



NEOVA GROUP SUSTAINABILITY REPORT 2021

Creating green growth through
net positive products and services

SUSTAINABILITY HIGHLIGHTS 2021

In occupational safety of our operations, **Finland** and **Estonia** reached our **zero accidents** goal in 2021.



The solid by-product of peat based Neova Ventures **biostimulant production** was approved for a list of biochar feedstocks by **European Biochar Certification** system.

Soil CO₂ emissions from our peat production areas have reduced by

18%

from 2018 level.



Our **Green Factory** concepts include clear environmental sustainability **goals and actions** for all our operations.

Neova Group launched **three wind power projects** in **Finland** to utilize former peat production areas in green energy production.



We have increased the share of recycled plastic in Kekkilä-BVB packaging materials by

50%

i.e. from share of 19% (2020) to 29% (2021)



81%

of our employees who responded to our internal Sustainability Survey confirmed “**they are motivated** to advance sustainability in their everyday work”

Already

50%

of the peat used by Kekkilä-BVB had **Responsibly Produced Peat (RPP)** certification (2020 **20.5%**).



Neova Group restores

1,000

hectares of old peat production area in Estonia as part of the **EU WaterLANDS** project.



We have converted

9,000

hectares of closed energy peat production areas **to next land use** since 2019.

Sustainability is part of our **short-term incentive**

target of every permanent employee in our organisation in all countries.



Neova Group received **Great Place to Work** goal certification in **Finland, Sweden and Estonia**. **Our Trust Index was 70%.**

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SUSTAINABILITY IS KEY TO THE LONG-TERM SUCCESS OF NEOVA GROUP



Today sustainability is essential part of any successful business. The key is to understand the continuously evolving stakeholder expectations on sustainability topics, anticipate the changes in your business environment from sustainability perspective and make sustainability a competitive advantage for your business.

In Neova Group, we have consistently developed our sustainability strategy with clear and ambitious target setting and ensured that our sustainability activities are integrated into our business strategies, business development plans and functional plans. During 2021 we did a major review of our sustainability strategy and this 2021 Sustainability Report reflects the renewed sustainability aim, themes, mid-term and long-term goals for Neova Group.

Sustainability – taking concrete actions through teamwork

Sustainability management is about taking concrete actions that have an impact. In this 2021 Sustainability Report you will find how we have successfully executed a comprehensive activity plan on environmental and social sustainability areas and how we are making steady progress in reaching our ambitious sustainability targets.

Sustainability management is very much about teamwork. We will not reach the targets and will not embed a purpose driven culture without inspiring and engaging our whole personnel in sustainability work, engaging our value chain partners i.e., suppliers and customers and establishing new coalitions and collaborations with NGOs, peer companies and industry associations. We have taken great steps in these engagement activities, but we can do even more. And that is what we are committed to do in an open and transparent way through active internal and external communication and dialogue.

Enjoy reading about our sustainability journey

We are proud of the progress we are making and the sustainability journey we are on. Sustainability is and will be at the heart of Neova Group's strategy and purpose – Creating Green Growth. Enjoy reading this 2021 Sustainability Report and see the progress in our sustainability strategy execution together with some exciting sustainability cases!

PETRI JÄRVINEN

Chief Supply Chain and Sustainability Officer

SUSTAINABILITY AT NEOVA GROUP

Renewed sustainability strategy with clear aim, themes, mid-term and long-term goals guiding the work in Neova Group.

During Autumn 2021 we conducted a comprehensive review of our sustainability strategy. We engaged several internal working groups in the areas of environmental and social sustainability and conducted a materiality assessment by interviewing our key stakeholders covering representatives from owners, Board of Directors, Supervisory Board, EU parliament, NGOs, Kekkila-BVB customers (professional growers, retailers), Carbons customers and R&D key stakeholders.

We listened to our employees through a sustainability survey to understand what aspects of sustainability are important, where have we succeeded and what could we improve in our sustainability work. We conducted a thorough evaluation of using additional new external sustainability references (frameworks/commitments/certificates/memberships) to guide Neova Group's and its businesses sustainability work going forward. Benchmarking of leading companies in sustainability provided us an outside in view for renewal of our sustainability strategy.

As a result, we now have a fully aligned and renewed Neova Group sustainability strategy for 2022–2025:

- Our sustainability aim has been updated and aligned with Neova Group purpose: Creating green growth through net positive products and services.
- The key [UN Sustainable Development Goals \(SDGs\)](#) that our products and services contribute the most have been clarified.
- Simplified themes have been selected for environmental and social sustainability.
- Mid-term goals by 2025 have been renewed and updated.
- Sustainability KPIs have been extended with clear target setting from 2022 onwards at Neova Group level.
- Additional external sustainability references (frameworks/commitments/certificates/memberships) have been chosen to guide Neova Group's sustainability work going forward.
- Key sustainability activities for 2022 have been defined for Neova Group and its businesses and functions and incentivised as part of annual planning and target setting.



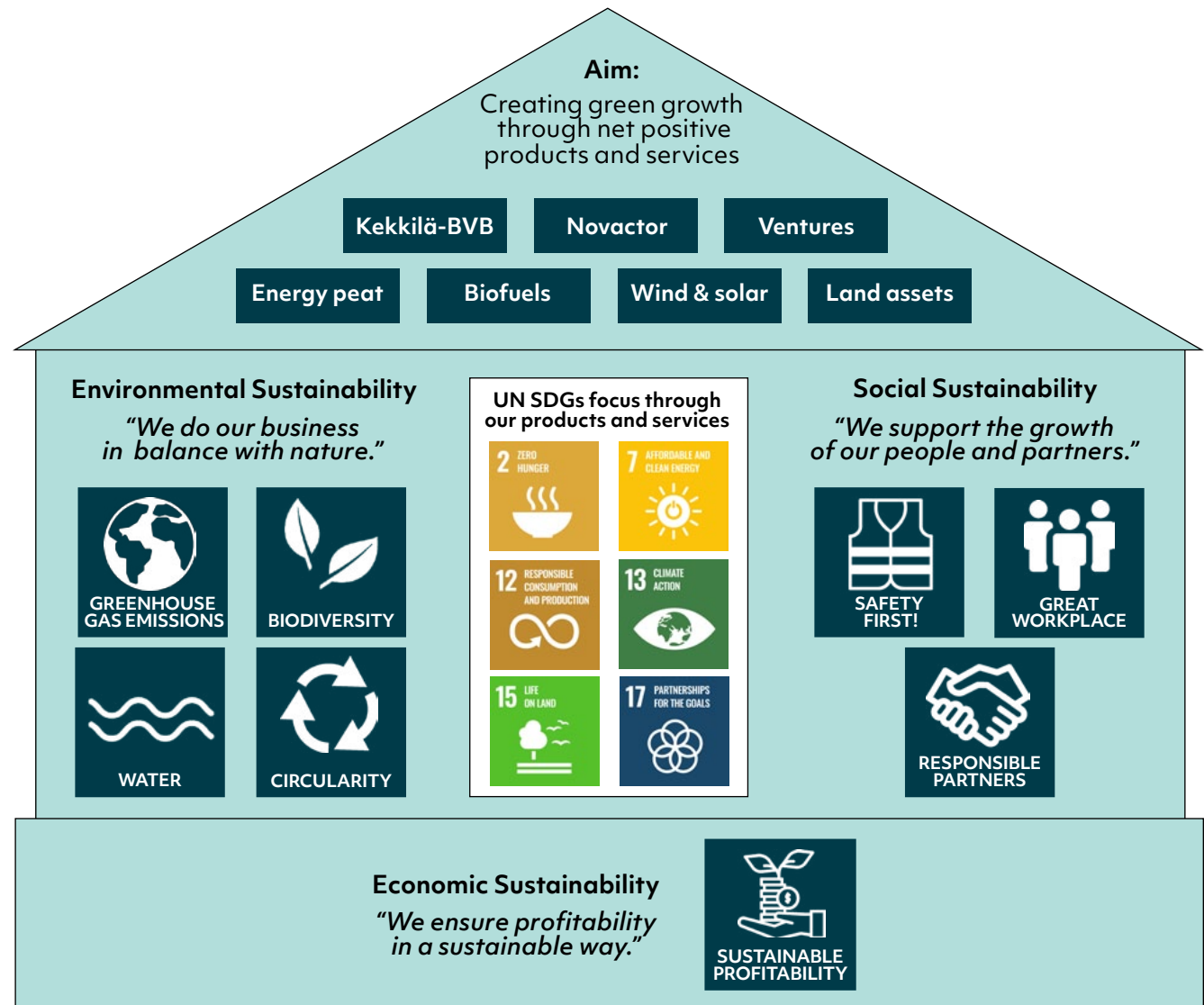
The renewed sustainability strategy ensures that sustainability is in the core of Neova Group's strategy and purpose – Creating Green Growth. Our sustainability aim is to create green growth through net positive products and services by considering the impact on environment, health, society, and knowledge. Our mid-term and long-term goals have been defined for the three areas of sustainability (environmental, social and financial sustainability) with selected themes:

- We do our business in balance with nature.
Themes: Greenhouse gas emissions, Biodiversity, Circularity and Water.
- We support the growth of our people and partners.
Themes: Safety first!, Great workplace, Responsible partners.
- We ensure profitability in a sustainable way.

UN Sustainable Development Goals are used as our key external sustainability framework to align our activities on the most impactful areas. We as Neova Group are committed to making the UN Global Compact and its principles on human rights, labour, environment, and anti-corruption part of the strategy, culture and day-to-day operations of our company.

We respect and observe international human and labour rights and are committed to UN Guiding Principles on Business and Human Rights and the Fundamental Conventions of the International Labour Organization. Our [Corporate Responsibility policy](#) describes our

Neova Group sustainability strategy



operating principles in health & safety, environment and quality matters.

Sustainability strategy is in line with our stakeholder expectations

We regularly conduct materiality assessment to ensure that the insights from the materiality analysis strongly influence our approach to managing our impacts, our target setting and activities and the content and struc-

ture of our reporting. We as well regularly benchmark leading companies and peer companies on their sustainability approach and review regulatory requirements and developments.

Sustainability tightly governed within Neova Group

Sustainability at Neova Group and the sustainability strategy are led at the Group Management Team

level by the Chief Supply Chain and Sustainability Officer, with the Director, Group Operational Excellence and Sustainability in charge of coordinating the implementation. Business management is in charge of the planning and implementation of the business specific sustainability roadmaps. The Group Chief Financial Officer is responsible for reporting on economic responsibility.

The Director, Group Operational Excellence and Sustainability is responsible for areas related to environmental sustainability and occupational safety and the Group Chief HR Officer is responsible for areas related to employee wellbeing and occupational health. Sustainability implementation is regularly followed-up by the Audit Committee. Sustainability report is reviewed and approved by Neova Group's Board of Directors and the Audit Committee.

We use following processes to ensure effective governance on sustainability topics:

- Board of Directors and Group Management Team guidance and involvement.
- Code of Conduct and other Group Policies (including mandatory e-learning).
- Risk management (including assessment of sustainability risks).
- Sustainability related incentives for management and whole personnel.
- Sustainability KPIs and reporting (disclosure and transparency).

Our recent materiality assessment (conducted during July-November 2021) and benchmarking indicates that we need to continue / improve our focus on:

- **Ensuring holistic management** of all aspects of sustainability (environmental, social and economic).
- **Reducing GHG emissions in the end-to-end value chain** i.e., extending the focus from scope 1 and 2 emissions (own operations and purchased energy) to scope 3 emissions (suppliers and product end use).
- **Enhancing biodiversity.**
- **Improving circularity** within our end-to-end value chain including the circularity of the raw materials and packaging materials we use and products we sell.
- **Increasing the use of sustainable raw materials.**
- **Having good standards on social sustainability topics** such as effective health and safety management, employees are cared for, work councils are respected, ethical statements are made by the business, no corruption, diversity and local community work etc.
- **Establishing transparency** of environmental and social sustainability performance and practices in the end-to-end value chain (especially raw material sourcing).
- **Stepping up communications effort** to get through the growing media and active carbon net positive story with facts – both to decision makers and public opinion.
- **Reviewing use of land assets** as a business opportunity to mitigate climate change and enhance biodiversity.
- **Making an impact through collaboration** within the ecosystem / industry and with local producers and communities.
- **Following up, taking actions and influencing on EU regulation and development** related to sustainability such as EU Fit for 55 objectives, EU taxonomy criteria, LULUCF regulation and EU Corporate Sustainability Reporting Directive (CSRD).



Stakeholder engagement and effective internal and external communication are vital

Neova Group's stakeholder engagement starts at the local level and extends all the way to international activities across national boundaries.

Continuous dialogue, feedback and on-going cooperation are the key methods for promoting mutual understanding between stakeholders and Neova Group. We aim to build networks with important parties as well as regularly collect and share information that is

relevant to the Group's business and customers. Feedback from stakeholders is one of the inputs considered in the development of products and services, and it also influences how the company operates. We also monitor and evaluate public discussion.

