occupational health care. As a corrective measure to

ENVIRONMENT

avoid the recurrence of deviations of this type, detail will be added to the content of the annual development discussions between Metsähallitus and the entrepreneur regarding employment contracts and occupational health care.

Update of PEFC standard criteria continued

Metsähallitus has been an active player in the PEFC forest certification system for over 20 years. The work on updating the criteria of the national PEFC standard and bringing them in line with the new international requirements began in 2019. Having taken longer than expected, it was only completed in late 2021. The process has involved an unprecedented number of parties: 65 forest and natural resource sector actors, research communities, authorities and other stakeholders have participated in it.

In the efforts to update the criteria, reconciling the views of an extensive working group proved more challenging than anticipated. Issues that sparked a great deal of discussion during the process included water protection, retention trees and sites excluded from forestry operations, including old-growth forests. Discussions on requirements set for outsourced services and their relationship with legislation were also lively. In spring 2021, the Finnish Environment Institute, the ELY Centres, the Sámi Parliament and the Reindeer Herders' Association withdrew from the process.

The new PEFC requirements are mainly well covered by our current guidelines, which is why the revised standard does not create significant needs for an update. It is expected that the new national PEFC standard will be in place at the beginning of 2023.

Reform of the Nature Conservation Act

The Nature Conservation Act was reformed under the leadership of the Ministry of the Environment with the principal aim of promoting the protection of biodiversity. The reform also aimed at addressing climate change, promoting the acceptability of nature conservation, and clarifying administrative procedures. Regulation on ecological compensation has also been developed in the context of this legislative reform. The reform was launched at the beginning of 2020. A Government proposal was completed and circulated for comments in autumn 2021. Metsähallitus was involved in the project group that prepared this overhaul of the Act and the group that drafted provisions on ecological compensation.

While the Nature Conservation Act is central to the administration and management of nature conservation areas, its impacts will also affect other areas of Metsähallitus' work. Among other things, the provisions on conservation of habitats and species will apply to not only protected areas but also multiple-use forests.

While working on the reform of the Nature Conservation Act, the project group has also been drafting a new Nature Conservation Decree. The new draft Nature Conservation Decree is to be circulated for comments in 2022.

CLIMATE CHANGE MITIGATION AND ADAPTATION

We promote the achievement of climate objectives

Climate change and adapting to it play an important part in Metsähallitus' strategy as state-owned lands have a key role in climate change mitigation. Based on the latest National Forest Inventory (VMI12), state-owned forests account for almost one half of the carbon sink of Finnish forests, and the size of the sink represented by the trees on state-owned lands corresponded to more than one fifth of Finland's total greenhouse gas emissions.

As part of our Climate Programme, we will increase carbon sinks and storage and clean energy production as well as reduce our emissions. Our programme also includes measures for preparing for changing conditions and adapting to climate change. Alongside climate change mitigation and adaptation, maintaining and developing biodiversity in land and water areas is an important goal for us.

The baseline level of the Climate Programme data was calculated for 2018. The calculations are based on data produced by the 12th National Forest Inventory. The development of the carbon sink and carbon storage is assessed annually on the basis of this data. The carbon footprint is always calculated for the previous year, and the figures for 2021 consequently apply to 2020.

Our Climate Programme promotes the achievement of Finland's climate targets and the transition to a carbon-neutral society by 2035: we will increase the carbon sinks, carbon storage and clean energy production as well as cut our emissions.

Climate 2021

Carbon sink
12.9
$MtCO_2e$

Carbon storage
184
million t C

Carbon handprint
3.3
$MtCO_2e$

Carbon footprint
0.07
$MtCO_2e$

2020 — **2025** — **2030** — **2035**

Goals and progress of Metsähallitus' Climate Programme

Metsähallitus' Climate Programme was launched in 2019.

We will restore 17,000 hectares of degraded habitats in protected areas and 4,760 hectares in areas used commercially by the year 2023.

We will phase out the use of oil for heating by 2024.

We will triple the production of renewable energy by 2030.

We will build up the carbon sinks of multiple-use forests by 10% and the carbon stock of state-owned lands by 10% by 2035.

13 CLIMATE ACTION

Photo: Mikko Törmänen

CLIMATE CHANGE MITIGATION AND ADAPTATION

We will increase the carbon sink of multiple-use forests and the carbon storage of state-owned forests

In keeping with the Climate Programme, we continued to build up the carbon sink of multiple-use forests and the carbon storage in trees on state-owned land in 2021. Our aim is to increase both the sink and the storage by 10% from the baseline figures of 2018 (12th National Forest Inventory) by 2035.

In 2021, the calculated carbon sink of multiple-use forests was 8.6 million tonnes of carbon dioxide equivalent. The carbon storage in trees on state-owned lands was calculated at 184 million tonnes of carbon, of which the share of multiple-use forests was 124 million tonnes. The carbon sink of multiple-use forests has increased by approx. 4.8% and the carbon storage in state-owned forests by 5.3% since 2018. Key measures for increasing carbon sequestration and building up the carbon storage in forests include increasing fertilisation and using selectively bred cultivation material for forest regeneration. In 2021, we significantly increased fertilisation, and forests were fertilised across 29,000 hectares.

Development of the carbon sink and carbon storage on state-owned lands in 2018–2021

Indicator	2018 (12th National Forest Inventory)	2020	2021	Growth 2021 cf. VMI12
Carbon sink of trees on state-owned lands $MtCO_2e$	12.0	13.4	12.9	6.1 %
Carbon storage in multiple-use forests $MtCO_2e$	8.2	9.1	8,6	4.8 %
Carbon storage in trees on state-owned lands, million t C	177	181	184	5.3 %
Carbon stock in multiple-use forests, million tonnes	117	122	124	5.3 %

The increased fertilisation will produce its full impact of around 0.435 million tonnes CO2 eq. a year on increasing the carbon sink from 2029 onwards. In addition, we planted around 17 million tree saplings in the regeneration areas of multiple-use forests.

We increase our carbon handprint

Our carbon handprint describes the positive climate impacts that our products and services generate in value chains. Our handprint consists of both the renewable energy produced on state-owned lands that reduces greenhouse gas emissions and the substitution effect of wood produced sustainably in multiple-use forests, not only as a substitute for fossil raw materials but also as carbon storage in long-lasting products, such as wooden buildings.

CLIMATE CHANGE MITIGATION AND ADAPTATION

Our carbon handprint in 2021 was 3.3 million tonnes of carbon dioxide equivalent. While the growing amount of wind energy produced in state-owned land and water areas increased our carbon handprint, it was decreased by reduced deliveries of energy wood and a declining trend in the average carbon dioxide emissions from electricity production based on the non-verified residual distribution consumed in Finland.

Carbon handprint

3.3

$MtCO_2e$

Wind power capacity built in areas controlled by Metsähallitus,

489

(248,5)

MW

We will triple renewable energy production

Our goal is to triple the production of renewable energy in state-owned areas by 2030. In 2021, the wind power capacity built in areas controlled by Metsähallitus amounted to 489 MW, a year-on-year increase of some 240 MW. In the next few years, new wind power capacity of about 210 MW will be built on state-owned lands. Wind power capacity of around 1,250 MW on land and around 1,300 MW in offshore wind farms (Korsnäs) is undergoing project development.

Roundwood harvesting and transport as the greatest sources of greenhouse gas emissions

In 2020, our carbon footprint was approx. 0.07 million tonnes of carbon dioxide equivalent, of which emissions from harvesting and transporting timber accounted for around 82%.

Our calculated total emissions decreased by around 18% compared to 2018. This decrease is mainly explained by a reduction in emissions generated by Metsähallitus Forestry Ltd, particular factors in which were a drop in the harvesting and transport volumes of roundwood. Reports indicate that the average distances of direct road transport and road transport to the railway station were shorter than in the year before. Over a longer term, the declining trend in emissions from timber harvesting and transport is also due to a transition towards increasingly economical and climate-friendly solutions and fuels in the transport and harvesting fleet. We contribute to this development by awarding points for new harvester fleet in resource procurements and ensure reliable and efficient road transport of timber by imposing age limits on the fleet.

The absolute carbon dioxide emissions of Property Development, Parks&Wildlife Finland and Wildlife Service Finland increased slightly. Among other things, this was due to the fact that increased fund-

CLIMATE CHANGE MITIGATION AND ADAPTATION

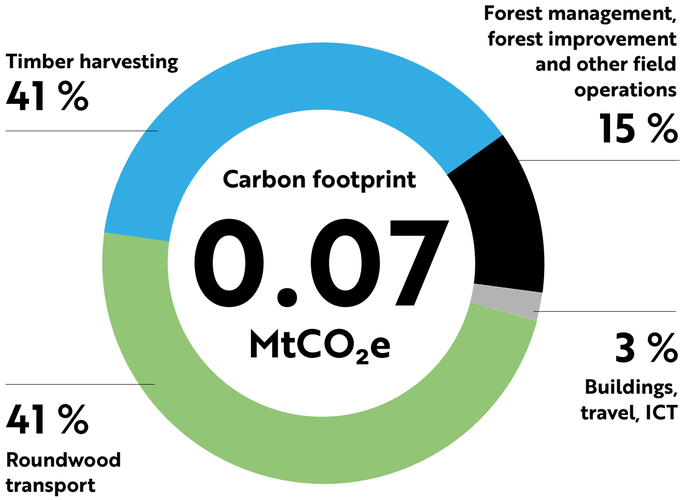
ing made it possible to restore and manage larger surface areas, and this work is mostly carried out using machinery.

After timber harvesting and transportation, forest management and improvement work and the production and delivery of forest chips, the next largest emission source in our operations is the electricity and heat used by our offices and visitor centres as well as the travel of our personnel. To reduce emissions from the buildings we manage, we have opted for renewable energy in our electricity supply contracts.

In 2020, travel emissions were mainly generated from travel by private and rented

cars. As a result of the coronavirus pandemic, emissions from air and rail travel, in particular, decreased considerably compared to previous years. In our Climate Programme, we commit to reducing our carbon

Emissions from Metsähallitus' activities



footprint from travel by 10% a year compared to the baseline level of 2019, among other things by making use of videoconferencing, arranging to have several meetings on one trip and using more environmentally friendly modes of travel.


Photo: Katri Lehtola

CLIMATE CHANGE MITIGATION AND ADAPTATION

We introduced certified energy efficiency system EES+

In 2021, Metsähallitus Forestry Ltd introduced an energy efficiency system, EES+, which was granted its own certificate at the end of the year by Kiwa Inspecta. The introduction of this system was one of the goals in Metsähallitus' Climate Programme, and together with the certified ISO 14001 environmental management system, it also fulfils Metsähallitus Forestry Ltd's statutory obligation to carry out a mandatory energy audit.

Metsähallitus Forestry Ltd has specified goals for the energy efficiency system and energy policy. In keeping with these goals, an effort will be made to steer energy-intensive timber harvesting and transport towards a more energy-efficient direction, to promote the use of renewable fuels, and to reduce emissions from travel by the company's employees.

The energy efficiency system will be introduced in all Metsähallitus units in 2022.

Metsähallitus' largest emission sources and their development in 2018–2020

Emission source	2018 tCO_2e	2018 Proportion of total emissions	2019 tCO_2e	2019 Proportion of total emissions	2020 tCO_2e	2020 Proportion of total emissions	Change 2018-2020	GHG protocol
Timber harvesting	32,072	38.3%	30,849	38.5%	27,903	40.8%	-13.0%	**Scope 3**
Roundwood transport	40,440	48.3%	37,323	46.6%	28,037	41.0%	-30.7%	**Scope 3**
Forest management, forest improvement and other field operations	9,148	10.9%	9,747	12.2%	10,406	15.2%	13.8%	**Scope 3 and Scope 1**
Buildings (electricity and heating)	1,128	1.3%	1,073	1.3%	1,073	1.6 %	-4.9%	**Scope 2**
Travel	938	1.1%	1,138	1.4%	998	1.5%	6.4%	**Scope 3 and Scope 1**
ICT	32	0.0%	33	0.0%	30	0.0%	-5.4%	**Scope 3 and Scope 1**
Total	**83,758**	**100.0%**	**80,163**	**100.0%**	**68,447**	**100.0%**	**-18%**	

CLIMATE CHANGE MITIGATION AND ADAPTATION

Climate change risks and adaptation

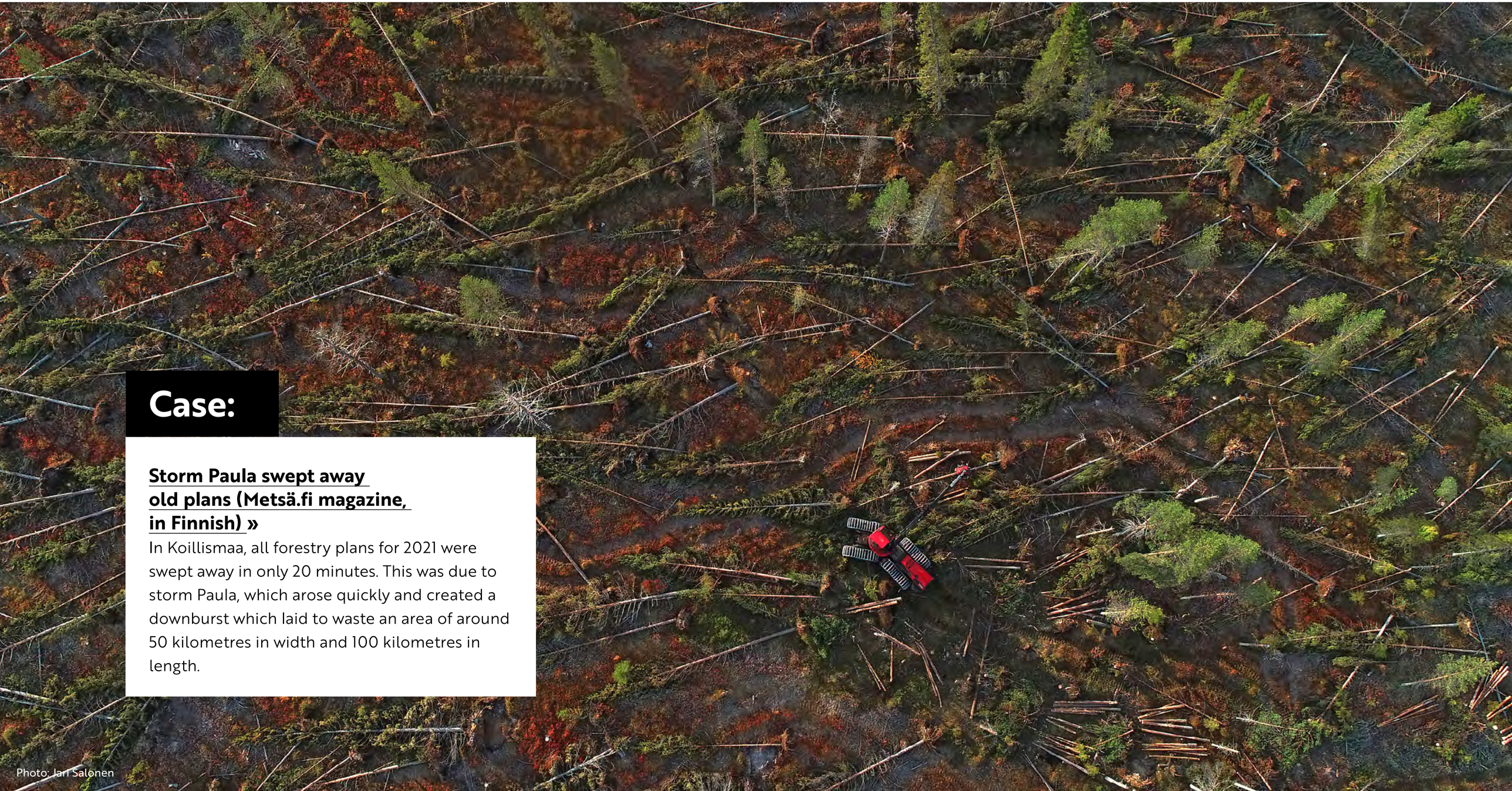
Climate change is one of the key risks relevant to Metsähallitus' activities over the short and long term. Climate change will have impacts on biodiversity, Metsähallitus' business and recreational use of state-owned land and water areas. To manage these risks, we use the risk management process defined at Metsähallitus.