The significance of international cooperation is constantly growing in response to the internationalisation of markets, research, and regulation. Neova Group companies in various countries are active members of local and international associations (e.g., [Growing Media Europe](#)). International advocacy work is focused on EU bodies in Brussels.

During 2021 stakeholder engagement work has especially focused on the acceptability of peat for growing media and alternative uses of peat. This has required and will continue to require meaningful dialogue with decision and policy makers in EU and parliament representatives in our key markets in EU.

Internally we aim to instil a purpose driven culture to inspire and engage our personnel. Effective sustainability communication and dialogue plays a key role in this. As well engaging our partners in value chain and establishing coalitions and collaborations are important ways to progress our sustainability work.

Key updates to our management approach during 2021

2021 has been a year of execution of our sustainability plans and communicating the progress in our sustainability activities extensively both internally and externally.

Last year, we paid special focus in sustainability communication: 116 external articles were published about us and we ourselves created 158 sustainability posts in our social media channels as well as 100 articles in our Neova Group intranet site, and conducted several internal sustainability information sessions for our employees.

In the [Great Place to Work](#) survey conducted in October 2021 we got an excellent score of 78% (% of replies for 'often true' or 'almost always true') on our sustainability work to the statement "Sustainability (corporate responsibility) is on good level in our company's operations." In addition, 81% of our employees who responded to our internal Sustainability Survey confirmed "they are motivated to advance sustainability in their everyday work". These are a recognition that our employees are engaged in sustainability work and that they are proud of the direction we have set for our sustainability work.

To further engage our personnel we included sustainability in the short-term incentive target for all employees in 2021. Relevant sustainability targets were selected for each business, function and team. The same approach will be used for 2022 target setting.

The use of external sustainability references is important part in the credibility of our sustainability work both internally and externally. During 2021 we conducted a major review of what references we use today and evaluated what new references would be useful in guiding our sustainability work. As a result we concluded that we will expand the use of external sustainability references in 2022 (see more detail in [Appendix 2](#)). ■

External sustainability references guiding Neova Group's and its businesses' sustainability work

* References to be implemented during 2022.

Impact materiality frameworks



UPRIGHT PROJECT

Methodology frameworks for emission calculations



Sustainability commitments



Product / site driven sustainability certifications



Management system certifications



ISO 9001:2015
Quality management systems

ISO 14001:2015
Environmental management systems

ISO 45000 FAMILY
OCCUPATIONAL HEALTH AND SAFETY

Non-competitive collaboration forums



Financials materiality frameworks



TCFD
TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

WE DO OUR BUSINESS IN BALANCE WITH NATURE



We are committed to minimise the harmful environmental impacts of our operations.

In 2021 we updated a common Neova Group sustainability strategy including our goals for environmental sustainability covering greenhouse gas emissions, biodiversity, circularity and water. As part of this work, we also defined a Green Factory concept with 2025 goals & key performance indicators for Kekkilä-BVB, Peat & Sphagnum, Pellet, Wood & Activated Carbons operations. For 2022 each of our businesses has an environmental sustainability programme which specifies the most significant annual improvement targets to move towards our Green Factory concept. We also started to define our Green Office concept, and will continue to set concrete goals and actions for that.

Overall, management system certification, covering both ISO 9001 quality and ISO 14001 environment, helps coordinate and direct our activities to meet customer and regulatory requirements and focus on continuously improving our operations, effectiveness, and efficiency. In addition, our sustainability concept

Neova Group environmental sustainability KPIs and targets

Key indicator	Definition	Actual in 2021 (2020)	Target by 2025
Carbon footprint: CO₂ emissions from our own operations (scope 1+2)	Neova Group level: Reduction from 2018 level (= 1.27 million tCO ₂ -eqv.)	-44% (-19%)	-50%
Carbon intensity in our value chain (scope 1+2+3)	Reduction of carbon intensity (tCO ₂ / M€ revenue) from 2020 level (=9,813 tCO ₂ / M€)	-13% 8,518 tCO ₂ /M€ (9,813 tCO ₂ /M€)	-40%
Conversion of closed energy peat bogs to next land use	Closed energy peat production areas (hectares) from 2019	9,000 ha (2,873 ha)	20,000 ha
Biodiversity of old peat areas (re-wetting/afforestation)	Restored area in collaboration with stakeholders (hectares)	86 ha	2,000 ha
Circularity of raw materials	% of circular raw materials*	Kekkilä-BVB -18% (-15%)	increase
Circularity of packaging materials	Use of recycled materials in packaging	Kekkilä-BVB 29% (-19%)	-50%
Impact on watercourses from peat production: Finland	Solid matter reduction from 2008	-78% (-68%)	-75%
	Nitrogen reduction from 2008	-68% (-53%)	-75%
	Phosphorus reduction from 2008	-75% (-63%)	-75%
Zero waste in our own operations	Recovery rate	89% (88%)	95%
	Recycling rate (excluding energy waste) **	37% (73%)	90%
Responsibly produced peat	Kekkilä-BVB RPP peat use (own operations / products)	50% (20.5%)	80%

* Circular raw materials definition: Organic raw materials that are from a renewable source or are given a second life after their first use, like compost from garden waste.

** 2021: Total waste volume in Neova Group halved after Nevel is sold. This has a major effect to recycling rate.

for peat in Finland, Sweden, and Estonia, is especially aimed for our customers and stakeholders relating to new businesses.

In 2021 we implemented a change in our ISO certification model and received a Neova Group level multi-site certification covering all our businesses. We also extended our ISO 9001 and ISO 14001 certification to our Novactor activated carbons operations, as well as ISO 9001 to cover all remaining Kekkilä-BVB sites. Moving on, we will also extend the 14001 to the Netherlands sites.

Greenhouse gas emissions

KEY TARGETS

We reduce CO₂ eq. emissions in our own operations by

50%

by end 2025 from 2018 level (scope 1 & 2 without compensation actions).

We reduce carbon intensity in our value chain (scope 1 & 2 & 3) by

50%

by end 2030 from 2020.



Neova Group greenhouse gas emissions are counted according to [GHG Protocol](#) and validated by external party (for scope 1+2 2020). The carbon footprint cal-

culation includes Neova Group and all its subsidiaries. In 2021 the emissions were 4.28 million tonnes CO₂-eq (corresponding figure in 2020, without Nevel: 4.61 million tonnes CO₂-eq). The largest share of emissions (77% of the total footprint) is caused by the use and end-of-life of products sold by Neova Group. Looking at scope 3 in more detail, the use of energy peat accounts for 59% (2020: 72%) of these emissions. Out of our scope 1 direct emissions, peat land emissions cause 89%.

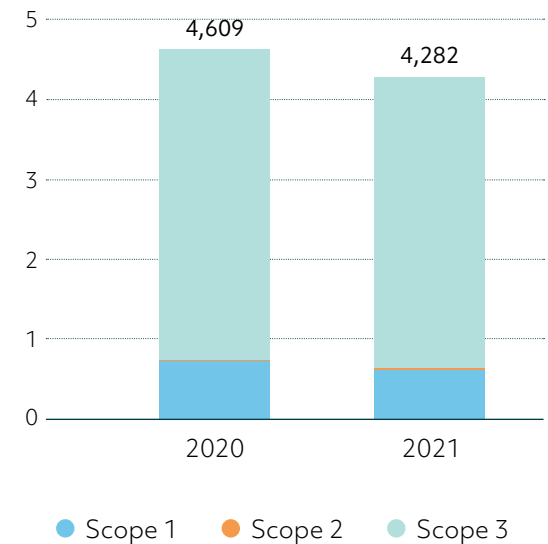
The greenhouse gas emissions from our own operations (scope 1+2) for 2021 were 714 kilo tonnes CO₂-eq (2020: 1,023 kilo tonnes CO₂-eq). Excluding Nevel operations account for 269 kilo tonnes CO₂-eq of this reduction, and the emissions from our peat production have reduced by 72 kilo tonnes CO₂-eq which is -10% year-on-year. Currently 91% of Neova Group's emissions in Finland are soil emissions. Our main efforts for reducing emissions from our own operation focus in implementing effective next land use for closed peat production areas. Overall, we have achieved -44% reduction of our own operations' emissions from 2018 level.

Moving forward, we will evaluate options to increase carbons sinks utilising our land assets, as well as pilot alternative horticultural peat harvesting techniques such as using peat mass transfer method to reduce CO₂ emissions (read more in the [Hietasalonneva case](#)).

In our factory operations our main efforts for reducing emissions are increasing energy efficiency and reducing fossil fuel use in our sites. In Kekkilä-BVB oper-

Neova Group greenhouse gas emissions in our value chain 2020 and 2021

Million tonnes CO₂-eq



GHG emissions in our value chain have reduced by 7% from 2020 (without Nevel).

ations 44% of our CO₂ emissions are caused by use of electricity. In the Netherlands we already produce 25% of our electricity consumption through solar panels on our own roofs. Our aim is to move towards renewable electricity totally by 2025.

During 2021 we implemented CO₂ emission reporting for our Group logistics and based on that data created action plan for logistics CO₂ reduction in 2022. Reporting cycle for logistics emissions is July-June annually. Overall, our logistics CO₂ emissions are 1.3% of our total scope 3. We target to ~4% relative logis-

tics CO₂ reduction (kg CO₂ / delivered tonne) between 7/2021 and 6/2022. In 2022 we will start to request regular logistics CO₂ reporting from our logistics providers in new agreements.

Moving forward, we will focus on greenhouse gas emissions in our value chain covering scope 1+2+3, and aim to reduce our carbon intensity by 50% by end of 2030 (from 2020). In addition, we will publish our CO₂ emissions in [Carbon Disclosure Project \(CDP\)](#) in 2022, and evaluate the options for setting [Science Based Targets \(SBTi\)](#).



Sustainable horticultural peat harvesting technique was studied in Hietasalonneva

During the 2021 peat production season in the Hietasalonneva production area in Virrat, Finland, we studied how horticultural peat can be produced sustainably with less carbon emissions. In the autumn of 2020, a so-called “mass transfer of peat” was done in an area of about 4 hectares, to preserve the surface vegetation in the peat fields. In this way, carbon sequestration will continue during peat production in part of the area.

In a conventional peat production area, carbon sequestration from the air is reduced due to the removal of vegetation. In addition, as a result of the drainage, the water level lowers, the peat layer oxidizes and begins to release stored carbon as carbon dioxide.

In the research project, in the intermediate fields that remain plant-covered, the plant cover was moved aside for a while with an excavator, the peat layer suitable for horticul-

tural peat was transferred to the adjacent fields and the plant cover was returned to the same location. In this way, every third field was left with the original bog vegetation on the surface, so that the carbon dioxide sequestration continues. Natural swamp vegetation does not pose a weed risk to peat production.

In the summer of 2021, the drying process and amount of peat produced from the mass transfer area was compared to that produced from conventional fields. The seasonal yield per hectare in the mass transfer area (total vegetation and drying plots) was the same as in the area of conventional production, although the drying area was one third less.

The 10 centimetre surface layer of the mass transfer drying field was clearly drier than that of the conventionally prepared reference field. This was also reflected in faster drying speed. The moisture content of the dried peat ridges in the

mass transfer area was on average 6.6 weight % drier than in the control field. The production work steps were performed simultaneously in both fields. Despite the dry and hot summer, the bog vegetation survived. Monitoring will continue next summer.

Thanks to the positive results, the next test area in Finland is planned for the Vehkaojansuo peat area in Kouvola, where the transfer of thicker layers of peat suitable for horticultural peat can be studied. In this case, the surface of the vegetation fields can be lowered closer to the level of the bog water, which in turn slows down the decomposition of peat and reduces carbon dioxide emissions. Also, similar pilot areas are planned in our Grimsåsmossen and Göklundsmossen peat areas in Sweden and potentially in Kasesoo peat area in Estonia.

Neova Sweden works closely together with peatland researchers from the Swedish University of Agricultural Sciences (SLU) in Sphagnum growing projects

In Sweden, Neova Group has two ongoing projects where the revegetation of terminated extracted peatlands through Sphagnum (peat moss) growing has started in Ekebymossen (next to Kekkilä-BVB growing media factory in Mosås) in 2018 and in Norrbomuren (outside Gävle) in 2021. The plan is that the projects will run to the end of 2023.

Researchers from the Swedish University of Agricultural Sciences (SLU) are conducting field preparation, Sphagnum establishment, monitoring of vegetation growth and greenhouse gas (GHG) measurements.

Besides a climate-smart peatland restoration, an industrial Sphagnum farming for the long-term to meet the demand for growing media is the main objective of the projects. The pro-

jects are part of Neova Group's biodiversity programme and two student theses have been conducted until now.

The sprinkled peat mosses in 2018 are growing very nicely sheltered by pioneer plants such as Carex and Eriophorum. In the beginning, the Sphagnum stand is not a pure stand. This will change when the peat mosses have outcompeted other plants and taken over the ecosystem by lowering the pH value of the ecosystem.

In spring 2021, 10 m³ of Sphagnum for cultivation at Ekebymossen was brought out. Here we will monitor during future projects that how fast the dense packed Sphagnum site will cover the water surface. This will also give us a comparison if compacted Sphagnum mats are growing faster than "loosely"

spread Sphagnum.

In addition to the Sphagnum farming projects, we work together with SLU in Toftmossen, a peat extraction area located in Surahammar, Västerås, which was terminated in 2007. The after-use plan aimed for an area mixed with open water, wetlands and forest. SLU became interested in the area in 2009.

Since 2010, the scientists have followed the area's overgrowth from open water and bare peat areas to new peat-forming vegetation. The first Sphagnum patches occurred in 2012 and were growing exponentially over the years with a small decline in 2019 and 2020 due to the very dry summer in 2018. A stable water supply is thus a very important factor for a successful Sphagnum establishment with farming as a goal.

Neova Group restores 1,000 hectares of old peat production area in Estonia

Neova Group participates in the [WaterLANDS project](#) in Estonia, together with the University of Tartu, Estonian Fund of Nature (ELF) and State Forest Management Centre (RMK). WaterLANDS is a new European Green Deal project aimed at large-scale restoration of Europe's wetlands.

Neova Group's part of the project covers approximately 1,000 hectares of our peat production area in Lavassaare during the next 10 years. The main goal of the project is to increase the area's biodiversity. During the project, wetlands for birds and insects will be created and rehabilitated, and higher areas will be reforested. The goal is that in the next 5 years, about half of the area will be restored.

Biodiversity pilot in Lavassaare is a part of Neova Group's biodiversity programme to increase biodiversity in our own industrial areas through concrete actions. In Estonia we have approximately 3,700 hectares in active horticultural peat production. The Lavassaare area is our largest peat production area in Estonia. Overall in Estonia, 358,923 hectares are defined as active peat resources (i.e. not under protection or unsuitable for production in other reasons), and only 6% of active peat resources are used for peat harvesting.

Europe has already lost up to 90% of its original wetlands, resulting in massive biodiversity loss, water and food shortages, devastating floods and fires, coastal subsidence and

erosion. Wetlands are home to 40% of the world's species. They also store and capture carbon, remove environmental pollutants, and protect communities from flooding. Wetlands are particularly vulnerable to damage from human activities.

The five-year WaterLANDS project is led by University College Dublin (UCD), Ireland and brings together 31 other organisations from research, industry, government and non-profit sectors in 14 European countries. Funding for the project is part of the European Commission's Green Agreement's goal of making Europe the first climate-neutral continent by 2050. The WaterLANDS project was officially launched in December 2021.

Biodiversity

KEY TARGETS

We convert all the closed energy peat production areas,

ca. 20,000 hectares

to next land use by 2025 and thereby reduce greenhouse gas emissions and enhance biodiversity.

We increase biodiversity by restoring (re-wetting or afforestation)

2,000 hectares

during 2021–2025 in collaboration with local stakeholders.



We are committed to responsible peat production. Since 2012 Neova Group has released 5,140 hectares of mires with significant nature value to be managed by Metsähallitus, a Finnish state-owned enterprise. In addition, Neova Group returned a total of 3,105 hectares of pristine natural bogs to Metsähallitus in 2021.

During 2021, from the peat production areas owned by Neova Group in Finland, we moved 4,185 hectares to next land use (corresponding figure in 2020: 1,156 hectares): 3,559 hectares to afforestation (2020: 754) and 626 hectares to wetlands (2020: 402). We returned 2,062 hectares to landowners (2020: 3,836), in addition to sell-

ing significant areas for which the next land use is determined by the new landowner. To cover the costs of post-production obligations in old peat areas, a financial provision for environmental work is made during production.

We have established a Neova Group biodiversity programme aiming to increase biodiversity by restoring (re-wetting or afforestation) 2,000 hectares (during 2021–2025) in collaboration with local stakeholders. In 2021 restoration planning was started for example in Lavasaares area in Estonia with the EU WaterLANDS project; in Norrbomuren area in Sweden with the Swedish University of Agricultural Sciences; as well as in Komppasuo area in Finland with [the EU MERLIN project](#).

This focuses on specific peat production areas, where we want to showcase how to increase biodiversity in habitats by wetland creation, as well as mosaic-like variation. Regarding closed peat production areas, the topography, hydrology, and rocks/stones influence what the best next land use option is. Also, during peat production, a diverse wetland species is formed in water treatment structures, and biodiversity can further be increased by creating small wetlands, and building nesting or shelter areas.

Regarding sustainability certifications for our Neova Group peat production areas, [the Responsibly Produced Peat \(RPP\)](#) certifications coverage by end of 2021 has reached 4,195 permit hectares (2020: 1,078 hectares). Our target coverage by end of 2022 is 6,376 hectares. For Kekkilä-BVB own products, 50% of the peat used in 2021 was RPP certified (2020: 20.5%).



Circularity

KEY TARGETS

We increase the recycling rate for our waste in our own operations to

90%

by end 2025.

We increase the use of circular raw materials

year on year.

We have

zero waste

in our own operations by end 2030.



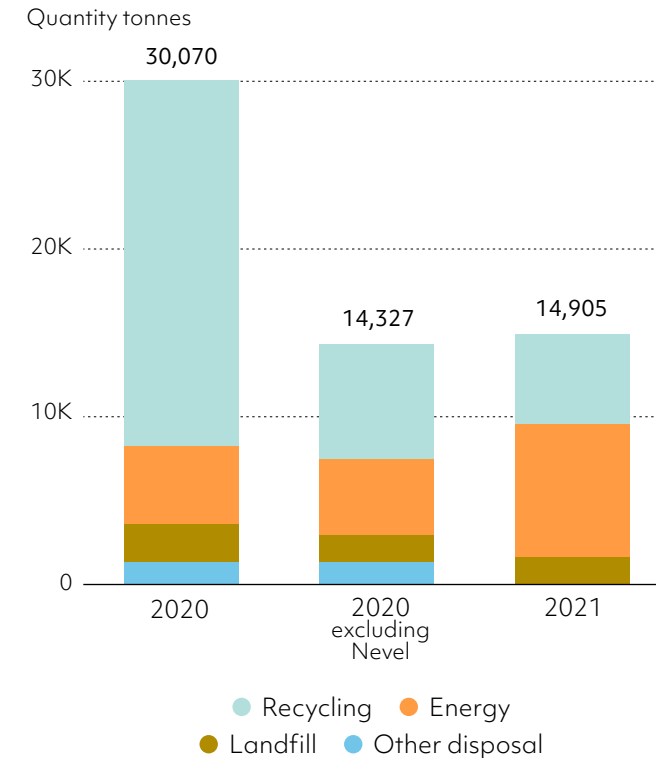
Our target is to progress towards our zero-waste by 2030 goal by increasing material efficiency, utilising recycled materials in our operations, and implementing efficient recycling of our waste streams. We are currently focusing on our main waste streams from our own operations including recycling ash from our pellet and activated carbons operations as fertiliser or landscaping material as well as increasing the use of recycled packaging materials to 50% by 2025. In 2021 the share of recycled packaging materials in Kekkilä-BVB reached 29% (2020: 19%), with progress especially in the Dutch retail market. Overall, our recycling rate

(excluding the waste fractions used as energy) for all of our operations reached 37% (2020: 73%). In 2021, the total waste volume in Neova Group halved after Nevel was sold. This had a major effect to the recycling rate.

Currently our biggest waste fraction in terms of volume is old peat stock pile plastics. During 2021 we disposed for reuse a total of 7,934 tonnes (2020: 8,844 tonnes) of old stockpile plastic in Finland, Sweden, and Estonia: 25% as recycled material and 75% as energy. By end of 2022 we aim to complete the removal of all old stockpile plastics in our peat areas, and after this our recycling rate will clearly be improved. Moving forward, we will continue to pilot new ways to reduce the use of plastic in peat and Sphagnum operations as well as packing materials in all our product lines.

Circularity is a key design principle when developing new products in the businesses, examples of these are described in the business sections of this report. Regarding circularity of the raw material used in our products, Neova Group is interested in organic natural materials and by-products from which valuable materials can be isolated and all fractions can be utilised as raw materials for other products, such as growing media, in accordance with the principles of the circular economy.

Quantity of waste by years



2021: Total waste volume in Neova Group halved after Nevel was sold. This has a major effect to recycling rate.

“Circularity is a key design principle when developing new products in the businesses.”



Internal innovations challenge in Kekkilä-BVB: Zero Waste

In autumn 2021 Kekkilä-BVB invited its own personnel to take part in the Internal Innovation Challenge for Zero Waste. Individually or in groups, personnel could put forward any ideas they had that can help us get closer to our zero-waste target. We got plenty of great ideas to accomplish the goal. Here are the top five:

- Recycling unit for grow bags.
- Potassium and nitrogen from coir wastewater.
- Cardboard packaging for consumer products.
- Find better ways to deal with our waste pallets.
- Turn waste pallets into wood chips for mulch.

We selected these ideas, because they potentially offer great business opportunities, reduce our environmental impact and help in obtaining zero waste in the value chain. We also received several suggestions on how to improve our waste separation in the offices. After the challenge, all ideas are linked to the right employees within Kekkilä-BVB who can take these ideas further, for example in our Green Office Concept implementation. So no idea is lost in the drive towards Zero Waste!

Water

KEY TARGETS

We reduce solid matter, nitrogen and phosphorous emissions by

75%

in peat production areas in Finland by end 2025 from 2008 levels.



WATER

Our main target is to reduce solid matter, nitrogen and phosphorous effluents in peat harvesting by 75% in Finland by 2025 (from 2008 levels). We have already made significant progress and in 2021 already reached the target for solid matter and phosphorous effluents. For all effluents, the reduction was over 30% compared to 2020. The water treatment systems in Neova Group peat production in all countries are well managed and based on best available techniques (BAT), which will help us to continuously improve our performance to protect the water sources we and the society rely on.

In our factory operations our main efforts for improving water efficiency focus in reducing water and chemical consumption in our coir production in Kekkilä-BVB in the Netherlands. as well as improving the efficiency of the wastewater treatment processes in our composting sites. ■



WE SUPPORT THE GROWTH OF OUR PEOPLE AND PARTNERS



Health and safety is our first priority.

In 2021 we updated a common Neova Group sustainability strategy including our goals for social sustainability, covering safety, the workplace and our partners. Moving forward, we aim to implement the ISO 45001 occupational health and safety certification to all countries and businesses during 2022.

In 2021 the COVID-19 pandemic continued to have a major impact to our people and partners. With active preventive actions of our personnel and suppliers we managed to protect the continuity of business in all our sites during the second pandemic year. Total number of COVID-19 cases in Neova Group companies has been 103 cases: 83 in 2021 and 20 in 2020.

In April, we organised a Wellbeing pulse survey for the third time to survey employees' wellbeing at work during the pandemic and 59% of all employees responded. Compared to the two previous surveys, more people (37%) felt that their wellbeing is no more than moderate and nearly as many (36%) felt that their workload is too heavy. The responses came from both office and production workers. As actions for these

Neova Group social sustainability KPIs and targets

Key indicator	Definition	Actual in 2021 (2020)	Target by 2025
Accident frequency: LTA1 (resulting in absence)	Group: year-on-year reduction by - 20% (*without Nevel)	7.2 (7.2 / *6.4)	< 3
Accident frequency: MTR (all accidents, incl. commute)	Group: year-on-year reduction by - 20% (*without Nevel)	15.7 (16.2 / *14.7)	< 6
Reported inappropriate behaviour case	Group: zero tolerance; all reported cases investigated and followed up	13 (9) cases all closed	0 cases
Great Place to Work Trust Index	Group: increase by + 2% points per year	70% (68%)	78%
GPTW Wellbeing and engagement index	Group: increase by + 2% points per year	74% (74%)	82%
GPTW Leadership index	Group: increase by + 2% points per year	57% (55%)	65%
GPTW Learning together index	Group increase by + 2% points per year	59% (56%)	67%
Responsible sourcing: Code of Conduct	% of contract suppliers signed Supplier Code of Conducts	-	100%
Responsible sourcing: Audit coverage of strategic suppliers	Number of audited strategic suppliers	-	All strategic
Responsible sourcing: joined sustainability development process and plans	Number of prioritised suppliers with joint sustainability action plan and targets	-	All prioritized

results, line managers were reminded to contact team members on a regular basis paying attention to prioritisation of work, to discuss how team members were feeling and if they needed more support.

Those working remotely during the pandemic, were also asked, where they would prefer to work after the pandemic is over. Based on the Wellbeing survey feedback, a hybrid model was introduced for organising office work after the COVID-19 pandemic. In the survey, many office workers stated that they would like to continue to work from home for the most part, but many also wished to return to the office environment. The hybrid model was launched in 1st of October.

Each team has created business driven rules which gives frames to everyone to decide which location is best for performing their tasks and find the good balance with the remote and office work. According to the Wellbeing survey, there was a clear decline in results regarding sense of community, compared to our previous survey. Face-to-face interactions are the key in creating a sense of community at work.

“After the pandemic we will continue in the hybrid model in all our operating countries.”

Safety first!

KEY TARGETS

We reduce accident frequency by
20%
year on year towards the zero accidents goal.

We have
zero
accidents by 2030.