We safeguard and promote biodiversity in conservation areas and enhance their recreational, nature tourism and other sustainable use values by means of comprehensive and systematic management of the network of protected areas. Assessing the impacts of climate change and means of adapting to it are an essential element in planning the management and use of protected areas, and we will pay increasing attention to these aspects. We support the preservation of, and strive to increase, biodiversity in protected areas through a network of ecological corridors and stepping stones defined in landscape ecological plans for multiple-use forests. The network helps to develop protected sites and the areas around them into entities that perform better ecologically and improves the connectivity of these sites.

We target and carry out ecological management and restoration measures ensuring that they promote both biodiversity and climate objectives. Through the planning and organisation of fishing activities as well as habitat restoration, we pay particular attention to fish species of cold waters that have suffered from climate change in the sea, lakes and flowing waters. In fisheries management actions, we are transitioning from population management based on stocking towards natural reproduction and life cycles of wild fish populations.

Climate change is likely to exacerbate the damage to forests caused by pests, storms and forest fires. Storm damage will also affect timber harvesting and increase the financial risk as the value of timber declines and costs rise. On the other hand, storms will increase the volume of decaying wood in the forest, which is vital for biodiversity. Winters that bring abundant rainfall amounts but no snow or ground frost will hamper field work, both on felling sites and when servicing and maintaining national parks and other hiking destinations. Examples of our preparedness for these changes include improving forest roads so that they can withstand the difficult conditions created by rainy autumns and mild winters. A comprehensive forest road network will also help to prevent and put out forest fires.

In the forestry sector, we also prepare for and adapt to climate change through good silviculture practices: by selecting a suitable tree species for each site, ensuring diversity in the tree species of our forests, and looking after other species and tree health. Climate change mitigation and adaptation are also the key to making decisions on forest management. Viable forests with a high level of biodiversity are a significant carbon sink and carbon storage and have a better ability to withstand storms and pests.



Case:

Storm Paula swept away old plans (Metsä.fi magazine, in Finnish) »

In Koillismaa, all forestry plans for 2021 were swept away in only 20 minutes. This was due to storm Paula, which arose quickly and created a downburst which laid to waste an area of around 50 kilometres in width and 100 kilometres in length.

Photo: Jari Salonen

PRESERVING BIODIVERSITY

We enhance diversity in nature and work to halt biodiversity loss

Increasing biodiversity and halting biodiversity loss is one of Metsähallitus' strategic pledges. We mitigate biodiversity loss in state-owned land and water areas by means of active measures aiming to maintain and increase biodiversity and to minimise negative impacts on the environment. Our objectives also support the achievement of the UN's Sustainable Development Goals.

In our work, we examine biodiversity in terms of the large entity formed by state-owned lands and waters. At the heart of this work is better reconciliation of multiple objectives. Alongside our work for biodiversity, we implement Metsähallitus' Climate Programme while making sustained efforts to mitigate both biodiversity loss and climate change.

In 2020–2023, we will spend around EUR 46 million on active restoration and ecological management projects that increase biodiversity. In addition, Metsähallitus' business units will invest more than EUR 50 million in biodiversity through the landscape ecological network and EUR 2 million in increasing the volume of decaying wood. Measures aimed at promoting biodiversity also have wider knock-on effects on society. For example, mitigating biodiversity loss has positive impacts on local economies as we also use outsourced services to carry out the measures.

Habitat programme Helmi boosts biodiversity in Finnish nature

We implement Helmi, the Government's habitat programme, in protected areas and multiple-use forests. This programme enhances biodiversity in Finland and safeguards the vital ecosystem services provided by nature while promoting climate change mitigation and adaptation. Metsähallitus Parks&Wildlife Finland is the largest individual implementer of this programme. The role of Wildlife Service Finland in the programme is to destroy invasive alien carnivores, or mink and raccoon dogs, in valuable bird wetlands. The goal is to train small groups of hunters to eliminate harmful carnivores on 30 sites in the coastal area of the Gulf of Bothnia.

Metsähallitus Forestry Ltd participates in the Helmi programme through inputs that are in keeping with the ownership policy and uses its internal funding to carry out the work. The different business units also work together to restore streams and block ditches, thus achieving significant synergy benefits and enhanced impact.

Biodiversity in 2021

Ecological management and restoration work across more than

16,000 ha

More than one half of the total volume of decaying wood, or

71 million m³

is found on state-owned land

Preservation of ecological sites in regeneration fellings

100 %

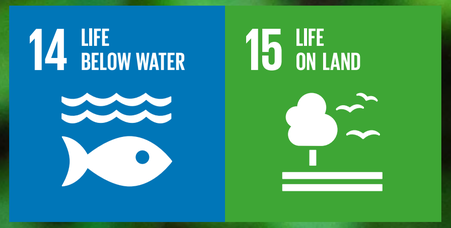


Photo: Outi Isokääntä

PRESERVING BIODIVERSITY

More hectares of protected areas restored than ever before

In 2021, we carried out work aiming to improve the status of habitats across the largest surface area in the history of protected area management. We restored more than 5,200 hectares of mires in state-owned protected areas, compared to 2,900 hectares in 2020. This work was largely carried out by entrepreneurs using forest machinery and excavators. In heath forests we managed to carry out restoration work, including prescribed burning, across 600 hectares, which is almost three times as much as in 2020. Once basic restoration had been carried out, we were able to put new traditional rural biotopes under continuous management. Under the Helmi programme, we reduced the ecological management backlog in forest habitats and also managed small-scale sites, such as herb-rich forests and deciduous trees.

While the Helmi programme enabled us to increase the volume of these activities, training was also required to complete the work. Thanks to long-term training activities and the accumulation of experience, we now have fixed-term experts with competence related to our strategic activities who will also help us achieve significant results in the future within the framework of the Helmi programme. In 2021, we provided training for both our own and the ELY Centres' personnel and developed our SAKTI information system to serve the needs of the Helmi programme better, both in Parks&Wildlife Finland and the ELY Centres. Research cooperation was expanded in such areas as the follow-up of mire restoration projects.

Key ecological management and restoration measures aiming to protect and enhance biodiversity in state-owned protected areas in a 2021

Measures	Target for 2021	Outcome in 2021
Mire restoration, ha	6,000	5,254
Restoration of heath forests, ha	250	643
Continuous management of traditional rural biotopes, ha	5,500	5,546
Management of other valuable habitats, ha	750	1,467
Total		**12,910**

PRESERVING BIODIVERSITY

Active ecological management and restoration in multiple-use forests

Active ecological management improves the status of degraded habitats in multiple-use forests or maintains and cares for habitats in order to preserve their structural features and to develop them in a desirable direction in terms of biodiversity. In 2021, we carried out active ecological management in multiple-use forests across more than three thousand hectares. Thanks to significant investments, the volumes of ecological management work planned for 2021 were exceeded; ecological management and restoration work was given a high priority in performance targets, and three ecological management experts were hired for planning the work in 2020. They made significant inputs in preparing the target sites. Sufficient machine capacity was available for the restoration work as the volume of ditch maintenance and other similar work has decreased. The weather also favoured the efforts, allowing the work to continue well into the autumn.

Mire restoration is a key ecological management measure on state-owned lands. This work carried out across a total of 2,673 hectares accounted for the highest volume of all measures. We removed barriers to fish migration at 120 sites and restored over 14 kilometres of flowing watercourses. In addition, we significantly increased the area of prescribed burning in multiple-use forests. Burning creates charred wood and deadwood, which effective forest fire prevention has made a scarce resource for the species that require it. We also carried out other tasks during the year, including the removal of invasive alien species and management of traditional rural biotopes.

The total costs of ecological management work in multiple-use forests carried out in 2021 amounted to approx. EUR 1.24 million. At the annual level, the order in which the work is carried out depends on the weather conditions of the year, possibilities of carrying it out cost-effectively in connection with other forest management work, and the availability of contractors

Key ecological management and restoration measures aiming to preserve and increase biodiversity in multiple-use forests in 2021

Measures	Target for 2021	Outcome in 2021
Mire restoration, ha	515	2,673
Management of herb-rich forests and fire and light environments, ha	120	264
Prescribed burning and burning of retention tree groups, ha	350	341
Removal of barriers to migration	80	120

PRESERVING BIODIVERSITY

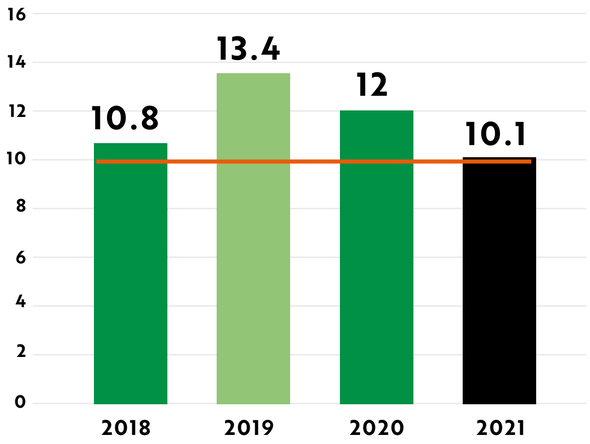
More decaying wood means more biodiversity

The volume of decaying wood and mature aspens, which are vital for biodiversity, on state-owned lands is monitored through the National Forest Inventories. The average volume of decaying wood in multiple-use forests currently is 7.7 cubic metres per hectare, whereas the long-term target is around 10 cubic metres per hectare.

At the annual level, our goal is to create around 100,000 artificial snags in multiple-use forests in connection with felling and to increase the volume of decaying wood by about 50,000 cubic metres. The volume of decaying wood in multiple-use forests is ensured by saving all deadwood and leaving a larger number of living retention trees in all areas and at all stages of forest management. Once they die, live retention trees develop into decaying wood over time. The snags, on the other hand, are living trees cut down at a height of 3 to 4 metres that quickly turn into decaying wood.

In 2021, an average of 10 valuable living retention trees were left per hectare of regeneration fellings, in keeping with the target level set in Metsähallitus Forestry Ltd's Environmental Guidelines. This number considerably exceeds the requirements of the PEFC forest certification criterion, as the minimum diameter of a valuable living retention tree is set higher in the Environmental Guidelines than in the forest certification. In addition to living retention trees, decaying wood as well as dead trees standing up and lying on the ground are left in the forest.

Number of valuable living retention trees* per ha left in multiple-use forests in keeping with Metsähallitus' Environmental Guidelines



* Valuable live retention trees include individual trees that are larger than the predominant tree species, trees with hollows, known nesting trees of birds of prey, or deciduous trees with a diameter of at least 10 cm at chest height.

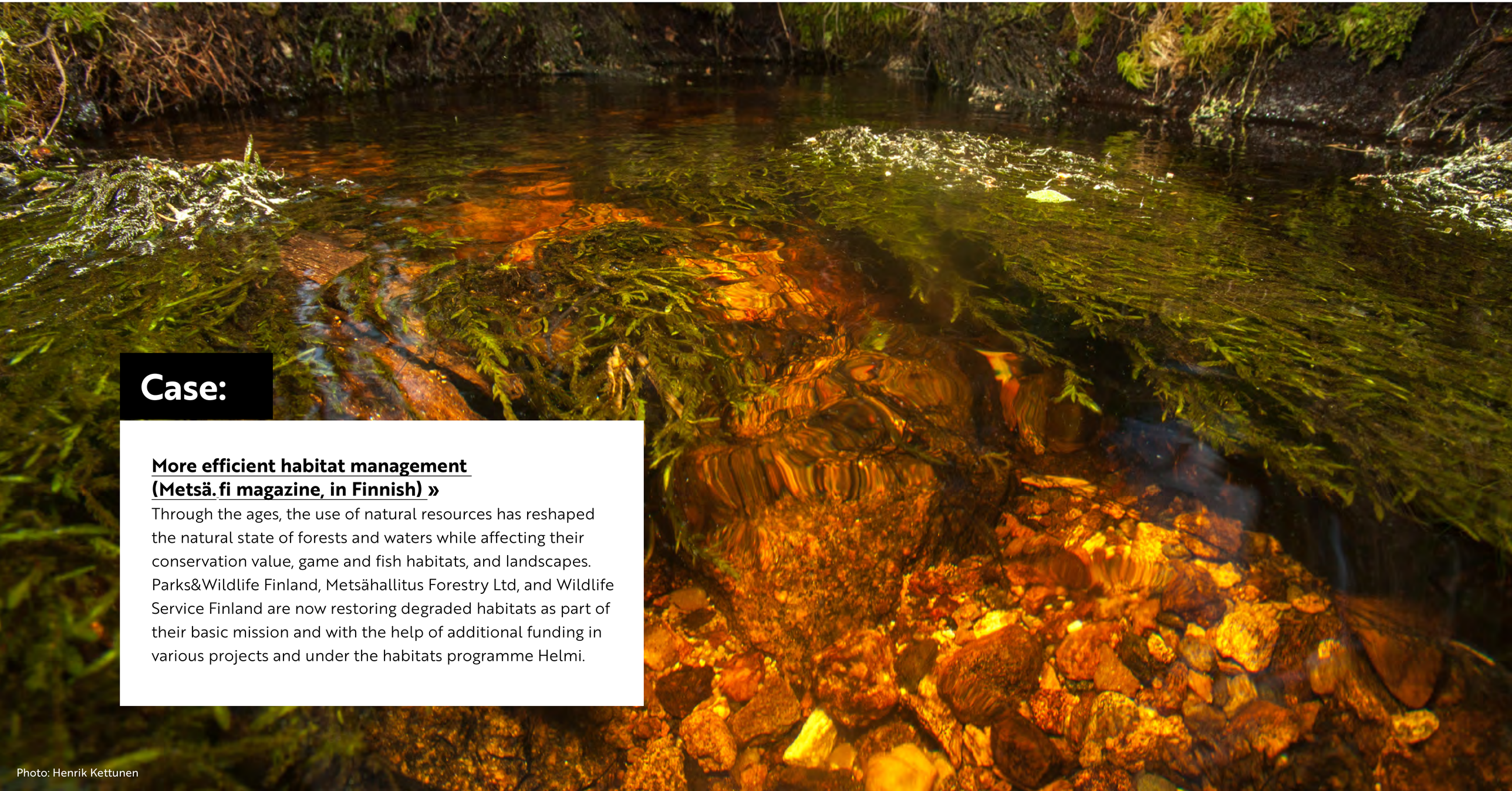
PRESERVING BIODIVERSITY

We also strive to actively increase the volume of sturdy aspens by retaining an adequate number of deciduous trees when managing forests. Based on measurements carried out for the National Forest Inventories 2015–2019, the volume of sturdy aspens on state-owned lands is approx. 0.35 m³ per hectare. The volume of mature aspens in multiple-use forests has increased. Aspens are favoured particularly as retention trees.

Decaying wood in protected forests is created by means of prescribed burning and as a result of storms. We also actively build up the volume of decaying wood in connection with other ecological management measures. For example, trees that overshadow aspens and deciduous trees are cut down. The preservation of individual occurrences of endangered species can also be promoted by actively felling or ring-barking trees if the occurrence is otherwise at risk of being lost.

More than a half of the total volume of decaying wood in Finland, approximately 71 million cubic metres, is found on state-owned lands.*

The total volume of decaying wood in Finland on forest and low-productivity forest lands is approximately 126 million m³. Source: National Forest Inventories 12 and 13.



Case:

More efficient habitat management (Metsä.fi magazine, in Finnish) »

Through the ages, the use of natural resources has reshaped the natural state of forests and waters while affecting their conservation value, game and fish habitats, and landscapes. Parks&Wildlife Finland, Metsähallitus Forestry Ltd, and Wildlife Service Finland are now restoring degraded habitats as part of their basic mission and with the help of additional funding in various projects and under the habitats programme Helmi.

Photo: Henrik Kettunen

PRESERVING BIODIVERSITY

Special attention to endangered species

We inventoried the most endangered species in protected areas

In 2021, we conducted species inventories in protected areas, especially in calcareous habitats, traditional rural biotopes, small water bodies and old-growth forests as well as on the fells. These inventories resulted in hundreds of observations overall of endangered and critically endangered species, particularly mosses, lichens, fungi and insects. New insect and plant species, and ones that had been classified as extinct, were also found in the inventories.