Group Safety team leads and develops our Safety First! culture to prevent safety incidents and accidents through effective risk mitigation, training and supporting business divisions and functions. In 2021 Neova Group accident frequency rate (lost time accidents, including commute, over million working hours) was 7.2, with some increase from 2020 (corresponding figure in 2020: 7.2 and 6.4 excluding Nevel). The accident frequency for Kekkila-BVB operations increased the most from 2020, being 11.2 (2020: 6.7) and especially in the Netherlands and Sweden, returning to 2019 level.

Most of our accidents, and especially serious accidents, occur in production operations. Looking at the past three years, 14% of all the accidents requiring medical treatment are categorised as a serious accident (12 out of 87). All accidents are investigated, with root

“Our key safety highlight from 2021 was that Finland and Estonia operations achieved the zero accidents goal.”

cause analysis, corrective actions and the learnings are shared in 5 languages to all personnel. In 2021, we also published on average two safety campaigns monthly in five languages, with key focus on fire safety.

To improve and harmonise our safety culture, we continued to focus on safety training and risk assessments in 2021 in all businesses. In 2021 we held 72 fire and chemical safety inspections in peat operations. The number of peat area fires was 41, a reduction of 49% from last year (corresponding figure in 2020: 80).

Safety observations made in 2021 by own personnel reduced by 8% from 2020 (2020: 9% reduction). Results from both 2020 and 2021 can mostly be explained by restrictions to site visits due to COVID-19. Total number of observations raised was 2,963 (2020: 3,363).

We also track our contractors' accidents in our operations, and conduct an accident investigation together with them. In 2021 our contractors reported a total of 8 accidents requiring medical treatment (2020: 11). Out of the safety observations made in 2021, 10% were made by our contractors (2020: 12%).

Great workplace

KEY TARGETS

We improve GPTW Trust Index by 2% points per year to reach

78%

by 2025.

We increase diversity and inclusiveness in our workplace by improving wellbeing and engagement index by 2% points per year to reach

82%

by 2025.

We have engaging leaders and resilient employees by improving leadership index by 2% points to reach

65%

by 2025 and **learning together index by 2% points per year to reach**

67%

by 2025.

We are among the most

**inspiring/
attractive**

workplaces (GPTW top quartile in Europe) by 2030.



Engagement and wellbeing of our employees

Neova Group participated in [the Great Place to Work](#) personnel survey for the third time in 2021. According to the survey, our employee experience improved by two percentage points as our Trust Index measuring the employee experience this year was 70% (2020: 68%). 80% of the employees responded to the survey, a one percent better response rate than in the previous two years.

We aim for a result oriented, purpose-driven, and learning corporate culture. The development goals based on the survey results are common to all teams. They are related to finding ways to involve people into planning matters impacting their work, and ways for noticing good - appreciating work well done or projects completed. Purpose-driven and sustainable activities relate to active communication of renewed sustainability strategy. There is high interest regarding sustainability matters and actions relating to them among employ-

ees. Also, as part of this action plan, and also contributing to new social sustainability strategy, Neova Group will establish a volunteer programme during 2022. Programme gives all teams a possibility to participate into volunteer activity for one day each year. Programme concept will be communicated and launched during the spring 2022. Teams will create their own action plans based on common themes.

Neova Group has had an active team focusing on wellbeing at work during the year 2021. The wellbeing team has launched campaigns addressing stress management, acknowledging one's colleagues, nature observation and cycling challenge.

Zero tolerance for inappropriate behaviour -trainings were also continued during 2021, in the Netherlands for the first time and in other countries as refresher trainings. Employees have learned to utilise reporting channels in case they observe or experience inappropriate

Great Place to Work certification

As a result of this autumn's survey, Neova Group has achieved Great Place to Work certification in three of its countries: Finland, Sweden and Estonia. The certification limit varies from country to country. In Finland, the limit has recently been lowered to 65% (our Trust Index is 69%), in Sweden it is 70% (72%) and in Estonia 65% (79%). In the Netherlands the limit is 70% and we were still slightly below (69%). In the other countries our group does not currently have enough personnel or responses to obtain the certification.



ate behaviour. Primary reporting channel is through line manager or HR, also anonymous whistleblowing channel can be used. All reported cases have been handled.

Competence development

During 2021 many of the activities started in 2020 to establish the common practices into our businesses organisation continued. License to Lead programme for new line managers, providing a full view for people processes and principles, was offered to 29 line managers from all countries.

Mandatory e-learnings, safety, Code of Conduct and information security were modified for factory workers into classroom trainings, which were held during autumn 2021.

Competence development plans were again in 2021 made in all Divisions/ Functions on BU/function level, also on team level in many teams. Focus on these plans was in 70-20-10 planning, acknowledging that majority of learning happens through on-the-job learning.

Employees expressed their wishes for better access to information and more communication in one's own language through our Wellbeing survey. Online English language courses were launched in December for all our operating countries with great number of attendees applying for basic or advanced groups.

Leadership development

Leadership as a Service, a nomination-based development programme was launched for the first time in

autumn 2021. Aim for the programme was to increase understanding of and contribute to Neova Group strategy, create a forum for Neova Group top management and nominated participants for active dialogue of topical strategic themes. And to support individual growth through mentoring and co-creation.

In 2022 Great Workplace focus will be in continuing our leadership development added by some new modules for all line managers, reviewing Group HR policies and guidelines to ensure diversity, inclusiveness and equality are clearly enough taken into account in all our people processes and leadership practices. We will continue to focus on wellbeing of our employees through working conditions, volunteering program, and increasing cultural awareness.

Leadership as a Service -training program launched in 2021

Leadership as a Service programme was launched in autumn 2021 for 37 nominated professionals from different parts of Neova Group. Kekkilä-BVB strategy and Mergers & Acquisitions (M&A) process was selected focus in this first Leadership as a Service programme. M&A project assignment was also linking the programme to one of the critical competence development themes, International expansion efficiency. Nominated participants were selected to both support and benefit from the selected focus.

Programme is planned to be annual, each year having its specific focus based on business priorities, with project assignment built to support the theme 2022 theme, or participants has not been selected, yet.

Aim for the programme was to create an internal forum for senior leadership and participants to have active dialogue of topical themes relating to business transformation and strategy. An important aspect was also to share knowledge and professional expertise through mentoring programme and project assignment work.

Topical themes covered were Neova Group portfolio strategy, Kekkilä-BVB strategy and the growing media business, ICT environment transformation and Sustainability strategy.

M&A project assignment was planned and executed in collaboration with external consultants and the Kekkilä-BVB programme management office. Project was based on a real-life case example. Participants were introduced to the end-to-

end M&A process, and were given an assignment to build integration plans for Day 1 and short, mid and longer term plans for an acquisition. As an outcome there will be an integration playbook, which can be used in generic trainings and also in planning the future integration cases.

Feedback from participants has been positive. Participants have felt that senior leadership has become more familiar to the participants, and many have been positively surprised how well online workshoping can actually work.

And why the name of the programme? We see that leadership is being of service to others while working towards shared goals, it is about helping others to succeed – achieving together.

Responsible partners

KEY TARGETS

We have

100%

coverage of signed **Supplier Code of Conducts** with our contract suppliers by 2025.

We have audited all strategic suppliers periodically by 2025.

We have joined sustainability action plan and targets with prioritised suppliers by 2025.



RESPONSIBLE PARTNERS

During 2022 we will implement [the Responsible Sourcing programme](#) on Neova Group level. The Responsible Sourcing programme includes actions to ensure and improve environmental and social responsibility with our suppliers. This includes e.g., increasing of Supplier CoC coverage for contract suppliers as well as joint action planning, joint targets and supplier relationship management with strategic suppliers to improve social and environmental responsibility, including follow-up by controlled supplier audit programme. Ongoing implementation of Neova Group new sourcing and supplier management system will support the Responsible Sourcing programme progress, including online visibility to Supplier CoC coverage, development actions and audits.

Supplier Code of Conduct (CoC) is an important part of our sustainability, and we need to ensure that our suppliers share and respect our values. During 2021 we have implemented Supplier CoC systematically to all new purchasing agreements. In total, we have conducted 29 supplier audits and 27 supplier self-evaluations to our strategic and tactical suppliers to monitor fulfilment of Supplier CoC requirements. In Kekkila-BVB, we conducted 8 audits and 24 supplier self-evaluations. By end of 2025 we target to cover all contract suppliers with Supplier Code of Conduct.

We encourage our operational contractors to make safety, environment and quality observations regularly and we make corrective actions based on the feedback. We also conduct an accident investigation for each reported accident by our contractors, and the key contractors take part of the safety walks done in our production sites.

Overall, in peat and wood production peak seasons of 2022 in Finland alone we have approximately 100 main contractors with roughly 700 people (including their employees or sub-contractors), and ~150 peat and wood transportation contractors plus ~100 contractors in other operations. In Sweden we have ~60 and in Estonia ~10 main contractors in peat production.

In Kekkila-BVB operations, we have several loader and maintenance contractors working at our production sites. We also use several professional contractors at our sites for installation work in Kekkila-BVB and New Businesses investment projects. ■



WE ENSURE PROFITABILITY IN A SUSTAINABLE WAY



Neova Group has a significant economic and employment impact in several locations.

KEY TARGETS

We will improve EBITDA as % of netsales
year on year.



Despite a very challenging market conditions Neova Group's comparable EBITDA remained very close to previous year level which can be considered to be satisfactory performance in the last year market turbulence boosted by continued pandemic and inflationary pressures through raw materials and freights.

Neova Group companies comply to all statutory taxes, based on their own business operations, to the country in which they operate. None of Neova Group companies have overdue taxes. Neova Group administration is responsible for the implementation of the

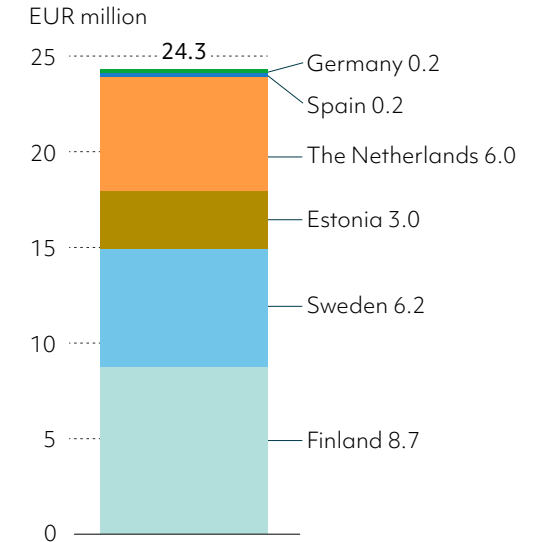
tax strategy and compliance with country-specific tax regulations.

Neova Group's local impact as an employer, taxpayer and buyer of products and services is significant, particularly in Neova Group's main operating countries of Finland, Sweden, Estonia, and the Netherlands. Neova Group's total gross investments in 2021 were EUR 83 million (corresponding figure in 2020: EUR 77 million).

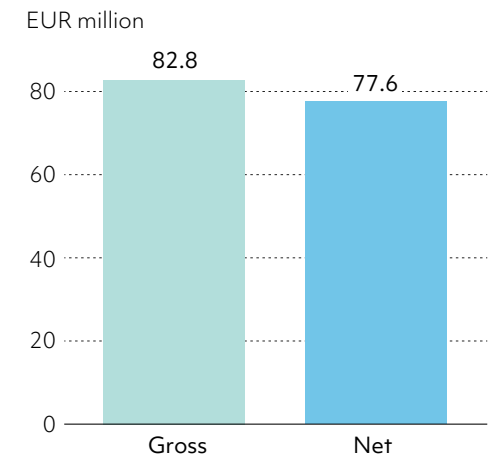
Investments in the activated carbon production facility in Ilomantsi, Finland was the single largest investment during the financial year. Investments were also allocated to capacity expansion, energy efficiency investments and environmental protection and field maintenance in the peat production business. Net investments (gross investments – asset sales) totalled EUR 78 million in 2021 (2020: EUR 59 million). In other words, investments made during 2021 represented 239% of depreciations for the same time period (2020: 162%).

Majority of the investments in 2021 related to capacity expansion and energy efficiency were in Grow&Care division, mostly in Kekkilä-BVB. Large numbers of pro-

Paid taxes 2021



Investments in 2021 (IFRS)



Horticulture peat helps EU to reach its reforestation targets

In November 2021, Neova Group made a historic decision when it announced that it will stop the harvesting of milled energy peat. The company began large-scale energy peat production in the early 1970s, 50 years ago.

However, Neova Group is not giving up peat production. Already in the summer of 2021, the majority of the peat produced by the company ended up as growing media, bedding peat and raw material for activated carbon. Peat is currently by far the most used material in various growing media products in Europe. Peat accounts for about 75% of the European growing medium market of about 30 million cubic meters. Only 10% of the growing media used in professional crowing do not contain peat at all. The explanation is simple. Peat has innumerable superior properties as a growing medium. It saves water, reduces the need for fertilisation, is clean of weeds, toxins and pathogens. And above all, it creates ideal growing conditions for plants. After use, it is fully recyclable.