We also continued the extensive monitoring of the species that have been designated to Metsähallitus as a special responsibility. A mapping of the gyrfalcon's range completed in 2021 found several previously undiscovered gyrfalcon territories and also new peregrine falcon territories. In total, 2008 golden eagle, white-tailed eagle, peregrine falcon and gyrfalcon nests were inspected, and 185 Arctic fox dens and 495 Saimaa ringed seal lairs were checked. The work inputs of volunteer species experts in the monitoring were significant. We have inventoried freshwater pearl mussels along a total of 117 kilometres of rivers, finding as many as 12 new populations.

Data on species observations and inventories collected on state-owned lands are stored in LajiGIS, a species management and maintenance system that is maintained by Metsähallitus and shared by the entire environmental administration. The accumulated data gives us an up-to-date understanding of various species' status and informs the planning of management measures. In 2021, we recorded more than 20,000 insect observations in the LajiGIS system. The recorded species observation data are openly available to actors through the Finnish Museum of Natural History's Laji.fi web service. More than 700 requests for LajiGIS data were made through the Laji.fi service during the year, mostly for the purposes of land use planning, such as for wind power, mining and fairway projects, and zoning.

PRESERVING BIODIVERSITY

Species checks and terrestrial habitat inventories in protected areas in 2021

Sites where mammals and birds assigned to Metsähallitus were monitored
2,768 sites

Checks on species needing urgent protection or special protection and those protected under EU directivest
2,922 checks

Terrestrial habitat inventories
36,305 ha

Terrestrial habitat inventories in private protected areas,
22,261 ha

More resources for protecting endangered species in multiple-use forests

Species inventories in multiple-use forests were carried out by several experts in 2021 to support both the planning of fellings and reviews of the landscape ecological network. Species inventories were carried out on 316 forest sites with a total surface area of 1,160 hectares, and about 2,500 new observations of endangered and near-threatened forest species were made.

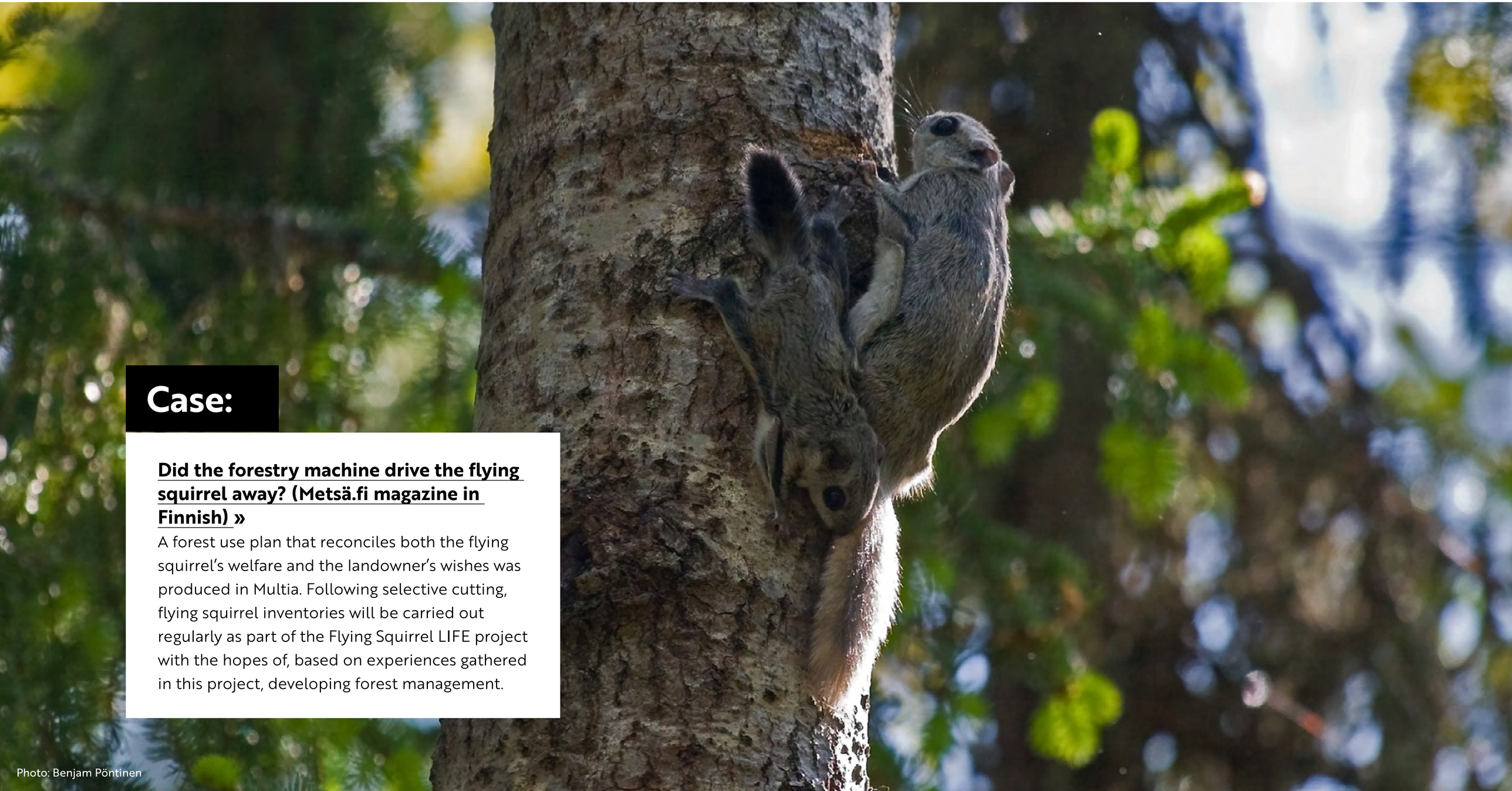
Metsähallitus Forestry Ltd has made significant investments in species expertise and built up both expertise and resources by recruiting additional experts for species inventories.

In the Lajidemo project launched in 2021, we are developing better capabilities for taking occurrences of species into account in the planning and use of state-owned multiple-use forests. This project looks at reconciliating the protection of species and forest management with the help of sample sites located in different parts of Finland, with special focus on voluntary measures addressing species that are endangered or near-threatened at the national level. The aim is to produce practical planning guidelines for sites with valuable species and to enhance the impact that forestry and ecological management work in multiple-use forests have on the conservation of species. The project will be completed in spring 2022.

Work on the forest reindeer continues

Metsähallitus is responsible for conserving the forest reindeer genome. We are striving to prevent hybridisation between the wild forest reindeer and the domesticated reindeer. We produced a preliminary study on the preconditions as well as the ecological and social impacts of building a fence that would keep the wild forest reindeer and the reindeer separate in the areas of Ylikiiminki, Utajärvi and Puolanka in Oulu. The study was completed in early 2022. Based on its results, the Ministry of Agriculture and Forestry will adopt a resolution on promoting the construction of this fence.

In addition, we continued the captive breeding and releases of forest reindeer as part of the Forest Reindeer LIFE project. The goal is establishing a growing forest reindeer population of a few dozen individuals in the areas of both Seitseminen and Lauhanvuori National Parks.



Case:

Did the forestry machine drive the flying squirrel away? (Metsä.fi magazine in Finnish) »

A forest use plan that reconciles both the flying squirrel's welfare and the landowner's wishes was produced in Multia. Following selective cutting, flying squirrel inventories will be carried out regularly as part of the Flying Squirrel LIFE project with the hopes of, based on experiences gathered in this project, developing forest management.

Photo: Benjam Pöntinen

PRESERVING BIODIVERSITY

Multiple approaches to improving the status of the Baltic Sea and its catchment area

Working together to improve the status of the Baltic Sea (metsa.fi, in Finnish) »

Finland's largest investment in the protection of species and habitats in the Baltic Sea so far, the BIODIVERSEA project to be implemented with funding from the EU's LIFE programme, was launched in 2021. Over the course of eight years, we will survey marine areas to identify their ecological values, monitor the development of their status, create a more effective network of protected areas and develop sustainable nature tourism.

Preparation of the first natural resource plan for marine areas managed by Metsähallitus to be launched

In 2021, we completed a project on long-term maritime spatial planning in which we looked at the big picture of maritime spatial planning and our role in it. Metsähallitus' goal state regarding the control, management and use of marine areas emphasises sustainable and responsible use, protection of biodiversity now and in the future, and striving for broad-based cooperation. Based on the results of this project, we will launch the preparation of the first natural resource plan for a sea area managed by Metsähallitus in 2022.

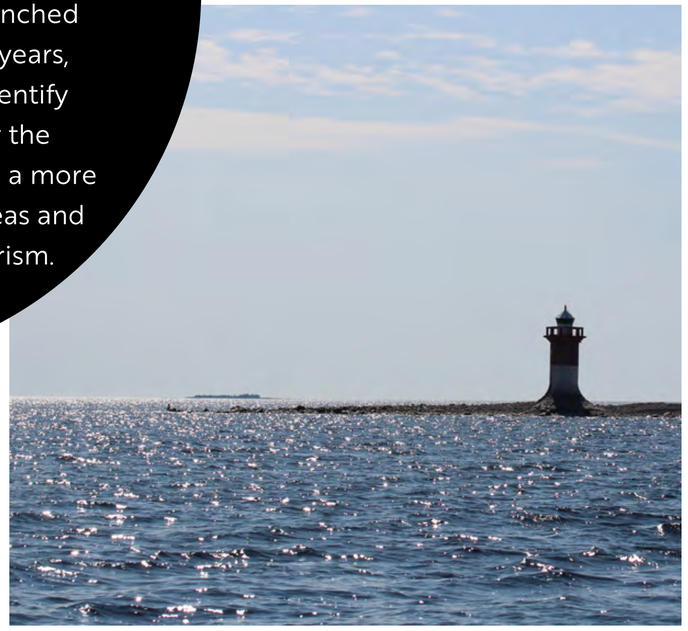


Photo: Suvi Saarnio

PRESERVING BIODIVERSITY

Restoration of water bodies takes in entire catchment areas

In the restoration of water bodies, we started paying more attention to the entire catchment area: just restoring a river is not always enough if the surrounding areas are not restored at the same time.

The catchment area project launched in 2020 was concluded at the end of the year. In this project, restoration measures were planned and carried out in nine pilot areas. Catchment area planning requires cooperation between experts in many different fields. This project involved fish and game experts from Metsähallitus Wildlife Service Finland, restoration experts from Parks&Wildlife Finland, and ecological management experts from Metsähallitus Forestry Ltd.

The aim of the project was to create operating methods for restoring entire catchment areas in state-owned areas. The catchment area planning started with looking at the restoration needs of a stream, after which water protection measures were planned for the catchment area. While the main focus in site selection was on improving game and fish habitats, other species also benefit from the restoration projects.

The project measures mainly comprised the restoration of rapids (8,038 m) and mires (993 ha). Financing for the project came not only from Metsähallitus but also from the Ministry of Agriculture and Forestry's game management funds and fisheries management fee revenue. After the project, catchment area restorations will continue as part of Metsähallitus' normal activities.

We mapped and restored rivers and coastal waters

With funding from the habitats programme Helmi, we mapped and restored flowing watercourses in protected areas. We inventoried the status of over 400 kilometres and restored 43 kilometres of streams, and we removed barriers to fish migration on 120 sites. The removal of barriers to migration freed up around 55 kilometres of stream channel in total, promoting the mobility of aquatic organisms. Stones were replaced in rapids where they had been removed in earlier times, and tree trunks were placed in streams to diversify flow conditions and depth variations as well as to allow floods to remove sand. Stream restoration helps many rare and endangered species and also improves the status of the water system more extensively.

Work to restore flowing watercourses in multiple-use forests was carried out by Metsähallitus Forestry Ltd as ecological management work on its internal funding and in keeping with the ownership policy, and by Wildlife Service Finland on such sources of financing as the Ministry of Agriculture and Forestry's game and fisheries funding and separate funding granted by Parliament. Metsähallitus Forestry Ltd

PRESERVING BIODIVERSITY

restored 14.4 km of streams in multiple-use forests and also removed barriers to fish migration on 120 sites. The barriers removed by Metsähallitus Forestry Ltd as ecological management work freed up in total more than 300 kilometres of upstream channels. On average, the removal of a barrier gave access to 2.5 kilometres of running waters upstream from the site. If the average channel width is two metres, this means that more than 60 hectares of water bodies upstream from barriers were freed up.

Over the past five years (2016–2021), Metsähallitus Forestry Ltd has removed barriers on more than 200 sites, which has helped to free up a total of 514 kilometres of flowing water upstream from the barriers. Additional funding of EUR 1.4 million granted by Parliament to Wildlife Service Finland was used to restore 20 rapids in ten rivers during the year. The aim is to restore spawning grounds and areas used by salmon fry in rivers, which have disappeared due to environmental modifications.

Year of the Fish campaign sought ideas for promoting clean waters and fish welfare
As 2020 had been a peak year for fishing, we decided to make 2021 a peak year for fish. We drew attention to the restoration of fishing waters, and more of these projects were carried out than ever before. However, the actual Year of the Fish 2021 campaign was created together with our customers.

Finnish fishers and outdoor enthusiasts sent Metsähallitus dozens of tips on how everyone can promote the cleanliness of fishing waters and the welfare of fish. Most of these ideas were published on the Eräluvat.fi website and on social media.

The customers who took part in the campaign brought up the use of detergents in waters close by holiday homes, the handling of caught fish, littering, and helping the passage of migratory fish with small actions. We will take our customers' ideas into account when publishing our Outdoor Etiquette for fishing and hunting in 2022.

We returned mussels to their home rivers

In the Freshabit project funded by the EU's LIFE programme, young freshwater pearl mussels from the rivers Mustionjoki and Ähtävänjoki were returned to their home rivers. This doubled the number of freshwater pearl mussels in these rivers and creates hope for their future. In Samus, an EU co-funded joint project of Sweden, Norway and Russia, young freshwater pearl mussels were reintroduced in the Luttojoki River. In addition, LIFE Revives was launched as an extensive project aiming to restore mussel habitats in Finland, Sweden and Estonia under the leadership of the University of Jyväskylä.

New geospatial data on lagoons in the sea area

We produced a data set concerning 8,000 sites with lagoons in the sea area which is available in the form of geospatial data. Lagoons identified in aerial photographs were classified into six categories based on their stage of development. Shallow sheltered lagoons are diverse habitats and important for such

species as spring-spawning fish. The new geospatial data set can be viewed in the VELMU map service that contains data on the marine environment. The data will help the authorities and researchers assess the status of and pressures on shallow lagoons much more accurately than before.

Domestic and international cooperation on water protection

We participate in several Finnish and international cooperation and research projects on developing water protection. In the Wambaf Tool Box (Water Management in Baltic Forests) project concluded in 2021, we promoted water protection in forestry in the Baltic Sea region. In connection with this project, we set up a test area in Kupittaansuo, Tammela to showcase water protection solutions for a peatland site. Metsähallitus Forestry Ltd additionally organised training related to Wambaf together with the Natural Resources Institute Finland, Tapio Oy and the Finnish Forest Centre in 2021.

We are also involved in a project led by the John Nurminen Foundation and co-funded by the ELY Centre for Ostrobothnia on water-friendly silviculture (VALVE-Metsä), in which a package of water-friendly silviculture measures for a selected model catchment area will be planned and implemented. The plan to be prepared as part of this project will contain concrete recommendations for forest management measures in each compartment, minimising adverse impacts on water bodies. As the catchment basin, a peatland dominated forest area in North Ostrobothnia was selected. It comprises commercial forests managed by Metsähallitus, protected areas and land belonging to private forest owners. The planning of project implementation began in 2021 under the direction of the local forest management association, and work in the field will start in 2022. The project will continue until 2023.

Together with the Natural Resources Institute Finland, we planned monitoring systems for sites to which water will be returned and developed the use of remote sensing methods in impact assessment. We worked with the Finnish Environment Institute to develop catchment basin level analyses conducted to identify the needs and possibilities for restoration and analysed long-term monitoring data with the Universities of Jyväskylä, Oulu and Turku, including within the framework of the Hydrology LIFE project.