In Finland alone, about 150 million tree plants are nurtured annually in horticulture peat. These tree seedlings are planted annually to either reforest or create additional forest. Horticulture peat decomposes and releases carbon dioxide into the air, but as a gift to nature, it can sequester huge amounts of carbon into regenerated forests.

In one cubic meter of horticulture peat, it is possible to grow about 8,000 tree seedlings to be planted. The cultivation of one hundred and fifty million tree seedlings therefore requires less than 20,000 cubic meters of horticulture peat. When that peat decomposes in a few years, it will release less than 4,000 tonnes CO₂ (calculated by the emission factor 0.193 tonnes CO₂/m³, black peat) into the atmosphere. The production of that amount of horticulture



peat requires about 50 hectares of production area with annual soil emissions of about 550 tonnes of carbon dioxide (11.4 tonnes CO₂/hectare).

One hundred and fifty million tree seedlings will be able to plant 75,000 hectares of new forest. The forest growing in Finland sequesters about 3 tonnes of carbon per hectare per year. In other words, up to 200 tonnes of carbon are sequestered in the new forest per hectare during its life cycle. In other words, emissions of horticulture peat from seedling cultivation are already compensated for in forest areas of less than 20 hectares. The rest is left to increase the carbon sink. This is the net positivity of horticulture peat. And this is exactly what Neova Group wants to make clear in the EU's debate concerning expansion of sustainable financing taxonomy, which assesses whether or not the use of horticulture peat is sustainable.

duction facilities in different locations raised also the total investment amounts needed. Investments were also done for Biofuels but no longer for energy peat.

Financial implications and climate change risks related to peat

According to the consumption forecasts of Neova Group's fuel customers, the demand for energy peat will fall to half of the current level by 2023. The reasons for this are the price of emissions allowances and the current energy tax of EUR 3/MWh applied to peat (in heating), due to climate change risks. Considering this assessment, we decided to discontinue energy peat production in Finland from 2022 onwards in November 2021. This also meant a write-down of approximately EUR 16 million on our remaining peat assets.

Although the need for peat will increase for other businesses than in energy use, we believe we can reduce significantly the land reserved for peat production over the next years. This will directly reduce our greenhouse gas emissions.

Moving on, as part of our Enterprise Risk Management process we will prepare [the Task Force on Climate-related Financial Disclosures \(TCFD\)](#) for Neova Group during 2022. The TCFD is a framework to incorporate evaluation of climate-related risks and opportunities into companies risk management and strategic planning processes. This disclosure will also cover our mitigating actions, as well as the related targets and key performance indicators. ■

GROW&CARE DIVISION

KEKKILÄ-BVB - GROWING TOGETHER FOR A BETTER FUTURE

Creating innovative solutions for growing food, gardening and greener cities through collaboration and education.

Like all other business we are impacted by global developments that influence market demands, government regulations and stakeholder actions. For us the key developments are urbanisation, climate destabilisation, ecosystem decline, food crisis, inequality and resource scarcity. These developments create challenges and opportunities for our company. In our [web page](#) we explain how these developments have an effect on our business.

Aligned with Neova Group Sustainability strategy, we have divided our sustainability roadmap in three focus areas, taking both the environmental, social, and business aspects of sustainability into account. The overview shows our ambitions and targets related to these focus areas.

Kekkilä-BVB's sustainability work is led by a lean governance structure with joint roles and responsibilities with Neova Group sustainability team. Kekkilä-BVB Leadership Team is responsible for the successful execution of Kekkilä-BVB's sustainability roadmap. This ensures that sustainability is integrated within the business and that ambitions are carried by the different business units and functions we have in the organisation.

Through the involvement of all our colleagues whether in procurement, operations, HR, sales or another department we make it happen. Kekkilä-BVB Sustainability Director and Sustainability Manager make sure that sustainability ambitions fit with market needs and developments and manage progress on our targets.

Growing together for a better future

We do this by

- Creating innovative solutions for growing food, gardening and greener cities through collaboration and education.



We make the world greener and healthier through our products and services

Our products and services always start from the same principle: fit for purpose. It is very important that the chosen recipe of growing media materials fits the purpose of the user, otherwise all the resources, energy and manpower to create the substrate are wasted. At the same time we aim to be as sustainable as possible throughout the value chain through collaboration and innovation. Our roadmap guides us in being a net positive company, a company that contributes more to the world than it takes from it. The best way for us to do so is by providing safe, socially responsible, environmentally friendly and effective growing solutions.

For professional growers we offer continuous quality monitoring of our substrates as well as onsite support. We have tooling in place that can optimise both the effectiveness as well as sustainability of our substrate recipes. After the first use of our substrate materials we offer circular solutions to optimise the after use. This is continuous research that we perform together with our customers, knowledge institutes and other sector organisations.

For retail we offer customised mixtures as sustainable as possible. We supply our products in packaging that both contains recycled content and is recyclable as well. Besides that we help consumers to optimally use our products and create healthy and green communities.

Kekkilä-BVB sustainability KPIs and targets

Focus area	Key indicator		2021 (2020)	Target 2025
We make the world greener and healthier through our products and services		# green city projects	New	4
		# collaboration projects with growers for more sustainable growing practices	New	20
		# new sustainable consumer product and service concepts	New	3
		# of community projects (e.g. grow the joy)	New	30
We support the growth of our people and partners	Safety first!	Accident frequency: LTA1 (resulting in absence)	11.2 (6.7)	20% yoy decrease
	Great workplace	Great Place to Work Trust Index	72% (68%)	78%
	Responsible partners	% of contract suppliers signed Supplier Code of Conducts	55% (81%)	100%
		Number of audited strategic suppliers	New	All strategic
		Number of prioritised suppliers with joint sustainability action plan and targets	New	All prioritised
	We do our business in balance with nature	Greenhouse gas emissions	CO ₂ footprint of operations (scope 1+2)	9.7 kilo tonnes (9.8 kilo tonnes)
Carbon intensity in our value chain (scope 1+2+3) (tCO ₂ / M€)			New	-25%
Circularity		% of circular raw materials*	18% (15%)	Increase
		Use of recycled materials in packaging	29% (19%)	50%
		Recycling rate of waste in own operations	66% (59%)	90%
Biodiversity		% of certified responsibly produced peat in own products	50% (20.5%)	80%

* Circular raw materials definition: Organic raw materials that are from a renewable source or are given a second life after their first use, like compost from garden waste.

Our expertise in landscaping creates green roofs, facades and outside areas. Using the local situation as starting point we try to reuse as much of the existing landscape elements as possible. Together we will find climate smart solutions, that help neighbourhoods become more biodiverse, healthier and more attractive to live in.

And only through collaboration in the value chain we are able to stay successful in and become a sustainable forerunner. Below you find a selection of our projects and products that with help of our partners will hopefully result in solutions that add social, environmental and business value.



Selection of Kekkila-BVB sustainable solutions

Professional

BIO-premix

BIO-premix is an important ingredient of our Skal or Fibl certified BIO-substrates. The BIO-premix provides a pH buffer and contains sufficient nitrifying bacteria that cause a quick and constant release of nitrogen.

PrimeFLOW

The only fine mixture for the production of young plants on the market containing renewable wood fiber. Compared to other fine mixtures it has the advantage of reduced shrinkage, more easily available water, optimum level of porosity, faster water uptake and it is good for all irrigation systems.

Retail

Kekkila Ecological Garden Soil

The garden soil uses only raw materials that are suitable for organic farming to create a high quality ready to use soil. It consists of local natural materials, compost and organic fertiliser for organic growing.

Kekkila Green Compost

Kekkila Green Compost is a high-quality, ready-to-use universal soil made from environmentally friendly raw materials for all yard plants. Green compost is made from safe and researched, completely natural, recycled and renewable raw materials.

Hasselfors Universal Plant Nutrition

The Universal Plant Nutrition, for instance, is a versatile fertiliser that quickly dissolves in water. One gram of fertiliser provides one liter of nutrition for flowering houseplants, green plants and everything edible you can think of growing indoors, on the balcony or outside.

Landscaping

Meadow Soils

Urban meadows play an important role as a new habitat for traditional biotope species. In addition to the range of growing media for dry meadows and keto areas, growing media for moist meadows and flooded meadows were developed.

Garden Soil E Biocharboost 10

This product is a garden soil with a lot of plant power. This variant of Garden Soil E has extra natural fertilizer for better nutrient supply, biochar to increase the porosity and nutritional ability and compost to increase the microbiological diversity into the soil.

We support the growth of our people and partners

At Kekkilä-BVB we work together with our colleagues and with our suppliers throughout the value chain to ensure good working conditions, safe working environments and engaged employees that are happy to work for and with us. In the sections below specific Kekkilä-BVB performance is shown.

Safety first!



At our production facilities safety has top priority for our own employees and visitors. Our operations start their meetings with a safety update to remind them of the importance of safe working. They are also asked to keep an eye out for risky or unsafe situations and register these in our online safety register. 1,556 observations were made in 2021 which increased by 17% compared to previous year (2020: 1,330). These observations lead to documented actions to mitigate safety risks.

To improve and harmonise our safety culture, we continued to focus on safety training and risk assessments in 2021. In Kekkilä-BVB we organised face-to-face safety training to ~150 people in operations in the Netherlands. In addition, as risks in maintenance operations is greater, the Dutch technical team also completed a formal test to receive a VCA -certification for safety, health and environment for contractors.

Overall, our efforts unfortunately have not resulted in fewer accidents and we are back at the level of 2019.

The accident frequency (resulting in time away from work) for Kekkilä-BVB in 2021 was 11.2 (2020: 6.7) and increased especially in the Netherlands, as well as Sweden. On the other hand, both Finland and Estonia reached our zero accidents goal in 2021 (without absence).

Most of our accidents, and especially serious accidents, occur in production operations. When we evaluated the incidents of 2021, we found that they can be split quite evenly to three categories: a) collision, hit (impact with a moving object); b) fall, slip, trip (impact with a fixed object); and c) cut stab, sting (caused by an object).

Moving forward, the key safety actions in 2022 focus on safety during high season, improving traffic safety inside each site, mitigating risks to head injury and conducting additional technical risk assessments around our production lines.

Great workplace



We have the ambition to be amongst the best employers in Europe. In 2021, we improved our Great Place to Work (GPTW) score from 65% to 70%, which makes us proud, but also shows we have a lot of work to do until we are in the top quartile of European employers.

Although we have many initiatives to create a community feeling with our colleagues, swamp football being one of them, we would like to highlight two initiatives that really show our colleagues commitment to



Let's give away: a ton of joy!

At Kekkilä-BVB, we believe in the power of plants. Not only for the beauty of the plants, but also for the joy of growing. That's why we give our garden products for free to projects in Finland and Sweden that bring joy to plants for others as well - especially for those who might not yet know or might not even be able to. For our 'Grow the joy' programme in 2021 we received a large number of applications from which we selected more than 20 projects.

Early summer of 2021 we sent our products to these projects and we've received many enthusiastic messages and pictures. Please visit our [webpage](#) to get an impression. We have also had the pleasure of participating in a number of projects where, for example, elderly people with memory issues have experienced the healing properties of plants in their own community garden. But also, we've seen children connect with nature and experience the creative impact of gardening.

This annual programme will continue in 2022 and we're looking forward to bring more joy to people and communities.

growing a better future. The first one is 'Grow the Joy' which is a long running initiative where we sponsor gardening initiatives in Sweden and Finland. The other initiative is Kekkilä-BVB's first innovation challenge focusing on Zero Waste. Many great ideas passed by, from better waste separation in the office to providing a second life to substrates after use by our professional customers. The winning idea related to making optimum use of unrepairable pallets. If the testing is successful, you'll find the solution on the market next year.

As part of Kekkilä-BVB strategy roll-out, critical competences were identified to support the growth strategy. These three were Customer Value Creation, Establishing new operations sites and International expansion efficiency. Development plans were created for all of them, turning them into development projects/programmes which will be to large extent be rolled-out during 2022: International expansion efficiency competence development was built into 2021 Leadership as a Service programme's project assignment, focusing on mergers and acquisitions, and more specifically in planning and execution of integration through a case example. Outcome of this project assignment is an integration playbook, created by programme participants. Commercial Excellence (ComEx) programme starting in February 2022 will be targeted for sales organisations with a theme: from good to great. Operations' competence development programme, with focus on attracting, retaining and developing competences in Operations will be also rolled out during 2022.

Responsible partners



Together with our partners we are able to create a responsible supply chain. Two years ago we started discussing our Supplier Code of Conduct and related sustainability values we expect our suppliers to put in practice. Last year 81% of our largest suppliers signed the Supplier Code of Conduct. This year we extended the scope of suppliers to increase our coverage. Unfortunately this resulted in a lower share of signed SCoCs (55%), even though we had new supplier signing. The focus of our procurement team was fully on obtaining enough resources and organising logistics, both of which were suffering from extreme price increases and lack of availability. During 2022 we target to cover 80% of all our contracted suppliers with the Code of Conduct and reach the suppliers we couldn't reach this year.