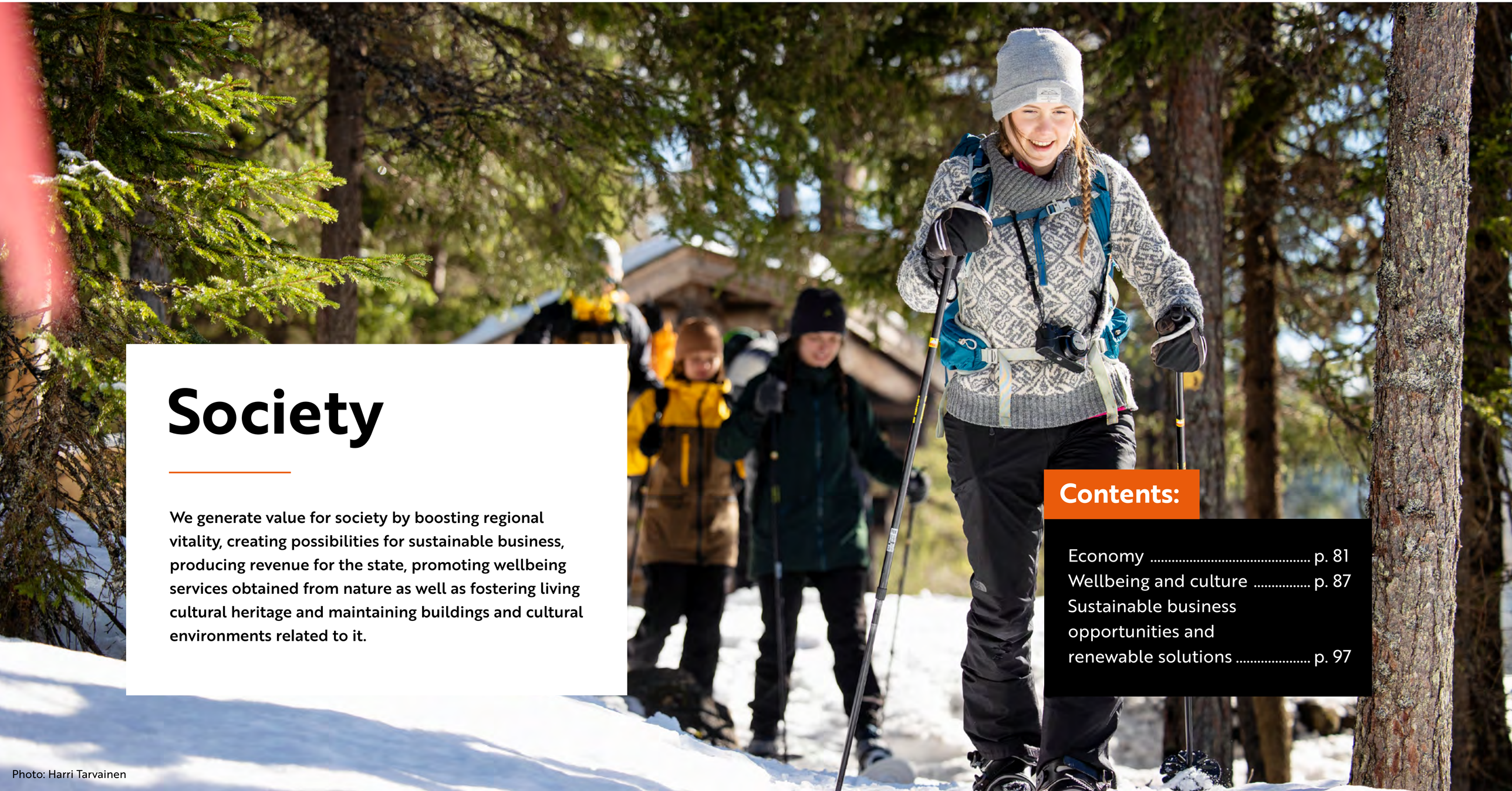
We are involved in several joint water protection projects

Case:

Multiple restoration methods in the valuable bird wetland of Siikalahti Bay (Metsä.fi magazine in Finnish) »

While Siikalahti located in Parikkala, South Karelia, is one of Finland's most important bird wetlands, over time fewer birds have started using the area, among other reasons because the bay has become overgrown. The objective of the restoration work is to provide a better living environment for birds.

Photo: Toni Eskelin



Society

We generate value for society by boosting regional vitality, creating possibilities for sustainable business, producing revenue for the state, promoting wellbeing services obtained from nature as well as fostering living cultural heritage and maintaining buildings and cultural environments related to it.

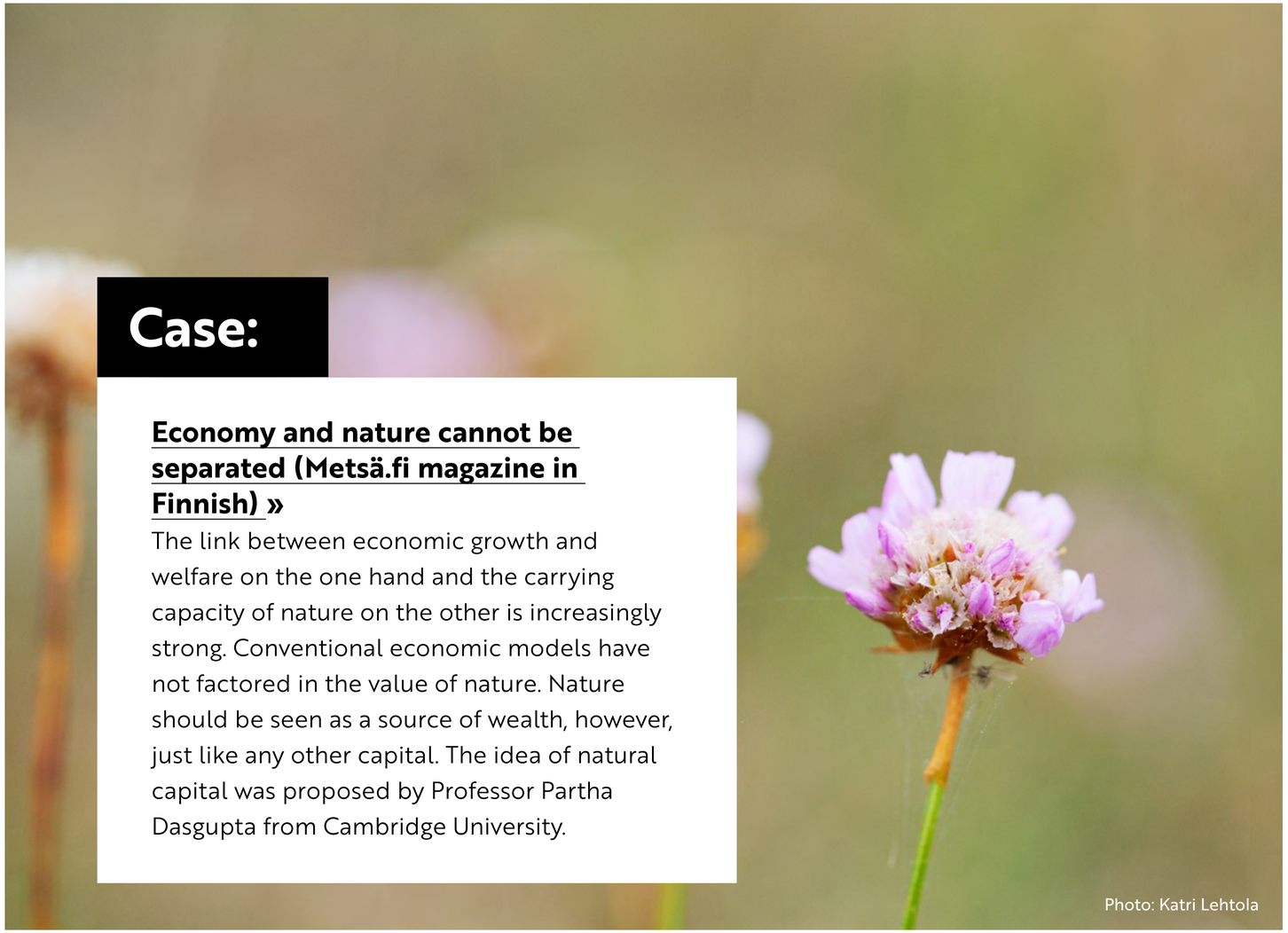
Contents:

Photo: Harri Tarvainen

ECONOMY

Economic welfare

Our work has both direct and indirect economic impacts. In 2021, the Metsähallitus Group made a profit of EUR 119.9 million, and Metsähallitus' work had direct impacts on society through taxes, wages, purchases of materials and services, investments and revenue amounting to EUR 450 million generated for the state. The indirect economic impacts generated through procurements, value chains of outsourced work and enabling job creation amounted to approx. three billion euros.



Case:

Economy and nature cannot be separated (Metsä.fi magazine in Finnish) »

The link between economic growth and welfare on the one hand and the carrying capacity of nature on the other is increasingly strong. Conventional economic models have not factored in the value of nature. Nature should be seen as a source of wealth, however, just like any other capital. The idea of natural capital was proposed by Professor Partha Dasgupta from Cambridge University.

Photo: Katri Lehtola

Economy in 2021

Revenue generated for the state

120

EUR million

Personnel salaries and fees

61.7

EUR million

Taxes paid

62.5

EUR million

Procurements of materials and services

179.2

EUR million

Indirect impacts on regional economies

3

EUR billion

Photo: Katri Lehtola

ECONOMY

Metsähallitus' tax footprint

Tax footprint refers to taxes and tax-like charges we pay to society on our activities. Tax returns and reports are submitted centrally by the Group's financial unit. If necessary, we draw on external expert assistance in tax matters, such as for separate reports and matters subject to interpretation.

In principle, taxes are paid to the country in which the tax liability was incurred. Metsähallitus Group companies and Metsähallitus state enterprise are Finnish, and we pay all our taxes to Finland. Metsähallitus has no subsidiaries or branches in other countries.

Metsähallitus' tax footprint was EUR 62.1 million in 2021. VAT, which was mainly paid on the activities of the state enterprise Metsähallitus, accounted for the largest share of the tax footprint. Taxes on salaries also comprised a significant proportion of our tax footprint. As a nationwide organisation, we also have an impact on regional economies through the salaries we pay.

Our income tax consists of taxes paid by the state enterprise and our subsidiaries. We pay property tax on the real estate we own. No property tax is paid on forests.

Metsähallitus' tax footprint in 2021 (2020), EUR million

In total 62.5 (58.1)

- Income tax 13.7 (12)
- Value added tax 33.5 (31.7)
- Withholding tax 12.8 (12.1)
- Property tax 2.3 (2)
- Transfer tax 0.2 (0.2)
- Vehicle tax 0.07 (0.06)
- Electricity tax 0 (0) Figures not available
- Flight tax 0 (0) Figures not available

Responsible procurement

In our procurements, we comply with public procurement legislation, the main principles of which are promoting healthy competition and ensuring the equal and non-discriminatory treatment of entrepreneurs. Our Supplier Code of Conduct incorporated in each procurement contract, which promotes responsible and ethical activities within Metsähallitus, ensures that our procurements are responsible.

In 2021, Metsähallitus' procurements of materials and services totalled EUR 179.2 million.

We mapped the current state of our procurements based on a responsibility and compliance risk analysis in 2021. The key development areas identified by this analysis were related to building and securing procurement competence and sufficient resources for procurements. We developed a network-based operating model and uniform procurement practices. Procurement competence in Wildlife Service

ECONOMY

Finland was centralised, and competence sharing between the Group units was stepped up. This operating model will ensure that procurements are prepared professionally and efficiently and that the objectives set for them are reached in practice in our invitations to tender. These changes also resulted in significant improvements in competence and practical work related to procurements. Together with other central government bodies, Metsähallitus participated in the activities of Hankinta-Suomi cooperation forum and the Competence Centre for Sustainable and Innovative Public Procurement Keino. In addition, we produced a training course on the procurement process for the entire Metsähallitus organisation and prepared to launch a web-based course in 2022. In the coming year, we will also launch a procurement manual for internal use within Metsähallitus.

In 2021, we defined our priorities for responsible procurements based on Metsähallitus' strategy and Responsibility Programme: leadership, the environment, people and society. We will continue this work in 2022 by setting more detailed responsibility goals for each service and product group and monitor their attainment in the context of themes that correspond to the priority areas.

In 2021, an internal audit was conducted on the realisation of corporate responsibility in the procurement and supervision of Forestry Ltd's contracting activities. The audit found that the status of responsible procurement and supervision of contracting was at an effective level. As development measures, we will integrate the responsibility perspective more strongly into the annual development discussions with contractors, and we will combine the methods of supervising contractors' responsible action into a clearer toolkit. We additionally decided that in the future, documented discussions will be conducted with the contractors on how they will meet the responsibility requirements of the Supplier Code of Conduct. We also developed the quality bonus system to factor in the responsibility aspect better.

Roundwood supplied by us is important for the regional and national economy

The timber supplied by Metsähallitus enabled the forest industry to achieve a turnover of EUR 2.4 billion. It accounted for around 9%, or EUR 0.9 billion, of the value of Finnish forest industry exports. These calculations are based on the latest data from 2020 provided by Statistics Finland.

Almost 8% of the 63,000 jobs in the forest sector, or around 5,000 jobs, were based on timber from Metsähallitus' multiple-use forests. * This calculation does not account for the multiplier effects of forest sector jobs.

* The calculation was produced for Metsähallitus' General social obligations report 2021 based on statistics from 2020.

ECONOMY

Total spending impact of visitors to protected areas on the local economy, million euros

456

(371)

Total spending impact of fishing and hunting customers on the regional economy, million euros

54.6

(54.4)

Employment impacts of visitors to national parks, state-owned hiking areas and certain other nature reserves and recreational areas, person-years

3,665

(2,992)

Employment impacts of hunting and fishing customers, person-years

291

(288)

Regional economy impacts of recreational use, fishing and hunting grew

The impacts on local economies of spending by visitors to protected areas grew strongly in 2021. The overall local economy impacts of money spent by visitors to protected areas, historical sites and visitor centres was EUR 456 million, of which visits to national parks accounted for EUR 306 million. The total employment impact was 3,665 person-years, of which the national parks accounted for 2,420 person-years. The impacts on regional economies are stronger in tourism areas where visitors stay longer and more services are available.

The impact of fishing and hunting on regional economies increased somewhat. Fishing and hunting enthusiasts produced an additional income of EUR 54.6 million for regional economies, which corresponded to 291 person-years of employment.

Business units increased their inputs in social obligations

We conduct responsible business actively and sustainably for the benefit of the environment, people and society and ensure that the general social obligations related to biodiversity, recreational use, the Sámi culture and reindeer husbandry laid down in the Act on Metsähallitus are fulfilled.

As part of our business operations, we made inputs amounting to EUR 79.7 million in general social obligations in 2021, of which sum Metsähallitus Forestry Ltd accounted for EUR 77 million and Metsähallitus Property Development for EUR 2.7 million. This represents a year-on-year increase of EUR 6.4 million. The largest increases were seen in spending on biodiversity and recreational use.
In 2021, the business units also invested EUR 16.76 million in the reconciliation measures required by the ownership policy. This was more than a 50% increase compared to 2020.

We report on the fulfilment of all general social obligations in our **annual General social obligations report (in Finnish).**

ECONOMY

Business inputs in general social obligations in 2021 (2020), EUR million

Total
79.7
(73.3)

Biodiversity
56.9
(52.3)

Reindeer husbandry
3.2
(2.9)

Recreational use
14.9
(13.7)

Sámi culture
4.7
(4.4)

Inputs in new reconciliation measures under the ownership policy in 2021 (2020), EUR million

In total
16.76
(7.27)

Active ecological management programme
1.2
(0.47)

Climate Programme
3.55
(0.05)

Research and development
0.4
(0.37)

Recreational use and nature tourism
0.91
(0)

Expanding continuous cover forestry as part of reconciling objectives
10.7*
(6.38)

* Fellings necessitated by storm damage are not included in the additional inputs.

WELLBEING AND CULTURE

Joy, health and wellbeing for millions

We enable citizens to enjoy nature by hiking, staying in holiday houses, picking berries, hunting and fishing. We foster the cultural environments in areas managed by us: traditional landscapes and their building heritage as well as archaeological monuments from castle ruins to tar pits. We support the continuity of traditional ways of moving about in nature and outdoor skills as part of living heritage and pass on hunting and fishing traditions from one generation to the next. We also produce new information on nature and sustainable development.

Photo: Jonna Kalliomäki

Health, wellbeing and culture in 2021

10 million
nature visits to state-owned lands

0.5 million
days of fishing and hunting

1.8 million
visits to visitor centres and cultural heritage sites

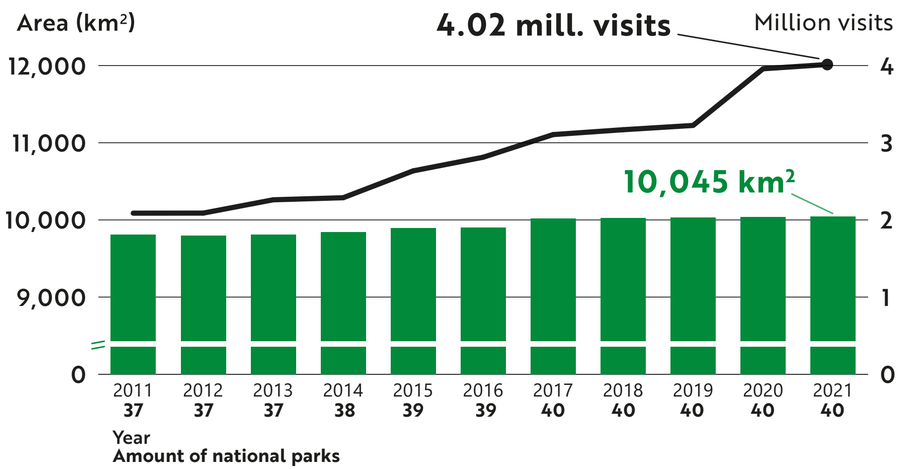
65,000 people
reached through guidance, events and nature education

Photo: Harri Tarvainen

Record number of visitors to national parks

Hiking destinations and historical sites were more popular than ever among domestic tourists in 2021, and the limit of four million annual visits to national parks was exceeded for the first time. While we had set the target at 9 million, a total of 9.4 million visits were made to national parks, state-owned hiking areas, historical sites, visitor centres, and protected areas and hiking destinations significant in terms of recreational use. The greatest growth was seen in Lapland and Koillismaa at around 20%. The visit numbers were also higher than in the pre-pandemic period in Southern Finland. The underlying factors in the higher number of visitors to sites in Northern Finland include a sharp increase in domestic tourism, the trend of working remotely in holiday homes located near national parks, and the popularity of the northern national parks also in the summer. Tourism demand forecasts indicate that domestic tourism to nature destinations, which has grown during the coronavirus pandemic, will stabilise, but it will be boosted by the recovery of tourism within Europe and later by long haul tourism.

Visits to national parks and development of the national park network in 2011–2021



Visitors to national parks clocked up 43.6 million kilometres by walking, skiing and cycling, which is equivalent to 1,087 trips around the world. In addition to the benefits generated by physical exercise, positive impacts on mental health are also highlighted.

WELLBEING AND CULTURE

The demand for services continued to grow, especially in the vicinity of tourist centres, but customers also discovered destinations that had experienced lower demand in the past. We refurbished hiking structures and built new accessible structures in the terrain with separate funding granted to Parks&Wildlife Finland. We aim to avoid new repair backlog, ensure that hiking structures are safe and protect nature from wear and tear. The target set for reducing the repair backlog by the end of 2023 was achieved for 2021. The key to success is a sustainable level of permanent funding, allowing us to respond to the growing number of visitors in the future and the expenditure incurred from new sites, in addition to making the necessary investments

The trail network and roads in multiple-use forests serve recreational use

Roads built for forestry use are an essential prerequisite for enabling and facilitating recreational and other multiple uses of state-owned areas. Based on road use surveys conducted in 2015–2019, the annual number of recreational visits to multiple-use forests is approx. 2.3 million. Particular sources of the beneficial effects of recreational use include hunting, berry picking and outdoor recreation in multiple-use forests.

In total, 36,000 kilometres of our own forest roads are available for recreational use in multiple-use forests. We invested EUR 17.8 million in road maintenance in 2021. Additionally, 189,000 hectares of forest land were excluded from commercial forestry or their use was restricted, primarily in order to facilitate recreational use.

An EU-funded joint project titled Arctic Bikepacking Trail II was launched in Lapland during the year. In this project that will continue until 2023, the possibilities of using Metsähallitus' forest roads and other areas as part of an extensive bikepacking network covering several municipalities in Lapland will be examined. The multiple-use forests also offer opportunities for snowmobiling in deep snow and supporting the tourism industry. For example, snowmobiles can be permitted on unploughed forest roads and other tracks. A so-called deep snow snowmobiling area was opened in the multiple-use forests of Hyrynsalmi-Suomussalmi area in Kainuu at the end of 2021. Similar snowmobiling areas have previously been established in Puolanka and Kuhmo in Kainuu as well as in Keuruu in Central Finland.

In connection with natural resource planning in the Sámi Homeland, the volume of recreational use in multiple-use forests was studied at popular tourism and recreation destinations using positioning data from the mobile telephone network. As there are blind spots in the coverage of the mobile network in Northern Finland, some of which are large, the data are indicative and not fully reliable when it comes to accurate numbers of visits. The data indicate, however, that the most attractive areas in multiple-use forests in the Sámi Homeland are those adjacent to Saariselkä and Lake Inarijärvi.

WELLBEING AND CULTURE

We monitor the sustainability of recreational use and tourism

We monitor the impacts of recreational use on the status of the ecological, economic, social and cultural sustainability on individual ecological or historical sites using the Limits of Acceptable Change(LAC) method.

In 2021, we developed further the method for monitoring the sustainability of use, especially with regard to measuring ecological sustainability; the monitoring covers around 40 sites. The reports for 2021 will be issued in late spring, but according to preliminary estimates, the values of all sustainability indicators were at a good level. Metsähallitus Parks&Wildlife Finland and the UNESCO World Heritage Sites located in Finland have common sustainable tourism principles, which are observed in all Metsähallitus' activities and in cooperation with tourism entrepreneurs. The principles to be monitored include safeguarding biodiversity and minimising environmental loading, bolstering local economies and creating jobs, and promoting visitors' health and wellbeing.

Levels of wellbeing impacts and customer satisfaction remained high

The visitor centres and customer points attracted 908,200 visits in 2021. The level of hikers' customer satisfaction remained high, both at customer service points and outdoors, even though some sites have experienced congestion due to undersized or otherwise inadequate infrastructure. We are striving to alleviate congestion by renovating and expanding parking areas, improving the durability of trails, and building hiking services with a higher capacity. The coronavirus pandemic also affected customer service opening hours, which had to be curtailed locally. We addressed customer safety in many ways, and a very good level of safety was achieved also in 2021.

Our digital customer experience and service concept was completed in 2021, and we continued to update the methods of visitor monitoring and the customer information system. We also conducted visitor surveys in several areas. Such surveys provide us with information needed to monitor social sustainability, for example on the impacts of the coronavirus pandemic on recreational use of nature and nature tourism.

Wellbeing impacts of recreational use in 2021 (2020)

Health and wellbeing impacts (social, psychological and physical) experienced by visitors to protected areas and historical sites, on a scale of 1 to 5

4.33

(4.35)

Health and wellbeing impacts experienced by visitors to multiple-use forests, EUR/visit

200 to 300

(200 to 300)

Customer satisfaction of recreational users in 2021 (2020), on a scale of 1 to 5

Customer satisfaction of visitor centre and off-road service users,

4.38

(4.42)

Customer satisfaction of hunters and fishers

hunters

3.77

(3.78)

fishers

3.81

(3.74)

Case:

Digital services complement the nature experience (Metsä.fi magazine in Finnish) »

Metsähallitus' digital service development is guided by customer experience. Hiking customers have wished for more advance information on the destinations. We intend to group our digital services together, making them easier for customers to find.

Photo: Erkki Ollila

Fishing arranged on terms of fish welfare

The exceptionally warm summer had an effect on fish welfare. Sensitive salmonoids cannot withstand strain in warm rapids, and their survival in catch and release fishing is uncertain. We suspended the sales of fishing permits at six fishing destinations in July.

The fact that fishing permits were no longer available sparked discussion, especially in Lapland. Sustainable quotas for the targeted species will be set for fishing and hunting destinations. In 2021, the permit quota was reached at an increasing number of destinations.

Over one million bed-nights in holiday houses on state-owned land

In 2021, we produced our first ever estimate of bed-nights spent in holiday houses on state-owned land. As background data, we used a holiday house survey conducted by the Natural Resources Institute Finland.

In the results of the survey, Finland stands out in international comparisons when it comes to spending time in holiday houses. Depending on the calculation method used, there are between 2.4 and 2.9 million free-time residents in Finland. The survey found that almost 40% expected to use their holiday house significantly or somewhat more in the next three years.

According to the survey results, the average number of days spent in a holiday house has increased considerably. While this figure was 79 in the holiday house survey of 2016, in 2021 it was as high as 103.

For the purposes of our calculation, we estimated that each holiday house would be used by two people. We sold a total of 3,561 holiday house sites in 2006–2021. Unlike other operators, we also lease sites. We currently have 1,644 leased sites, of which 197 are intended for permanent residence.
Based on these parameters, our conservative estimate of the number of days spent in holiday houses on state-owned lands in 2021 was 1,072,230.

We also drew up an assessment of holiday residents' impacts on regional economies based on the data produced by the Natural Resources Institute Finland's holiday house survey. The survey found that people spend approximately EUR 30 per day on daily consumer goods while staying in holiday houses. They spend on average EUR 3,500 a year on services and goods related to building and renovations, EUR 2,600 on building, repairs and appliances for the property, and EUR 663 on other goods and services. Using median values, these purchases add up to more than EUR 35 million annually for those staying in holiday houses in state-owned areas. Holiday residents make purchases in both their holiday and home municipalities. A large-scale and in-depth study based on actual cash flows rather than primarily on surveys would be needed to investigate all direct and indirect impacts on the regional economy.

A good level of data on the condition of valuable cultural heritage sites

In 2021, the cultural heritage sites maintained by Metsähallitus were visited 924,300 times. Supported by dedicated funding, we were able to restore sites of cultural history value under our management and map the cultural heritage sites in the new Salla National Park. In 2021, we achieved a good level of data on the condition of valuable cultural heritage sites. We will continue to work together with other stewards of state-owned properties to develop the management of valuable cultural history sites.

The pandemic had an impact on events, guided tours and nature education

In 2021, nearly 65,000 people participated in events, guided tours and nature education organised by Metsähallitus. The coronavirus pandemic continued to have an impact on their organisation. For example, almost all major events planned as part of our communications addressed to young people had to

Röhkömukanmaa sites in Ylläs sold like hot cakes (in Finnish) »

In autumn 2021, holiday house sites came up for sale in Röhkönmukanmaa in Ylläs. A large number of advance enquiries was received, and it was finally necessary to draw lots to pick the buyers. All 43 sites were sold. The main reasons for this huge interest resulted from the coronavirus pandemic: there was an increase in domestic tourism, and more people are working remotely.

Photo: Katri Lehtola

WELLBEING AND CULTURE

People reached through guidance and nature education in 2021 (2020)

Science Centre Pilke, customers reached, including at fairs and other events
42,257
(49,040),

of whom children and young people in learning groups
2,340
(2,879)

Number of customers guided at visitor centres
21,200
(11,900)

Persons who participated in wildlife tutor activities
600
(1 323)

Angling Day and Winter Angling Day participants (children and young people with their families)
894
(1,000)

be cancelled. Temporary lifting of restrictions locally made it possible to go ahead with some events and tours.

More than 2,300 children and young people participated in learning groups organised at Science Centre Pilke in Rovaniemi in 2021. In addition, more than 40,000 people came to see the exhibition and participated in other events at the Science Centre. Digitalisation played a large role in both workshop activities and events, and the hybrid model will remain a permanent part of the activities. Around 21,200 people took part in guided tours organised by the visitor centres.

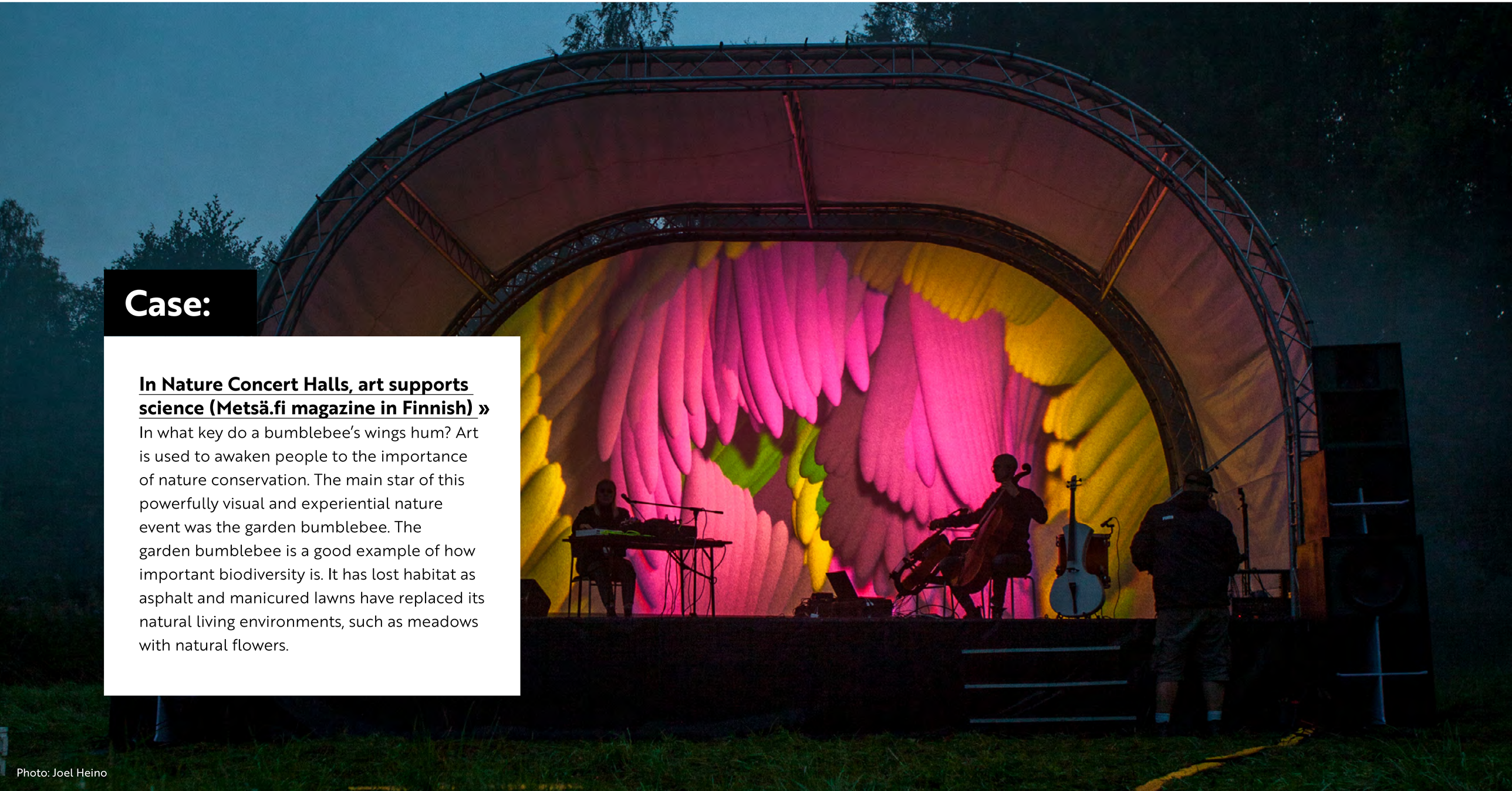
Our wilderness tutor work and Angling Day event encourage children and young people to take up outdoor activities. The wilderness tutors take young people outdoors, where they learn about nature and get to understand the principles of sustainable fishing and hunting. On Angling Days, everyone under the age of 18 can try fishing for free at a number of Metsähallitus' angling destinations. In 2021, 600 children and young people participated in the wilderness tutor activities and almost 900 in the Angling Day.