Going forward we will keep our Supplier Code of Conduct as the basis of our discussions and negotiations and in addition find even better ways to improve together. In the coming year we will make assessments to our strategic suppliers to understand where we can add most value in strengthening our partnerships. In the past year it has been hard to physically meet our partners due to COVID-19 travel restrictions. Especially reaching our suppliers of coconut based constituents was hard, while we know they are facing stricter regulations on dust prevention, soil pollution and wastewater recycling. Supporting our partners on these sustainability issues with joint action plans and targets will be one of our focus areas for next year.

We do our business in balance with nature

At Kekkilä-BVB we do our business in balance with nature. We find this not an easy task, because we need land, materials, water and energy for almost everything we do. But every year we get a step closer to reduce our greenhouse gas emissions, increase circularity and enhance biodiversity. Within our own operations these focus areas are addressed through the implementation of our Green Factory concept. Overall, the ISO 9001 and ISO 14001 certifications are the basis on which we continue to improve the quality and environmental performance of our operations. During 2021 we extended the ISO 9001 to cover all remaining Kekkilä-BVB sites. Moving on, we will continue to implement the 14001 to the Netherlands sites. In the sections below more is explained about Kekkilä-BVB specific ambitions, challenges and achievements related to our focus areas.

Greenhouse gas emissions



When we talk about our carbon footprint, we have to take the whole value chain into account. That's why this year we have assessed our carbon footprint of the whole supply chain (scope 1+2 validated by external party and scope 3) according to GHG Protocol, covering the last two years. In 2021 the emissions for Kekkilä-BVB own operations were 9.7 kilo tonnes CO₂-eq (comparable figure in 2020: 9.8 kilo tonnes CO₂-eq). The largest share of emissions (44% of the total footprint) is caused by the use of electricity. Of our indirect emissions, the



Upgrading local soils with our nutrition mixes

Our Landscaping colleagues are always looking for ways to optimize the use of local, renewable and recycled materials to be as circular as possible. Another way we are contributing to circular material use is by preventing the use of new materials. For landscaping this has resulted in the development of our 'Nutrition Mix'.

This is a service for upgrading local soil instead of replacing it with new soil materials from elsewhere. Through location research and chemical and physical lab tests we can determine what is needed to upgrade the local soil. With this information we create a customized nourishment mix that replace only part of the soil (e.g. 30%) and hereby lowers waste, transport movements and pollution.

use and end-of life for our own products accounts for 569 kilo tonnes CO₂-eq, driven by the emissions from horticulture peat (2020: 568 kilo tonnes CO₂-eq).

With this solid basis for calculating our performance, we have set forth in developing our strategy to reduce our emissions in the value chain, starting with those activities we have most influence on. As part of our Green Factory concept we have decided to move towards renewable electricity for all our operations in 2025, which will reduce our own footprint significantly. During 2022 we are conducting several evaluations for replacing oil heating with ground source heat or geothermal heat in Finland and Estonia factories. We are also aiming to use more and more renewable fuels in our operations, but for this the business case is less attractive. Therefore, if we want to improve our logistical emissions for now it is best to focus on local sourcing of materials and setting minimum thresholds on amounts to be shipped.

Another topic much talked about by us and the whole sector are emissions from peat extraction, which has the biggest impact on our overall greenhouse gas emissions. Therefore, we challenge suppliers to look for ways to reduce the emissions during excavation and after use; for example using a mass transfer method in peat harvesting as explained in this [report](#). Peat is currently a vital material for the growing media industry and is the most safe, versatile, effective and clean material for growing. And if not for its carbon footprint it would be the most environmentally friendly too.

In our discussion about the carbon footprint it is important to look at the positive net impact we have with our growing media solutions. Especially when it comes to gardening and landscaping, the carbon footprint of the growing media itself is negligible compared to the plants, shrubs and trees that are grown in it. For instance, one cubic meter of growing media can be used to nurture 8,000 saplings and when these are mature trees, they annually store about 1,000 times more CO₂ than was emitted during the lifecycle of the growing media.

And if we look at professional growing, in protected environments yields can be up to 10 times higher than in open field growing, meaning land can be made available for growing trees for carbon storage. Also it is possible to reduce the use of fertilisers with 60% as well as the related CO₂ emissions. And through protected growing, extreme weather, soil pollution or other events can't cause crop losses, which would be a waste of energy, water, fertilisers and labour. That's also why in our search for the most sustainable growing media we take the impact of the whole value chain into account, otherwise we will end up with suboptimal solutions.

Circularity



In our own operations we are aiming for zero waste by 2030. Our raw material waste is already below 1% and close to non-existent at many sites. That's why we are looking into other waste streams, like packaging and mixed waste, to find out how we can further reduce

them together with our suppliers and waste processors. It turned out that this is actually quite hard to improve at our sites. Our two biggest streams of waste are pallets and used plastic packaging. The pallets we already reuse and repair as much as possible, either ourselves or through our suppliers. What cannot be repaired is usually recycled and becomes chipboard or something similar. Pallets of insufficient quality are used as fuel in biomass installations and this is hard to prevent. For our used plastic packaging waste we can only have clean packaging recycled, but this is impossible without washing the plastic and for this we have no room at our facilities. So it's challenging to improve, but also in 2022 we will discuss with our waste processor to find solutions for these two large waste streams.

For our packaging we have been increasing our recycled plastic content for both professional and retail products. We've managed to increase the overall share of recycled packaging to 29% (2020: 19%). A great achievement in a year where it was sometimes hard to source plastic materials at all. Sometimes our products themselves are made from recycled plastic, like our composter we sell in Sweden and Finland is made from 100% recycled plastic. Besides that we are also looking at other ways to optimise our packaging. We offer for instance smaller sized potting soil and mulches that better fit with smaller household needs. We have also introduced a pump bottle for liquid fertilisers that makes dosing much easier and keeps plants in good shape.

When it comes to our growing media solutions we have continued with our sourcing and innovation programmes to find new circular raw materials, i.e. organic raw materials that are from a renewable source or are given a second life after their first use, like compost from garden waste. Most of the work we do is in collaboration with our customers, because new raw materials need to be tested in practice to determine whether they are fit for purpose. An example of this in the past has been our collaboration with [Hoogstraten](#) on the use of Accretio (Sphagnum moss), which showed so many positive results that now the demand for it is higher than what is available. But besides developing our sourcing strategy for Accretio (e.g. in collaboration with the Swedish University of Agricultural Sciences) we are also working on many other projects.

In the [Bioschamps](#) project we are for instance looking for new raw materials (and combinations thereof) that we can use for mushroom growing. We have been testing materials like leave compost, reused mushroom substrate and non-wood biomass as complementary materials to peat, but also testing use of biostimulants to reduce the need for fertilisers and pesticides.

In another project in Finland, [the John Nurminen's Foundation Coastal Reed Project](#), we are collaborating to test the use of coastal reed for growing media. This causes a win-win situation, because mowing coastal reeds can prevent nature loss, removing nutrients that cause eutrophication of the Baltic Sea and produce climate-friendly raw materials for garden soil products.



Biochamp collaboration for more sustainable mushroom cultivation

Kekkilä-BVB is taking part in the EU funded project BIOSCHAMP. The BIOSCHAMP project aims to develop an integrated approach to tackle the mushroom cultivation challenges: an alternative and sustainable biostimulant casing for the mushroom industry, reducing the dependency on and need for pesticides and contributing to improve the productivity, the sustainability, and the profitability of the European mushroom sector.

The project started on October 2020, it will last 3.5 years and gathers 12 partners from 6 different countries. This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 101000651.

We also continued working with our professional customers to provide their used substrates a second life. In Finland we have our own recycling site in [Teuva](#), in other countries we collaborate with external partners to make a second life possible. Already we are able to reuse substrates for our landscaping projects, as a soil improver and for consumer potting soil and we are now also looking into onsite reuse at the grower. We do have to be careful when reusing substrates, because there's always a risk of contamination, no matter how careful we and our customers are. That's why we have inhouse laboratories to test this.

A clear example of how contamination can harm our business is how we had to deal with a clopyralid contamination in one of our organic fertiliser products. Clopyralid is the common name for a long-lived herbicide used primarily on agricultural land to kill broad-leaf weeds such as clover, dandelion and thistle. The clopyralid had ended up in our organic fertiliser, through the manure from chicken that either had clopyralid containing feed or bedding. And since clopyralid breaks down slowly, it was still detected in the fertiliser. All of the products where this could potentially lead to problems for growing were recalled. We have updated our equipment in the lab so that we can now detect lower levels of clopyralid in our products so we can prevent this from happening in the future. This example also shows why we have to be careful when introducing circular raw materials to our growing media recipes. Since we are not the only company that has to deal with these chal-

lenges it has become one of the topics that Growing Media Europe, our European sector organisation, will take forward.

Despite these challenges we've been able to increase the amount of circular materials in our growing media from 15% to 18%. This is a rather slow process, because every new material has first to be tested to make sure it's predictable, consistent and stable. After that it has to be tested at the grower, to make sure it is suitable for the specific crop that it is used for as a growing medium. The coming years we will continue to increase the use of circular raw materials, but exactly how much and how fast we can do so really depends on the availability, sustainability and quality of these materials.

Biodiversity



Biodiversity plays an important role in our business, from micro- to macro level. At the smallest level we talk about the importance of micro life in our growing media which can be bacteria, fungi or protozoa. Through strict quality control of the whole supply chain we try to keep the negative species out and keep the positive species in our growing media. Within our research department we are continuously looking at new biostimulants (of which mycorrhizae are one of the best known) that can contribute to increasing plant resilience.

At a larger level we have an important role to play to ensure our growing media can support native flora.

For example, this year a specific [meadow soil](#) was developed. In general our landscaping solutions make it possible to grow plants, shrubs and trees at locations, such as rooftops, facades and parking lots where it would otherwise not be possible. We are now also looking at the neighbourhoods of our own production sites to increase biodiversity and support the local flora and fauna to flourish. Plans will be developed next year as part of the Green Factory Concept. This includes further research into using the wastewater at our composting sites for fertilising the surrounding landscapes.

Taking care of nature is also an important parameter in selecting suppliers. Here we've prioritised the sourcing of peat, since this is the most important material for growing media in terms of properties and volume. We only source from suppliers that harvest peat from already degraded peatlands, follow the strictest regulations and restore the peatlands after use. This way we know that biodiversity is higher when our suppliers leave than before they came. We are now also asking from our suppliers to become RPP certified (Responsibly Produced Peat) so we have external validation of the efforts undertaken. Although we would love to have a 100% RPP certified peat as soon as possible, we noticed that travelling restrictions and the lack of auditors at RPP have slowed this process down. Nevertheless more and more of the peat areas at our suppliers are ready to be RPP certified. Our current performance is 50%, by 2025 we aim to increase this to 80%. ■

GROW&CARE DIVISION

G&C MATERIALS - PROVIDING HIGHLY VALUABLE BEDDING PEAT FOR ANIMALS

G&C Materials Oy sells animal bedding materials in Finland and in Sweden and Neova Group's horticultural peat for domestic and export markets in over a dozen countries.

We can guarantee a constant supply through seasons to our domestic and export customers as we operate in three countries, Estonia, Finland, and Sweden. At the moment we are able to load in about 10 ports in the Baltic Sea region, and some of them are ice-free all year. Our export customers are mainly located in Europe, e.g. Germany, the Netherlands, Belgium, France, Spain, Ireland, and Ireland. We also serve our local customers in Estonia, Finland, and Sweden with vast volume.

The export of horticultural peat has grown rapidly in a few past years. There are several reasons for this. The horticultural peat demand for growing media has increased

significantly as home gardening and professional growing demand for substrates keeps rising. The other issue is the availability of horticultural peat in the traditional peat harvesting countries, e.g. Germany and Ireland.

As animal bedding, peat is safe for both the animals and their breeders. Animal bedding peat is used by cattle and dairy farms, horse stables (riding and racing horses), as well as poultry and pig production. As an antiseptic, acidic and mold free product, peat prevents the spread of bacteria in animal shelters. It keeps platforms dry, soft and warm and animals clean. Antiseptic bedding peat reduces mastitis in cows on dairy farms, hoof and respiratory diseases in horse stables, and it reduces significantly foot diseases in broiler houses.



Among animal breeders bedding peat is highly valued because of its special properties. Peat absorbs the smell of urine based ammonia efficiently and keeps the air mould free. Bedding peat is fully recyclable and it can be used as a fertilizer in home gardens and when composted as a raw material for substrates. ■

ENERGY DIVISION

PROVIDING SOLUTIONS FOR RENEWABLE LOCAL ENERGY

Energy division transition from energy peat to biofuels and renewables.

Energy division supports customers' transformation from fossil fuels towards biofuels, while ensuring availability and security of supply, when energy peat use is in strong decline. Thus, Energy division has a social impact by providing fuels reliably, and at a competitive price, to enable sustainable district heating for households and real estate. It also supports the transformation towards a carbon neutral society.

Our target is to grow in biofuels, such as wood chips and pellets, as well as supplying energy peat as a transition fuel. Growth in the biofuels business is supported by changes in operating model, as well as by focusing on building long-term partnerships with customers. An essential part of the new operating model is growing our own wood sourcing directly from the forest owners and creating a close cooperation with contractors.