Celebrating nature through art and science

Vallisaari island in Helsinki provided the venue for Helsinki Biennial, a contemporary art event, from mid-June till the end of September. This event organised by the City of Helsinki attracted 145,000 visitors. The event was produced by HAM Helsinki Art Museum, while Metsähallitus' partners provided catering and transport services.

Two Nature Concert Hall events, which combine science and art, were organised in summer 2021 in Punkaharju and at the castle ruins of Kajaani. The theme of these events was biodiversity and, in particular, the significance of pollinators. A total of around 1,800 people attended the free concerts and their supplementary activities, all of which were organised outdoors.

From May till September, 170 shepherding weeks at 15 destinations were available. These highly popular weeks of staying at a remote location and caring for livestock were allocated by a draw between more than 14,000 applicants. The income from the fees for the shepherding weeks is used to maintain the sites and to pay the costs of ecological management.



Case:

In Nature Concert Halls, art supports science (Metsä.fi magazine in Finnish) »

In what key do a bumblebee's wings hum? Art is used to awaken people to the importance of nature conservation. The main star of this powerfully visual and experiential nature event was the garden bumblebee. The garden bumblebee is a good example of how important biodiversity is. It has lost habitat as asphalt and manicured lawns have replaced its natural living environments, such as meadows with natural flowers.

Photo: Joel Heino

SUSTAINABLE BUSINESS OPPORTUNITIES AND RENEWABLE SOLUTIONS

We create diverse opportunities for bioeconomy and circular economy

State-owned land and water areas offer solutions for a more responsible and sustainable future. We enable the growth of renewable energy generation, produce renewable raw materials sustainably, and create business opportunities in state-owned land and water areas based on natural resource plans prepared together with our stakeholders.

Growing interest in offshore wind power

We enable the production of renewable energy generated with wind power in state-owned land and water areas. By increasing wind power production, we promote sustainable business and Finland's carbon neutrality.

Operators are showing a growing interest in Finland's sea areas as sites for wind farms, and we aim to speed up offshore wind power development on commercial terms. An auction model for offshore wind energy projects approved by the Cabinet Committee on Economic Policy was completed in late 2021.

Following this model, we conduct preliminary studies on water areas and, on this basis, select the areas to be auctioned. Depending on the importance of the project, either the Government or the Ministerial Committee on Economic Policy approves the areas to be leased and the conditions for the auction before it goes ahead.

The winner of the auction will be responsible for such matters as applying for the required permits. Once the contracts have been signed, they may develop the areas as appropriate for their operation. The state will retain ownership to the sea area. The first auction is expected to be held in 2023–2024, and it will comprise three to four areas suitable for generating offshore wind power.

Regional plans allocate several potential areas to offshore wind power production in Finnish sea areas. As the steward of public water areas, we have concluded reservation contracts with energy companies for some of these areas. Some of the rights of use to the

SUSTAINABLE BUSINESS OPPORTUNITIES AND RENEWABLE SOLUTIONS

areas will be auctioned to energy companies following the auction model.

Alongside introducing the auction model, we continued working on the Korsnäs offshore wind energy project, in which our project development goes beyond identifying the areas to be auctioned. We are looking for a responsible project development partner in a competitive tendering process which began in late 2021. During the year, we defined the Environmental, Social and Governance (ESG) criteria for the partner selection and prepared an audit process of environmental responsibility, social responsibility and good governance (ESG Due Diligence) that meets international requirements. We aim to select a partner among those who have submitted a binding offer in 2022. We will launch the project's environmental impact assessment in 2022. In this assessment, we will carefully examine the impacts of the project on nature, housing and the environment. Our aim is to ensure that the impact assessment will also meet international requirements as far as possible. In early 2022, we commissioned a gap analysis, in which the coverage of the EIA programme laid down in the Finnish Act on Environmental Impact Assessments is compared to the Environmental and Social Performance Standards and EHS Guidelines defined by the International Finance Company (IFC).

In addition to Korsnäs, wind power projects are underway in Simo, Kajaani and Puolanka, as well as joint projects in Kajaani and Pyhäntä. Requests for preliminary studies related to wind power have increased by more than 50% since last year. In 2021, 138 wind turbines had been built and project development was underway on 150 more on state-owned lands. Of the installed wind turbines, 113 are located in wind farms developed by Metsähallitus. In addition to our own wind power project development, we also lease state-owned areas to other project developers. Our goal is to triple the production of renewable energy on state-owned lands from 2020 levels by 2030.

Wind power has many direct and indirect impacts, both locally and more extensively. Wind farms generate property tax for municipalities, in addition to which wind power creates jobs in the construction and operational phases. In addition to economic impacts, wind turbines significantly reduce the municipality's emissions.

In 2021, we commissioned Ramboll to produce a calculation of the regional economic impacts of the offshore wind farm in Korsnäs, in particular, as very little is currently known about the regional economic impacts of offshore wind farms in Finland. The assessment of regional economic impacts is based on a resource flow model commissioned by SITRA and developed in cooperation by Ramboll Finland and the Natural Resources Institute Finland in 2013–2015. The resource flow model makes visible all resource flows related to construction, production and decommissioning, including material and monetary flows related to manufacturing, service and consumption. The model can also be used to describe the significance of different actors as part of the region's activities. The assessment of Korsnäs offshore wind energy project's regional economic impacts and its results will be used in project planning and in subsequent impact assessments.

Metsähallitus' auction model for Finnish public water areas:

Location planning of offshore wind power › **Site selection** › **Site survey** › **Permit process** › **Construction**

A **Operator/ Project developer** › **Operator**

We initially identify and delimit sites geographically

- Advance selection is based on the geospatial information system. Protected areas are excluded.
- The site must be one designated in maritime spatial plans or regional plans.
- The site must be located in a public water area, and its distance to protected areas must be established.

We select the site/s

- A regional plan exists, or the site can be zoned.
- Sufficient distance to protected areas and cultural heritage sites already in existence or to be established.
- No environmental data or GTK data preventing the project are found in an internal preliminary study.
- Merchant shipping is taken into account
- Distance to the main grid in land area less than 45 km or corresponding basic criteria for connecting to the grid.
- Water area depth over 10 and under 40 metres.

We prepare the site for the auction

- To auction the site and to conclude a Right of Use Agreement, a Government-level transfer decision is required (see the Act on the Right to Transfer State Real Estate Assets).
- The necessary statements (Ministry of the Environment, Ministry of Transport and Communications, Finnish Defence Forces/Ministry of Defence and Finnish Heritage Agency) must be obtained before a permit enabling the lease of the state's real estate assets can be granted.
- Decision of the municipality/ city on the planning initiative of the component master plan.

Key procedures and reports for the project, for example:

Permit for seabed survey and mapping
- Seabed surveys

Statement from the Defence Forces on acceptability of wind power construction

Environmental Impact Assessment Procedure (EIA)
- Landscape impact assessment (illustrations, 3D video models, power plants and overhead line)
- Underwater impact assessment
- Underwater archaeological inventory
- Resident and stakeholder surveys
- Noise and flicker modelling
- Impacts on maritime infrastructure

Component master plan (for wind power construction)
- Review of compliance with the regional plan

Water permit

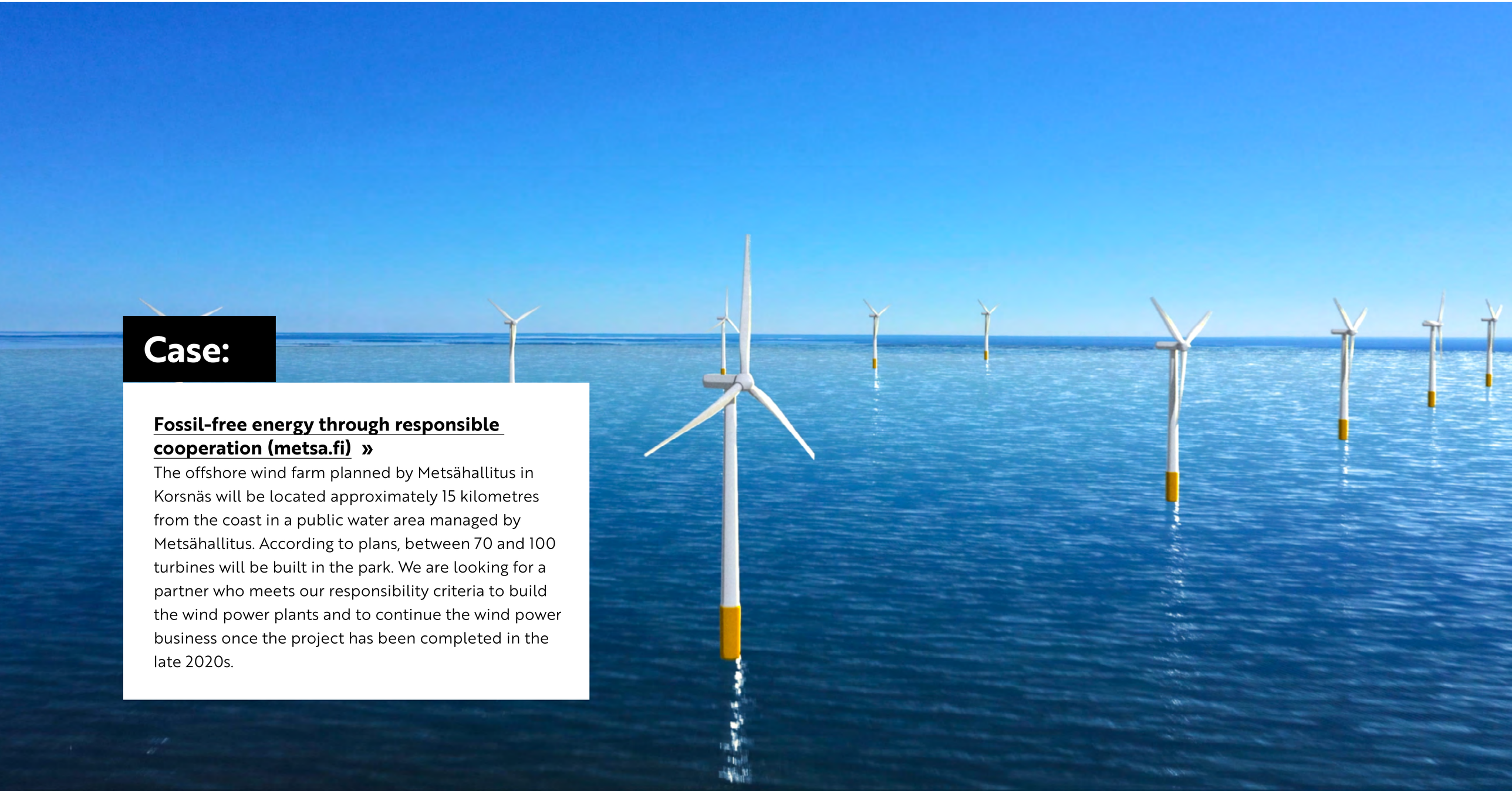
Building permits

Permission to set up an obstacle to air navigation
- Statement from the Border Guard

Procedures related to grid connection:
- Environmental Impact Assessment Procedure (EIA)
- Survey permit (National Land Survey of Finland)
- Project permit for constructing a high-voltage line
- Transfer procedure

Metsähallitus' work, about one year › **Auction, about one year** › **Project developer's work, approx. 5 to 6 years** › **Construction and operation**

A = Auction



Case:

Fossil-free energy through responsible cooperation (metsa.fi) »

The offshore wind farm planned by Metsähallitus in Korsnäs will be located approximately 15 kilometres from the coast in a public water area managed by Metsähallitus. According to plans, between 70 and 100 turbines will be built in the park. We are looking for a partner who meets our responsibility criteria to build the wind power plants and to continue the wind power business once the project has been completed in the late 2020s.

Seabed extraction as an alternative to gravel from eskers

MH-Kivi, a subsidiary of Metsähallitus, tested the extraction of seabed minerals off Helsinki in 2021. Rock materials from the seabed have so far only been used in very large-scale projects in Finland, including the construction of Vuosaari Harbour. The aims of the test extraction included, in particular, examining the suitability of these rock minerals as a raw material for concrete. The idea is to provide a sustainable and responsible alternative to gravel excavated from eskers.

The seabed rock materials will be extracted using environmentally sustainable techniques, and an environmental impact assessment will be required to obtain an environmental permit. The impacts of the extraction activities will also be monitored after the permit has been granted. In 2021, water permit monitoring programmes for the extraction of seabed rock materials were updated, for example with regard to sounding and monitoring of bird life. The updates will make it possible to assess the impacts and changes caused by the extraction more accurately. The permit areas for seabed rock material extraction are far away from the shore at sites where the water depth usually exceeds 15 metres.

Seabed minerals can be produced competitively and sustainably, and they have many uses. Metsähallitus currently has a permit to extract a total of five million cubic metres of marine rock materials from the areas of Itä-Tonttu and Soratonttu in Helsinki, or nearly ten million tonnes, and eight million cubic metres off Loviisa, which adds up to around 15 million tonnes.

We are involved in developing a more responsible mining and concrete industry

Mining activities and the minerals they produce are a key part of the transition towards lower-emission energy production and electrification of transport. In mining, prospecting and gold panning, we act in the interests of state-owned land and water areas.

Metsähallitus is a member of the Network for Sustainable Mining, which develops concrete operating models, solutions and practices for more responsible and sustainable mining activities and improved exploration processes in Finland. The common goal of this network and Metsähallitus is developing Finland into a pioneering country of sustainable mining, with an industry that takes due account of ecological values, the cultural and social environment, and other industries and businesses.

The Network for Sustainable Mining is a continuous discussion and cooperation forum for the mining industry and its stakeholders. It develops and customises the right tools for Finland to promote more responsible and more sustainable mining, to exploit the synergies between industries and businesses, and to prevent conflict.

SUSTAINABLE BUSINESS OPPORTUNITIES AND RENEWABLE SOLUTIONS

In 2021, self-assessments of mines that use the responsibility system prepared by the Sustainable Mining Network were verified for the first time. Independent certification company experts have verified five mines (Pyhäsalmi, Kevitsa, Siilinjärvi, Terrafame, Kittilä). More verifications will be carried out in 2022 and published separately. The results were published at a webinar on 20 January 2022

The Sámi Parliament and the Finnish Association for Nature Conservation, which were among the network's founding members, resigned from it in 2021 as they felt that the network had been unable to sufficiently promote the sustainability of mining in practice.

As an enabler of raw material deliveries to the concrete industry, we also participate in efforts to develop more environmentally and climate-friendly concrete. This is why we joined Betoniteollisuus association and Suomen Betoniyhdistys association in 2021.

Our goal is to be involved in making the concrete industry more responsible during its transition towards carbon neutrality. Thanks to our membership, circular economy issues and influencing their development are also in a key role.

More sustainably produced Finnish fish

Since 2019, we have participated in the Kalavaltio project and Aquaculture Innovation Programme. Building up sustainable aquaculture is one of the key objectives of both the Government's Aquaculture Strategy and the EU's Blue Growth Strategy.

The objective of the Kalavaltio project is to increase sustainable domestic fish farming in state-owned sea areas and to facilitate the launch of business activities in this industry. The project takes a wide range of environmental factors and social and economic criteria into account, using them as the basis for assessing sustainable areas and production volumes for fish farming. In 2021, we prepared four pilot sites for which we will apply for fish farming permits. They are located in Isokari and Kotka, in addition to two sites in Kaskinen. We will initiate an environmental impact assessment in Isokari in 2022.

The Aquaculture Innovation Programme examines the permit process and production sites of off-shore aquaculture. The extensive partner network of these projects provides a good starting point for developing the aquaculture sector.