As part of the renewable energy development, we

are developing opportunities in wind and solar power. This is linked with Neova Group's current land ownership of 60,000 hectares in Finland.

Energy peat – Delivering energy peat as a transition fuel towards fossil free energy production

According to the consumption forecasts of Neova Group's fuel customers in Finland, the demand for energy peat will decline to 20% of the 2021 level by 2025. The drivers are the increase in the price of emission rights of twelve times in four years, and the decision to double the tax on energy peat, the negative public opinion against energy peat and the political pressure to end the energy peat usage.

These drivers resulted in an unparalleled decline in energy peat sales in 2020 and 2021 in Finland. In November Neova Group announced the discontinu-

Providing solutions for renewable local energy

We do this by

- Supporting our customers' transformation from fossil fuels towards biofuels, while ensuring availability and security of supply.
- Developing solutions for renewable energy (wind and solar) based on own land resources.



ation of milled fuel peat production in Finland and a write down of 16.2 M€ concerning the remaining fuel peat production assets. Neova Group has stockpiled energy peat in quantities we believe will meet the needs of important customers for years to come.

Although the need for peat will increase for other businesses than in energy use, we believe we can reduce significantly the land reserved for peat production over the next years. This will directly reduce our emissions to air.

Wood fuels and pellets – Providing solutions for renewable local energy

The demand for energy wood is growing fast as energy companies are rapidly transferring to sustainable biofuels and abandoning fossil fuels like coal, natural gas and peat. Neova Group grows our wood fuel business and service by successfully entering into long-term wood supply partnerships with large customers. In 2021, we also continued to develop the wood fuels operating model and further developed our focus on our own wood sourcing

directly from the forest owners and by creating a close co-operation with trusted contractors. At the same time, we strengthened our wood import capabilities, and Neova Group is the largest importer of energy wood to Finland to open market. To further enforce the position on the market and to be able to serve the customers better we announced in December a merger of Neova Group's and Lassila & Tikanoja's wood businesses to a joint venture.

Neova Group has six pellet production plants in Finland. The total capacity of the Finnish production plants

The environmental permit study for Finnish wood terminals was one of the key projects for environmental responsibility

In 2021, we carried out an environmental permit study for wood fuel terminals, the purpose of which was to clarify the laws and regulations concerning wood terminals and to ensure the permit conditions and possible permit needs for Neova Group's existing wood terminals. An essential part of the study was to export the agreements and permit documents for the wood terminals to our internal permit and monitoring management Luuta-system and to develop an operating model that will ensure environmentally responsible wood operations in the future as well.

The study was one of the top 10 key projects for environmental responsibility in 2021. The goal was to ensure that the environmental permit documents for all wood terminals in Finland are in order, up to date, and can be found in the permit management system with obligations and responsible persons.

The project was divided into three parts: In Step 1, we

ensured the environmental permit status of the existing terminals and exported existing documents to the Luuta-system.

In Step 2, we approached the authorities by requesting the necessary assessments and opinions on the need for permits. In the case of new wood fuel terminals, requesting an opinion is already included when considering the acquisition of a new terminal.

In the last Step, the aim was to prepare and submit needed permit applications to the municipal authorities and the regional government agency. For these, the permitting process will continue during 2022.

In the project, we went through the permit documents for almost a hundred terminals operated by Neova Group. Based on them, we defined the measures, schedules and persons responsible for the operation of the permit management system. This way, we will continue to ensure that wood fuel terminals operate in an environmentally responsible manner.





is approximately 320,000 tonnes per year. The factories produce wood and peat pellets for energy, animal bedding and as a raw material for activated carbon. As a Finnish fuel, the advantage of pellets is that the entire production and supply chain employs Finns and its use improves Finland's trade balance. At the same time, it helps energy customers reduce their CO₂ emissions.

The largest of Neova Group's pellet plants is the Vilppula unit, which has a capacity of approximately 90,000 tonnes per year. The site's raw material comes from the nearby Metsä Group's sawmill. In 2021, the Vilppula plant reached 1 million tonnes of produced pellets, loaded and delivered to heat the Helsinki metropolitan area. The majority of Finland's pellet production is used in large and medium-sized heating plants.

Our key safety highlight from 2021 was that Pellet operations achieved the zero accidents goal (without absence, including all operations). To further improve, we focused on fire safety risk assessments in all our production plants.

When it comes to improving the environmental sustainability of our wood and pellet operations, we have defined our goals and annual actions through our Green Factory concept. Neova Group's wood and pellet business has a valid [PEFC certificate](#), which covers the sourcing and sale of wood and forest industry by-products, as well as the marketing, production and sale of pellets. The PEFC certification promotes ecologically, socially and economically sustainable forestry.

Moving forward, we will implement [the Sustainable](#)

[Biomass Program \(SBP\)](#) certification for pellet operations during 2022, to provide further assurance that our woody biomass is sourced from legal and sustainable source.

Wind and solar power – Developing solutions for renewable energy based on own land resources

In year 2021, most of the time was spent to ensure the necessary land administration for the wind and solar power projects. Although the projects are based on Neova Group's own properties, it is also essential to utilise the neighbouring areas as well, as wind farms need a lot of space. Land lease negotiations may take a long time if there are a large number of landowning parties.

The wind and solar power development team was also strengthened with several new recruitments. At the end of the year, the team had a total of six persons. Team members are located in different parts of Finland, which is only seen as an advantage, as the project locations are quite decentralised.

During 2021, three wind power projects advanced to zoning phase, meaning that the municipalities had made a decision to approve our zoning application. The next step is to carry out the master plan and [Environmental Impact Assessment \(EIA\)](#) processes, which typically take about two years. The goal is to have at least five wind power projects moving forward in zoning phase during 2022. This would mean a total of about 100 wind turbines, which corresponds to an installed capacity of about 700–900 MW.

In addition to wind power, industrial-scale solar power projects were also studied in more detail. Interest in solar energy has accelerated a lot in Finland during 2021. This can also be seen as a large opportunity for Neova Group, as we have already identified over 10,000 hectares of preliminarily potential solar project areas from our own properties. The aim is to get the first solar energy pilot projects into project development during 2022. Many of our wind power projects are also hybrid projects, meaning that there is a plan to produce both wind and solar energy in the same area. These dif-

ferent forms of production support each other very well, as wind power generates the most electricity during the winter and night, while solar energy is generated most during the summer and daytime.

Land assets – Providing solutions for sustainable use of land resources

During 2018-2021 we have sold approximately 40,000 hectares out the land owned by Neova Group in Finland. In addition, we returned a total of 3,105 hectares of pristine natural bogs to Metsähallitus in 2021. Former peat

production areas have been sold for afforestation and more and more for wetlands and carbon sequestration.

In 2021, 85% of the former peat production areas were afforested and 15% were turned into wetlands. We sold 305 hectares to the 4H Foundation for carbon sequestration alone, and an additional 25 hectares were sold to AKK Sport, which offsets the CO₂ emissions caused by the organisation of the Jyväskylä Rally over a three-year period. Moving forward, we will continue to put focus on evaluating options to increase carbon sinks utilising our land assets. ■



Kairinneva hybrid project was the first own project progressing to zoning phase

The Kairinneva peat production area in Halsua, Finland was recognized as a promising area for wind power in a survey done in 2020. The area has been used for peat productions since 1970's and the production is now nearing its end. Neova Group was able to reserve the area for wind power development due to vast land area owned by the company. Private landowners have also already joined the project initiative in both Halsua and Kokkola municipalities.

Halsua and Kokkola municipalities have had a positive attitude towards the project and during 2021 Neova Group started the land use process with them. Relevant authorities were also contacted in 2021 as one of the key factors for using the area for wind power was to gain an obstacle permit due to the proximity of Kokkola-Pietarsaari airport. The permit was granted by Traficom, the Finnish transport authority, in September.

The current plan for Kairinneva wind farm consists of around 20 wind turbines, with the total capacity of 140-180 MW. With the advancing technology in solar power, we have

now also started to investigate the possibility of building a hybrid project in Kairinneva. The advantage with wind and solar hybrid parks is the steadier power production.

During 2022 Neova will continue to work on the land use planning with a specialised consultant and the municipalities. As part of the process, extensive nature studies for the statutory Environmental Impact Assessment (EIA) will be carried out. The effects of the possible wind farm on nature, plants and animals, including on migrating birds will be evaluated. During these processes the local residents and other stakeholders will be heard. To ensure the profitability of the wind park an extensive wind measurement study has been planned to start during 2022.

There are several risks that need to be addressed before the building of the wind park and electricity production can start. If all goes as planned the land use planning should be finished by 2024 and the park connected to newly built Fingrid main grid in 2027.

NEW BUSINESSES DIVISION

NOVACTOR – PROVIDING SOLUTIONS FOR PURIFYING THE ENVIRONMENT

Clean air and water are essential to all life on our planet. Activated carbon is an important material in fighting the ever-increasing pollution in our living environments. The use of activated carbon in air and water purification is growing at a fast pace and it is also widely used in other critical end uses such as food and pharmaceutical production.

With modern technology to lowest emissions

Novactor activated carbon factory in Ilimantsi, Finland is the most modern and environmentally friendly production facility in the world. We are replacing Chinese and North American coal-based import of activated carbon with our offering and significantly reducing the carbon footprint of our European customers. European manufacturing also significantly reduces the logistic costs and emissions of the activated carbon used in Europe.

Reducing the carbon footprint of manufacturing has been very high in the agenda of the Novactor Team. In addition to this, we want to make sure that we use our raw materials as effectively as possible and use an advanced heat recovery system to utilise excess energy from our process. This enables us to provide a vast majority of the district heating energy needed in the local municipality of Ilimantsi. We use best available technology (BAT) in flue gas treatment to ensure low emission levels.

In 2021, Novactor was granted ISO 9001 and ISO 14001 certificates. We have paid extra attention on developing our production and quality control processes in order to ensure safety and to improve our production efficiency, while minimising the waste of raw material. Our modern flue gas treatment system ensures our compliance with the strict environmental permits in place for our production unit.

Providing solutions for purifying the environment

We do this by

- Supporting customers in responsible production through our solutions for air, water and living environment purification.
- Using modern production technologies targeting low energy usage and emissions, recycling and reducing waste.
- Effective use of raw material and side streams.



Activated carbon manufactured from renewable biomasses

Novactor's target is to become a leading supplier of activated carbon manufactured from renewable raw materials. Adsorption characteristics of the activated carbon product are very strongly linked to the raw material used. Finnish natural biomasses offer Novactor a very good base for a wide portfolio of high-quality activated carbon products.

Hard and softwood side streams from Finnish wood industry have been tested in our R&D laboratory and production process. Test results have been promising and we will introduce a portfolio of wood-based products soon after the start of the first production facility. This will also enable us to produce a larger variety of products for different end uses and applications.

The latest addition to our research and development pipeline is willow. Willow, as a fast-growing biomass has been extensively studied in Finland for energy use as well as for afforestation of waste land, such as old peat production areas.

As a raw material of activated carbon willow is an interesting addition that we are looking into with great interest. Our R&D tests have revealed great potential and unique characteristics in the product, but also an opportunity to create a truly "green activated carbon" product with even a negative CO₂ footprint. There will be a market for such offering in future, we believe. ■



Experiment of growing willow as a raw material for activated carbon

Neova Group's target is to increase the use of renewable raw materials and, at the same time, promote biodiversity and carbon sequestration. The combination of these three targets will be tested during the next few years at Karhunsuo in Kouvola, Finland, where almost 20 hectares of willow cuttings have been planted.

Neova Group has tested willow as a raw material for activated carbon, and the initial experiments show that high quality activated carbon can be harvested from willow. The target at the Karhunsuo test site is to test the cultivation, harvesting and carbon sequestration of willow and, at the same time, speed up the recovery of biodiversity.

The special feature of willow is how fast it grows. Already during the first year, willow grows tens of centimetres. At its fastest, willow can produce 8–10 tonnes of biomass per

hectare in a year in a mineral soil field. Two thirds of this is on the surface and one third is in the root systems. Once a willow field has been planted, it produces harvestable crop every 3–5 years for an estimated 20–25 years, after which the vitality of the populations starts to decline.

Willow absorbs carbon dioxide from the air and binds it into its growth and root system. If the speed of growth is ideal, willow binds 10 tonnes of carbon per year. Willow growth is also an effective water evaporator.

The idea is to utilise willow as raw material in industrial processes. Willow can be used as raw material for activated carbon and biocoal, among other things. In the future, the goal is to examine the possible valuable materials that willow contains and how to utilise them.

NEW BUSINESSES DIVISION

NEOVA VENTURES - INNOVATING FOR SUSTAINABLE FOOD PRODUCTION

Neova Ventures develops solutions to global challenges in collaboration with customers and other ecosystems to secure global food production, to promote healthy and comfortable living environments, and to develop means to purify air and water. Our aim is to refine peat based biomass and other organic natural materials into new high value-added products to international markets.