In addition, a study on the suitability of Metsähallitus' areas for fish farming with different aquaculture techniques was launched by the Natural Resources Institute Finland during the year. A report on this study will be published in the Natural Resources Institute Finland's series in 2020.

SUSTAINABLE BUSINESS OPPORTUNITIES AND RENEWABLE SOLUTIONS

We improve opportunities for sustainable nature and wilderness tourism

Metsähallitus plays a key role in enabling responsible and sustainable growth in the value chain of nature and wilderness tourism. The service infrastructure and forest road network we maintain, sites offered for tourism companies, plans and land use planning in tourism areas, visitor centres, online services and hunting and fishing permits are examples of activities that also serve nature and wilderness tourism.

In 2021, we promoted responsible and sustainable tourism together with Metsähallitus' strategy streams with the aim of providing more opportunities for recreation and nature and wilderness experiences that promote health and wellbeing as well as improving our partners' opportunities to develop safe and sustainable nature and wilderness tourism. In particular, we analysed tourism and Metsähallitus' role as well as our operating methods from the perspectives of leadership, responsibility, customer relationship management and new products and services. We also engaged in this work our contracting partners in the tourism sector through a forum of nature tourism developers, in which nearly 200 tourism entrepreneurs took part.

Responsibility was identified as a leading theme of the work. In tourism, responsibility is increasingly visible as the selection of destinations, and tourists pay more attention to their footprint on the climate, nature and the destination. Tourists increasingly also want their trip to be meaningful and produce added value for the local population and the environment. Our tourism partners expect us to play a pioneering role in and share information about responsible and sustainable tourism, from nature conservation to business and the tourist's choices.

The tourism stream concluded its work in February 2022. The resulting development measures will help us develop our capacity to serve the tourism sector better than before. Our goal is a proactive, responsible and customer-oriented approach. New products or services may also be in the pipeline as we come up with ideas together with Metsähallitus' personnel and entrepreneurs.

Case:

Metsähallitus wishes to provide better service for tourism (Metsä.fi magazine in Finnish) »

We will develop our capacity to serve the tourism sector better, with the goal of adopting a proactive, responsible and customer-oriented approach.

Photo: Harri Tarvainen

SUSTAINABLE BUSINESS OPPORTUNITIES AND RENEWABLE SOLUTIONS

We develop climate effective forestry planning

In 2021, we continued the efforts to develop forestry planning with the Natural Resources Institute Finland and Arbonaut Oy and determined carbon balance estimates for drained peatlands in multiple-use forests on the basis of up-to-date forest resource data and drain depth data interpreted with the help of laser scanning technology. The carbon balance estimate used to support planning in the GIS system covers a total of one million hectares of state-owned multiple-use forests.

Local carbon balances can, in particular, be used to map high calculated carbon emission sources in the soil. When planning forest management measures on peatlands, we also take into account the regulation of groundwater levels. With the help of new data that serve practical planning, we can target, scale and carry out more climate effective measures, for example in connection with fertilisation, fellings and drain maintenance.

We will increase continuous cover forestry, especially on peatlands, where we will reduce the total amount of greenhouse gas emissions from soil generated during the regeneration phase of periodic cover silviculture as well as nutrient and solids emissions into waters. The carbon balance data can also be used to select restoration sites on drained peatlands.

In 2021, the target for continuous cover forestry set by the owner was 25% of regeneration-type fellings. Due to extensive damage to forests caused by storm Paula in Koillismaa and Kainuu, the surface area of continuous cover forestry increased to 40% of regeneration-type fellings in all multiple-use forests. We are also collecting information and experiences related to the possibilities of using continuous cover forestry on observation sites established in 2019. The purpose of these sites is to produce information not only on forest regeneration, growth and timber production but also on the impacts of large-scale and sustained continuous cover forestry on biodiversity in forest habitats, the damage resistance of trees and the profitability of forestry. As continuous cover forestry becomes more widespread, knowledge of its cost impacts will also be accumulated. In 2021, timber harvesting was over 40% more expensive when using continuous cover techniques than in clear-fellings typical of periodical silviculture. More accurate data on other factors related to profitability will be obtained as the monitoring continues.

We will ensure climate-wise and sustainable use of natural resources (metsa.fi) »

Case:

Lignin's rise from a minor role to the limelight (Metsä.fi magazine in Finnish) »

New uses as a raw material for various bio applications are being sought for lignin, which is formed as a by-product of pulp production. Lignin is used to produce various chemicals and materials, and it is considered an interesting raw material of the future, especially for technical coal and composites.

Photo: Katri Lehtola

SUSTAINABLE BUSINESS OPPORTUNITIES AND RENEWABLE SOLUTIONS

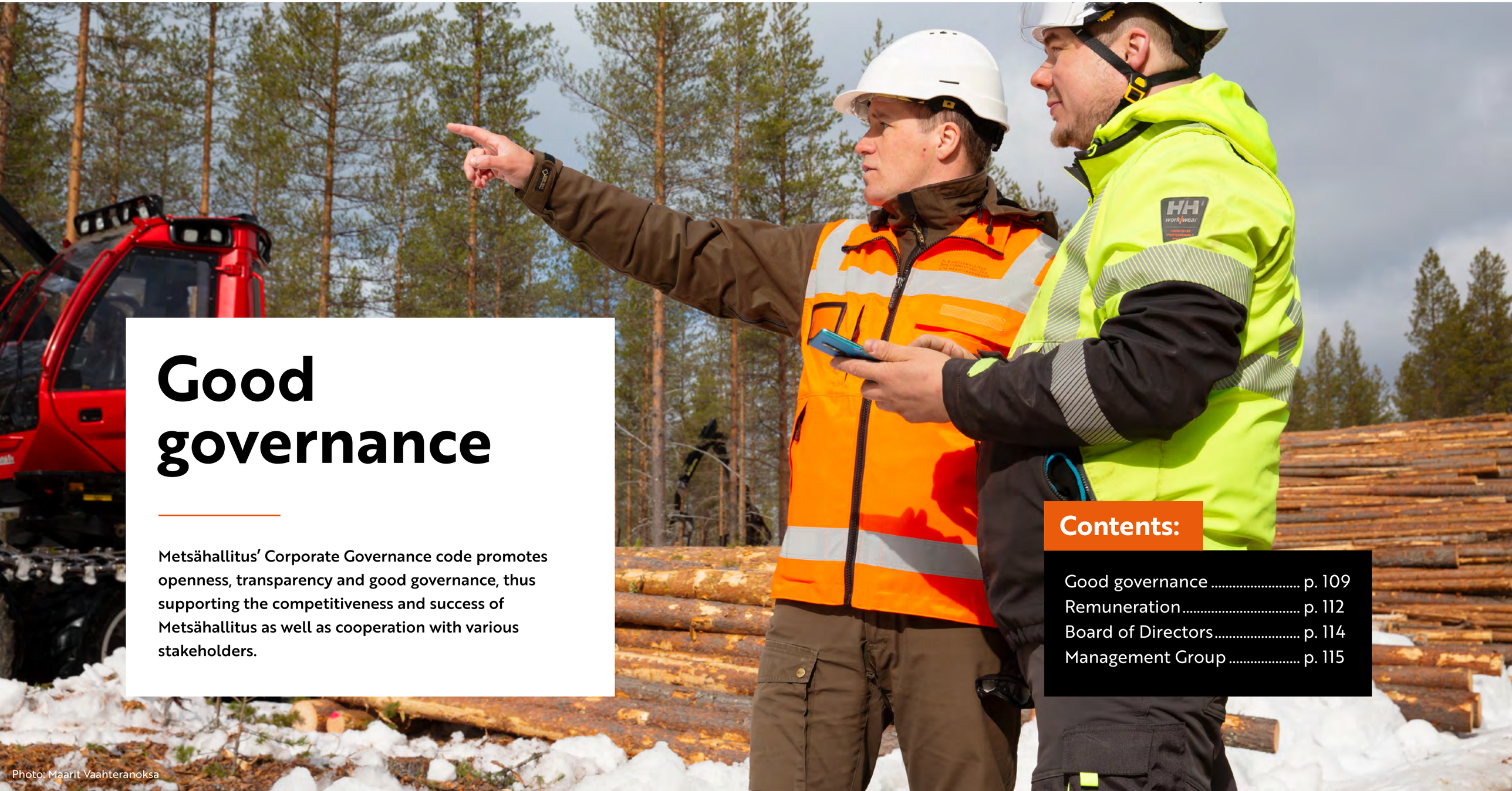
Growing demand for natural products

We also promote the exploitation of multiple-use forests for various natural products. Studies have shown that products collected in a clean environment have numerous effects on promoting health and wellbeing. In 2021, we introduced a natural product licence sold in the Eräluvat online shop for collecting natural products that are not within the scope of everyman's rights, including young tips of the spruce, chaga mushrooms and resin.

There is increasing demand for mor in landscaping and urban construction. Mor has mainly been collected in Kainuu on sites best suited for this purpose before final felling. We introduced a new operating model in 2021 that aims to promote the access of new mor harvesting entrepreneurs to the market and to ensure a fair producer price level.

We are also actively involved in procuring and developing new natural materials to replace peat. Suitable recently drained low-productivity lands in Western Finland have been designated for collecting sphagnum moss.

.



Good governance

Metsähallitus' Corporate Governance code promotes openness, transparency and good governance, thus supporting the competitiveness and success of Metsähallitus as well as cooperation with various stakeholders.

Photo: Maarit Vaahteranoksa

Contents:

GOOD GOVERNANCE

Management principles

The Board of Directors is responsible for the governance and strategic management of Metsähallitus and the proper organisation of its work. The Government appoints members to the Board of Directors for three years at a time.

The Managing Director, who is appointed by the Government and who carries the title of Director General, is responsible for the management and development of Metsähallitus' work and for implementing the decisions of the Board of Directors. The Managing Director is also responsible for the operational management of Metsähallitus and for ensuring that financial accounts are kept in compliance with the law and financial management is reliably organised.

An Executive Director appointed by the Government is responsible for the unit in charge of Metsähallitus' public administration services. The public administration services concerning fishing, hunting and wilderness supervision in Parks & Wildlife Finland are managed by the Director of Game and Fisheries Services.

Most of the matters submitted to the Board of Directors for consideration are prepared by the Management Group, which assists the Director General and deals with matters assigned to it by the Director General. The Director General chairs the Management Group and decides on its composition.

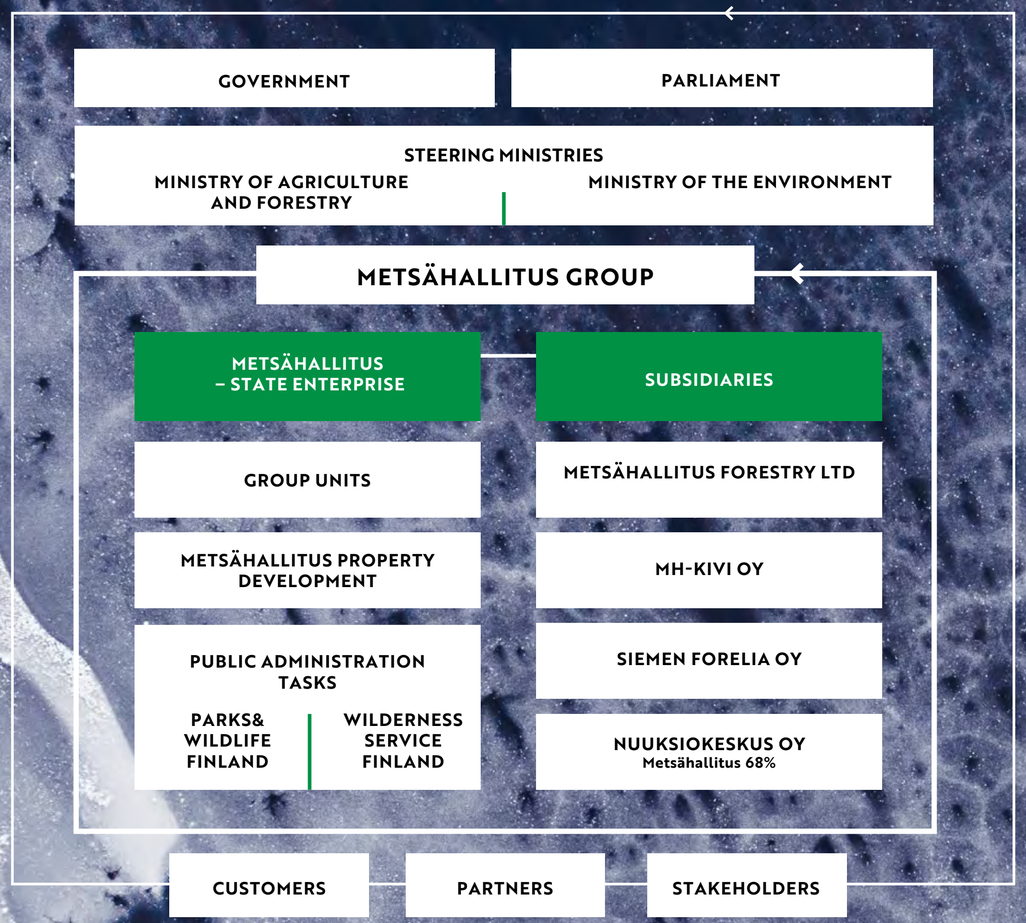
Work and cooperation in the regions are reinforced by regional management groups operating in Lapland, Ostrobothnia–Kainuu and Southern Finland.

The regional management groups see to the overall interests and synergy of Metsähallitus and liaise between the units. The management groups also formulate the views of Metsähallitus and ensure that the regional perspective is considered in the opinions issued by Metsähallitus. The regional management groups report to Metsähallitus' Management Group and the management groups of individual business units.

Internal audit

The Director General is responsible for arranging internal control. The Board of Directors approves the annual plan for the internal audit. The planning, outsourcing and monitoring of audit activities are the responsibility of the Director of Risk Management, who is supported by the Audit Committee of Metsähallitus' Board of Directors. Internal audit reports to and receives assignments from the Board of Directors and the Director General.

Metsähallitus organisation



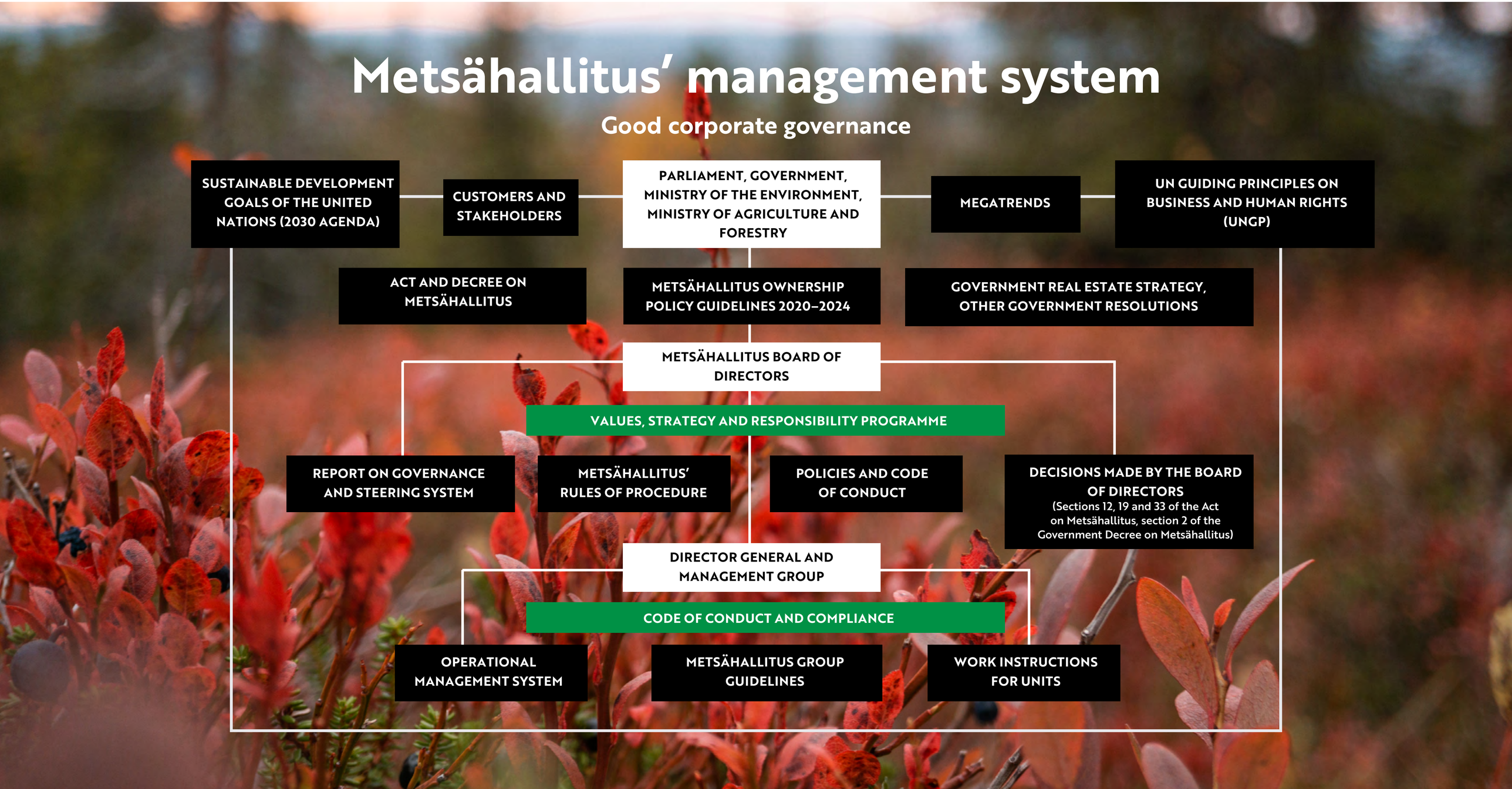
Our annual targets are approved by Parliament as part of the central government budget. The Ministry of Agriculture and Forestry is responsible for our performance guidance. Within its remit, the Ministry of the Environment also steers the performance of Metsähallitus' public administration tasks.

Under the State's ownership policy guidelines, we are required to

- manage state-owned land and water assets as a whole with the aim of achieving the best overall societal benefits and cost-effectiveness
- maintain and develop biodiversity
- support efforts to achieve Finland's carbon neutrality targets through our work
- produce socially sustainable, ethically acceptable and cost-effective solutions
- ensure that the management, development and reporting of our activities are based on recent, concrete and transparent information and indicators describing the key objectives of our work
- map areas critical for soil emissions and reduce emissions in site management
- step up cooperation aiming to promote the Sámi culture and continue applying the Akwé: Kon model
- develop cooperation aiming to promote reindeer husbandry as a sustainable, profitable and culturally significant industry.

Metsähallitus' management system

Good corporate governance



RENUMERATION

Remuneration is based on strategy objectives

In its remuneration policy, Metsähallitus is guided by the Government Resolution on State Ownership Steering Policy and the ownership policy guidelines for Metsähallitus for the years 2020–2024. Remuneration is based on the objectives laid out in Metsähallitus' strategy and helps the Metsähallitus Group to work towards achieving these objectives.

Remuneration is reasonable and based on fairness, and it aims for better performance and internal unity and efficiency of the Group's operations. Metsähallitus and its subsidiaries have similar remuneration practices as unlisted state-owned companies operating on a commercial basis.

In Metsähallitus Group, the remuneration system covers the entire personnel. In this respect, the personnel are divided into four groups: the Managing Director; Management Group members and the Managing Directors of the subsidiaries; other directors by decision of the Managing Director; and personnel. In 2021, the common performance bonus criteria for all personnel members were the overall business profit of Metsähallitus and a unified and responsible Metsähallitus, which is measured by the successful implementation of the Responsibility Programme, the customer experience indicator and, for the part of the management, also personnel experience. In addition, the units have their own complementary indicators that describe their activities.

Remuneration and fees 2021

The remuneration and other fees paid to the Managing Director and Board members totalled EUR 439,278 in the financial year (2020: EUR 551,216).

RENUMERATION

Fees paid to the members of Metsähallitus' Board of Directors and committee chairs

The fees paid to the Chair, Vice Chair and other members of Metsähallitus' Board of Directors have been valid since 1 June 2016. The monthly remuneration and attendance fees are taxable income.

The Board of Directors met 14 times in 2021. The attendance rate at Board of Directors' meetings was 100%. The Audit Committee met 11 times and the Human Resources Committee 7 times.

Metsähallitus Board of Directors

FEES

Chair EUR	Vice Chair EUR	Other Board members EUR
2,000 /month	**1,300 / month**	**1,150 / month**
+ attendance fee EUR 600/meeting	+ attendance fee EUR 300/meeting	+ attendance fee EUR 300/meeting

Committees

FEES

Chair of the Audit Committee EUR	Chair of the Nomination and Remuneration Committee
1,300 / month	**1,300 / month**
+ attendance fee EUR 600/meeting	+ attendance fee EUR 600/meeting

BOARD OF DIRECTORS

The Government appoints a Board of Directors for the unincorporated state enterprise for three years at a time. One Board member must be from the Ministry of Agriculture and Forestry, one from the Ministry of the Environment and one from Lapland. One Board member must represent the personnel of the unincorporated state enterprise and be employed by it.

The Government appointed a Board of Directors for Metsähallitus for the period 1 April 2019–31 March 2022.

Timo Laitinen
Chair
Director General, State Treasury
Board member since 2016

Sanna Paanukoski
Vice Chair
Ministerial Adviser, Ministry of Agriculture and Forestry
Board member since 2020

Pekka Hautala
Board member
Ranger, Metsähallitus personnel representative
Chief Shop Steward, Trade Union for the Public and Welfare Sectors JHL
Board member since 2019

Johanna Ikäheimo
Board member
Chair of the Board of Directors, Lappset Group Ltd
Fennia Mutual Insurance Company, Board member
Chair of FEPI – Federation of the European Play Industry
Chair of the Advisory Council of Lapland University Consortium
Board member since 2016

Simo Rundgren
Board member
Regional representative, Kolari
Vicar
Board member since 2016

Jussi Saukkonen
Board member
Director, Finance, Development and HR, Isku Interior Ltd.
Chair of Metsähallitus Audit Committee
Board member since 2019

Ismo Tiainen
Board member
Director General of Administration and International Affairs, Ministry of the Environment
NEFCO – Nordic Environment Finance Corporation, Board member
Board member since 2020

Liisa Tyrväinen
Board member
Research Professor, Natural Resources Institute Finland
WWF Board of Trustees, member
Board member since 2016

MANAGEMENT GROUP

The Management Group assists the Director General in managing the state-owned enterprise. The Management Group comprises the following members assigned by the Director General: directors of the business units, director of the public administration services unit and the directors of the Group units.

Juha S. Niemelä
Managing Director

Tuomas Hallenberg
Director, Metsähallitus Property Development

Henrik Jansson
Executive Director, Parks & Wildlife Finland Public administration tasks and Parks & Wildlife Finland

Terhi Koipijärvi
Director, Communications, Strategy and Responsibility

Jussi Kumpula
Managing Director, Metsähallitus Forestry Ltd

Heli Lehtonen
Director of Finance

Susanna Oikarinen
General Counsel

Anna-Leena Ruuth
Director of Information Management

Jyrki Tolonen
Acting Director (until 31 March 2022) Wildlife Service Finland

Terhi Vires
Director of Human Resources

REPORTING PRINCIPLES AND GRI TABLE

Reporting principles

This report covers the operations of Metsähallitus and its subsidiaries in 2021. The report data were collected internally with the help of experts and compiled into a report in the Communications, Strategy and Responsibility Unit. In addition to the annual and responsibility reports, the report and financial statements that contain the Group's financial information are part of this set.

The GRI standard has been used as the frame of reference for the report, and it mainly meets the requirements of the GRI core option. The report also takes into account the EU's non-financial reporting framework. The selection of reported key figures was guided by a materiality analysis. With the exception of the financial statements data, the information of the responsibility report has not been verified by an external party.

Further information about the report and responsibility at Metsähallitus is available from responsibility expert Hanna Kelola-Mäkeläinen (hanna.kelola-makelainen@metsa.fi).

Case MH 1355/2022.

Calculation principles

Climate programme

The baseline level of the Climate Programme data was calculated for 2018. The calculations are based on data produced by the 12th National Forest Inventory (2014–2018). MELA software and greenhouse gas inventory methods were additionally used in the calculations. The development of the carbon sink and carbon storage is assessed annually on the basis of this data.

Carbon handprint:

The carbon handprint estimate takes into account wind power built on Metsähallitus' land, energy wood and the use of renewable wood raw material in products.

In the method used to calculate the carbon handprint of wind power, it was assumed that wind power will replace some of the average annual emissions produced by the electricity market system. This is described by the residual distribution of electricity calculated by the Energy Agency, which gives the unverified distribution of electricity production in Finland. Our carbon handprint calculations for wind power only include the carbon dioxide emissions based on the residual distribution. Other greenhouse gas emissions from energy production were not included. Neither does the figure factor in emissions from the construction of power plants or the production and transport of fuels.

For energy wood, the default carbon dioxide emission coefficient of peat in Statistics Finland's fuel classification was used in the calculation. No other greenhouse gas emissions were taken into account. Neither does the figure include emissions from peat or energy wood harvesting and transport or power plant construction. Emissions from the harvesting and transport of energy wood are taken into account in Metsähallitus' carbon footprint.

Our customers manufacture different bioeconomy products from the roundwood we supply and use it in their products to replace fossil raw materials and fuels. The resulting compensatory effects reduce greenhouse gas emissions that drive climate change.

REPORTING PRINCIPLES AND GRI TABLE

Our handprint was calculated by putting our share in the timber market in proportion with the research findings of Hurmekoski et al. (2020).

Carbon footprint:

The emission calculation was produced in cooperation with Metsäteho Oy, using Metsäteho's emission calculation model and separate calculations. The calculation is always made for the previous year, so the figures for 2021 apply to year 2020.

The data for the carbon footprint calculations of air and rail travel and ICT are obtained from service providers. The carbon footprint calculation for buildings is produced by Metsähallitus on the basis of building characteristics and energy consumption data.

As an exception to the GHG protocol, the carbon footprint calculation does not distinguish between in-house work (direct 'downstream' emissions) and outsourced work (indirect 'upstream' emissions) when examining field work. While the majority of the work carried out in the forest is outsourced to external contractors, some clearing work is carried out by Metsähallitus' personnel, for example, which is not separated in the emissions calculation model used. Additionally, some of the emissions from motoring are included in the carbon footprint of forest work, which results in an overlap in the breakdown following the GHG protocol.

The calculations do not include emissions related to procurements, such as the manufacturing of office supplies. Neither has it been possible to take into account all the energy consumption of buildings and fuel consumption of motor vehicles or, for example, climate emissions from the construction of premises or emissions from combustion of firewood.

The carbon footprint calculation is an estimate based on the assumptions made in the calculation and the baseline data obtained from reporting. The accuracy of the assessment will improve as more research evidence is accumulated and the input data becomes more accurate.

REPORTING PRINCIPLES AND GRI TABLE

102 - GENERAL CONTENT

GRI CODE		content	PAGE
Organisational profile			
102	1-7	Metsähallitus' activities, market areas, countries of operation, and ownership structure	7–11; 110
102	8	Information on employees and other workers	45
102	9	Supply chain	81-82
102	10	Significant changes to the organisation and its supply chain	No significant changes
102	11	Application of precautionary principle	33–34; 37–38
102	12	External principles or initiatives promoted by Metsähallitus	7; 16
102	13	Membership in associations and advocacy organisations	33; 101–102
Strategy			
102	14	Statement from the Director General	4–5
102	15	Key impacts, risks and opportunities	13–15; 34; 63; 97–101
Ethics and integrity			
102	16	Values and business principles	14; 34; 50; 53; 85–86; 110
102	17	Mechanisms for reporting abuses	37

102 - GENERAL CONTENT

GRI CODE		content	PAGE
Board of Directors			
102	18	Governance structure	111
102	19	Delegating authority	109; 114–115
102	20	Executive-level responsibility	114–115
102	22-24	Selection, composition and chair of the Board of Directors	109; 114
102	33	COMMUNICATING CRITICAL CONCERNS	37
102	34	CRITICAL CONCERNS	37
102	35-36	Remuneration for the Board of Directors and upper management and process for determining remuneration	112–113
Stakeholders			
102	40-43	Metsähallitus' stakeholders and interaction	17–20; 21–25; 47–49; 78; 94–95
102	44	Key topics and concerns raised by stakeholders	23–25; 42; 47–49
Reporting practice			
102	45	Companies included in the consolidated financial statements	116
102	46	Specification of report content	20
102	47	List of material topics	14; 20; 31
102	48-49	Changes in information or changes in the extent of reporting	No changes
102	50-56	Information about the report	116–118

REPORTING PRINCIPLES AND GRI TABLE

103 - MANAGEMENT MODEL

GRI CODE		content	PAGE
103	1	Boundaries related to the material topics	29; 116–118
103	2	Components of the management model	27–29; 33–34; 35–38; 40; 53–54; 109; 111
103	3	Evaluation of the management model	27; 109

200 - ECONOMIC IMPACTS

GRI CODE		content	PAGE
Economic performance			
201	1	Direct economic added value generated and distributed	81–82
201	2	Financial implications and other risks and opportunities for Metsähallitus activities due to climate change	34; 58–60; 63–64; 65
201	4	Financing received from the government	7; 65
Indirect economic impacts			
203	1	Infrastructure investments and non-profit services supported and their impacts	85–86; 89–91; 94–95
203	2	Significant indirect economic impacts and their extent	82–86
Procurement practices			
204	1	Procurement from local suppliers	81–82; 83–85
Procurement practices			
205	2	Communication and training related to anti-corruption policies and practices	29; 35
Taxes			
207	1	Tax strategy	83
207	4	Country-specific tax reporting	83

REPORTING PRINCIPLES AND GRI TABLE

300 - ENVIRONMENTAL IMPACTS

GRI CODE		content	PAGE
Biodiversity			
304	1	Operational sites located in protected areas or areas of high biodiversity value	11
304	2	Significant impacts of activities, products and services on biodiversity	45; 89–91; 97–107
304	3	Habitats protected or restored	11; 67–70
304	4	IUCN Red List species and national conservation list species with habitats in areas affected by activities within Metsähallitus' sphere of influence	72–75; 77
Emissions			
305	1	Direct (Scope 1) greenhouse gas emissions	60–61
305	2	Indirect (Scope 2) greenhouse gas emissions	60–61
305	3	Other indirect (Scope 3) greenhouse gas emissions	62
305	5	Reduction of greenhouse gas emissions	60–62
Environmental compliance			
307	1	Non-compliance with environmental laws and regulations	54–55
Environmental assessment of suppliers			
308	2	Negative environmental impacts in the supply chain and actions taken	63

400 SOCIAL IMPACTS

GRI CODE		content	PAGE
Employment			
401	1	New employee hires and employee turnover	45
Occupational safety and health			
403	2	Risk identification, assessment, and incident investigation	44
403	3	Occupational health services to prevent risks	44
403	5	Occupational health and safety training	44
403	9	Occupational accidents	44
Training and education			
404	1	Average annual training hours per person	40; 45
404	2	Programs for upgrading employee skills and transition assistance programs	40
Diversity and equal opportunityt			
405	1	Diversity of governance bodies and employees	42–43; 45
Non-discrimination			
406	1	Incidents of discrimination and corrective actions taken	37; 42–43
Human rights assessment			
412	1	Operations that have been subject to human rights reviews or impact assessments	50
412	2	Employee training on human rights policies or procedures	51
412	3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	48–49; 98

REPORTING PRINCIPLES AND GRI TABLE

400 SOCIAL IMPACTS

GRI CODE		content	PAGE
Local communities			
413	1	Operations with local community engagement, impact assessments, and development programs	17–20; 48–49
Public policy			
415	1	Political contributions	Metsähallitus does not make political contributions
Socioeconomic compliance			
416	1	Assessment of the health and safety impacts of services	91
Customer's privacy protection			
418	1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	37
Compliance			
419	1	Non-compliance with laws and regulations in the social and economic area	51

Annual Report and Financial Statements

Click here »

Photo: Katri Lehtola