Focusing on the sustainability of our new biostimulant products

During 2021 Neova Ventures has successfully researched and developed peat-based biostimulants to be used in rapidly growing international agricultural and horticultural markets. We aim to start commercial production in 2024. Biostimulants increase the efficiency of plant nutrient uptake, stress tolerance and both qualitative and quantitative properties of plants through a variety of mechanisms of action. Studies have shown the

superior customer value of our products. Peat-based humate products have, on average, performed better than products that have been on the markets for a long time and are manufactured from fossil carbon-based raw materials. We are also investigating plant-based biostimulants from Sphagnum moss and other natural raw materials to create added value for our customers through strong biostimulant product portfolio in the future.

Product development has included the management of the environmental impacts of production as part of the selection of processes, products and the location of a potential production plant. For this reason, the life cycle environmental impacts of humic products have been modelled using a screening level life cycle analysis (LCA). The examination was extended from cradle to grave, i.e., it included all stages of the life cycle. In addition, the carbon balance of production was examined, i.e., how much of the carbon from the original peat ends

Innovating
for sustain-
able food
production

We do this by

- Effective use of natural raw materials and side streams to produce high value-added products for sustainable food production.
- Building Refinery concepts based on circular economy.
- Creating sustainable innovations with the ecosystem.



“Up to 70% carbon from the original peat used for biostimulant humate and biochar may end up in the products and return to the soil for a period of 100 years.”

up in the products and how much carbon is lost in the processes.

In terms of climate impact, the processing of peat into humate biostimulants is a better option than, for example, energy use, in which the carbon contained in the peat is released immediately into the atmosphere during combustion. In one of the refinery concepts developed by Neova Ventures, humic substances are extracted from dark peat into biostimulants and the solid by-product is utilised as a raw material for biochar. Other utilisation possibilities of this by-product are also being studied, such as a direct use as a soil improver.

According to a preliminary carbon balance, up to 70% of the original carbon in peat is transferred into humate and biochar products. Thus, the most of the original carbon in the peat is returned to the soil with the

products. In addition, it has been studied that Neova Ventures' biochar is suitable for agricultural use and is permanent in the soil for a period of 100 years. Humic substances can also be expected to be relatively stable in soil, although research data on this is still limited.

The European Biochar Certificate (EBC) is an European certification system for a biochar and only a product derived from raw materials listed by that system can be certified. The solid by-product of peat-based humic production was approved for a list of approved biochar feedstocks maintained by the EBC last fall. This is a very positive thing for the commercialisation of product, as it will make it possible to apply for a certificate in the future if the concept ends up producing biochar.

The life cycle analysis of humate products was, to our knowledge, the first of its kind. Based on this, the climate and other environmental impacts of the peat-based humate products are reasonable. It is possible to manage them e.g., optimising product form and composition, production methods and factory location. The environmental impact of the manufacture of a dry granular product is clearly higher than the impact of a liquid product due to energy needed in drying process, although some of the differences in production are offset by the transport of the products to the target market in Southern Europe.

The preliminary LCA work, and the carbon balance review are intended for internal product development and customer negotiations and will for a basis for the full scale LCA work. The modelling is updated as the



planning of the production progresses. The goal is a peer reviewed LCA that can also be utilised in public communication.

We develop sustainable Neova Refinery concepts, where all raw-materials and side-streams are utilised according to principles of circular economy

In 2021 we studied integration benefits of different existing and future products of Neova Group. Haukineva (Seinäjäki, Finland) has potential to be developed to a Circular Economy Biorefinery Park where several products based on Neova Group knowhow would be produced. Haukineva Master Plan study was completed in October 2021, and it serves as a roadmap for Haukineva site development until 2030. At present there are wood pellet and growing media production at the site. No investment decisions have been made yet, but the future production at Haukineva is planned to consist of activated carbon, biostimulant, feed/energy pellet and large growing media production unit with several product lines. In the beginning the main raw material will be peat, but the proportion of other raw materials like wood, moss and new sustainable raw materials will gradually increase by 2030.

The integrated production of different products at the same site enables significant cost savings and additional revenue when the side streams from one process can be recycled to other processes. Activated carbon production can supply its excess energy to heat the

demanding processes. Different raw material fractions can be effectively used on-site, and it will be possible to minimise commodity consumption and environmental emissions. There are synergies also in product logistics, operation, maintenance, laboratory activities etc.

Neova and the University of Jyväskylä signed a cooperation agreement to promote a circular economy

For decades, Neova Group and the University of Jyväskylä, Finland have had research and development cooperation, which has intensified in recent years. Neova Ventures' product development laboratory was established in connection with the University of Jyväskylä in 2018. In the Neova Refinery product development programme funded by Business Finland, the University of Jyväskylä produces high-quality scientific research at the interface of research and development and thus helps meet our product development needs.

Moving forward, Neova Group is interested in organic natural materials and by-products from which valuable materials can be isolated and all fractions can be utilised as raw materials for other products, such as growing media, in accordance with the principles of the circular economy. Research and development will focus on particular on the development of biostimulants.

The University of Jyväskylä has internationally high-level research in the field of analytical chemistry, which creates a strong foundation for methodological develop-

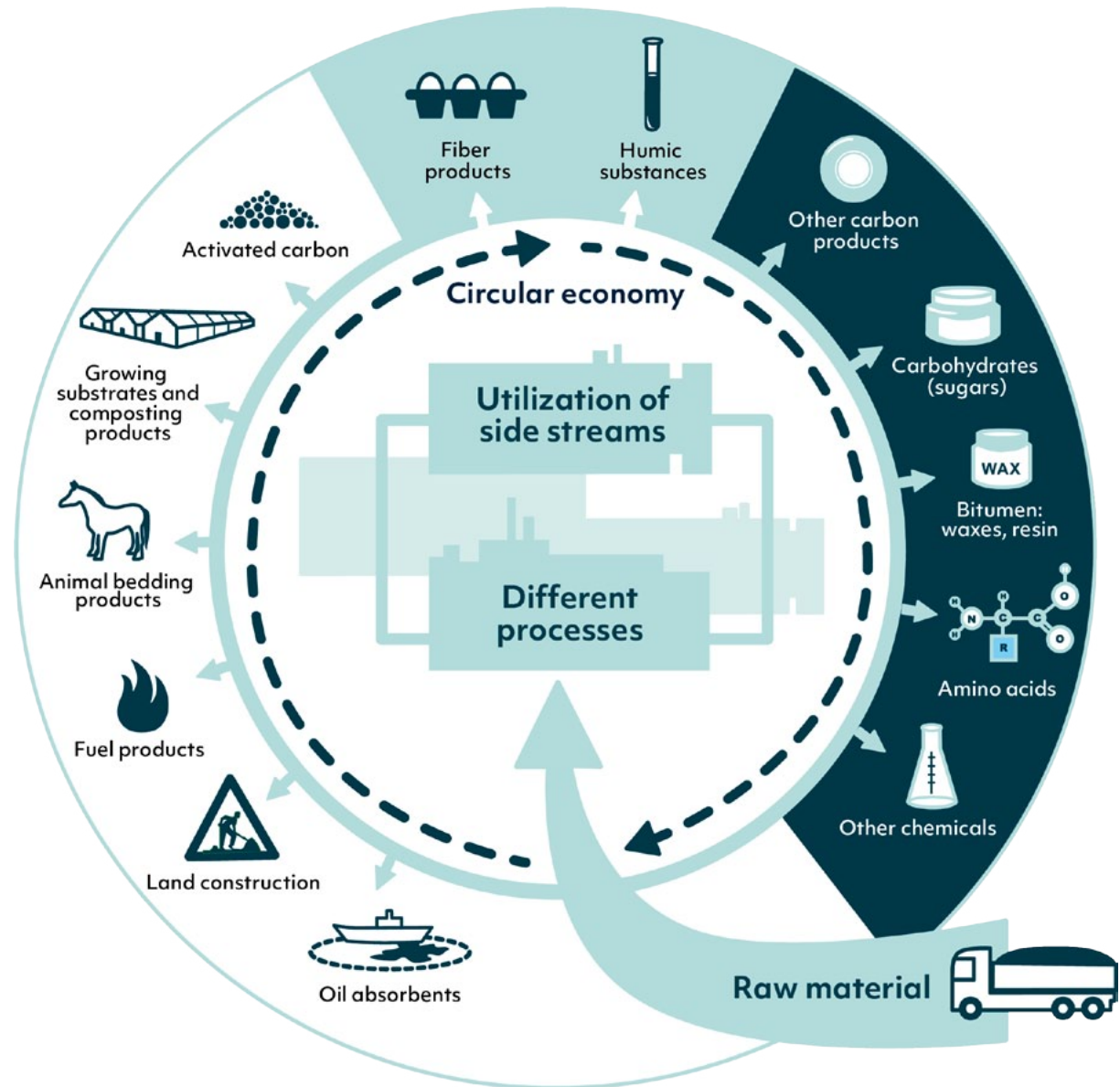
“Haukineva Master Plan indicated significant integration synergies and environmental benefits of different existing and future products of Neova Group. Haukineva has potential to be developed to a Circular Economy Biorefinery Park in the future.”

ment and applications in the circular economy. Research has already produced new innovations for the recovery of valuable substances from industrial by-products and wastewater.

The Group's research and development investments during 2021 amounted to EUR 16.3 million (EUR 27.2 million), which corresponds to 3.2 per cent of turnover (5.0%). Research and development activities were focused on supporting the company's strategic renewal in all of the Neova Group companies. ■

Neova Refinery concept

We develop sustainable Neova Refinery concepts, where all raw materials and side-streams are utilized according to principles of circular economy and high value-added products are produced for international markets.



GRI INDEX

Organisational profile	Page	Comments
102-1 Name of the organisation	Front cover	
102-2 Activities, brands, products, and services	76-94, Annual Report, Neova Group	
102-3 Location of headquarters	GRI Index	Jyväskylä, Finland
102-4 Location of operations	About us	
102-5 Ownership and legal form	GRI Index	The state of Finland has a holding of 50.1% in the parent company Neova, while Suomen Energiavarat Oy holds 49.9%.
102-6 Markets served	76-94, Annual Report, About us	
102-7 Scale of the organisation	About us , Annual Report, Financial Statements and Board of Directors' Report	
102-8 Information on employees and other workers	69-73, 109	
102-9 Supply chain	73, Annual Report	
102-10 Significant changes to the organisation and its supply chain	54, 57-61, 74-75, 76-94, Annual Report, Financial Statements and Board of Directors' Report	
102-11 Precautionary Principle or approach	57-59, 75, Corporate Governance	
102-12 External initiatives	60-61, 104-105, Certificates	UN Sustainable Development Goals, UN Global Compact, certificates on quality, environmental and sustainability management
102-13 Membership of associations	60-61, Memberships	

Strategy	Page	Comments
102-14 Statement from senior decision-maker	Annual Report	
102-15 Key impacts, risks, and opportunities	54, 57-59, 62-68, 74-75, 76-94, Annual Report, Financial Statements and Board of Directors' Report	

Ethics and integrity	Page	Comments
102-16 Values, principles, standards, and norms of behavior	58, 69, 73, Values	
102-17 Mechanisms for advice and concerns about ethics	71-72, Whistleblowing	
Governance	Page	Comments
102-18 Governance structure	59, Corporate Governance	
102-20 Executive-level responsibility for economic, environmental, and social topics	59	
102-21 Consulting stakeholders on economic, environmental and social topics	57-59	
102-23 Chair of the highest governance body	Corporate Governance	
102-26 Role of highest governance body in setting purpose, values, and strategy	Corporate Governance	
102-29 Identifying and managing economic, environmental, and social impacts	57-59	
102-32 Highest governance body's role in sustainability reporting	59	
Stakeholder engagement	Page	Comments
102-40 List of stakeholder groups	57-59, GRI Index	Personnel, customers, owners, public authorities, peatland lessors and landowners, scientists, researchers, research institutes, schools and students, non-governmental organisations, HR partners and external stakeholders, suppliers, service providers, contractors, political decisionmakers, citizens, media, labour market organisations.
102-41 Collective bargaining agreements	109, GRI Index	Percentage of personnel covered by collective bargaining agreements: Spain 100%, Sweden 100%, Finland 36%, The Netherlands 8%, Estonia 0%, Germany 0% .
102-42 Identifying and selecting stakeholders	57-59	
102-43 Approach to stakeholder engagement	57-59	
102-44 Key topics and concerns raised	57-59	

Reporting practice	Page	Comments
102-45 Entities included in the consolidated financial statements	Financial Statements and Board of Directors' Report	
102-46 Defining report content and topic boundaries	57-59, GRI Index	The reporting is based on a materiality analysis that was used to determine the views of Neova Group's stakeholders and the company itself regarding the most material corporate sustainability topics related to the company's operations. The sustainability report covers the entire Neova Group. The calculation principles and boundaries of environmental figures are primarily reported in the context of the relevant charts and tables.
102-47 List of material topics	57-59	
102-48 Restatements of information	GRI Index	No restatements of information.
102-49 Changes in reporting	GRI Index, 54, 62, 66	The figures presented in the sustainability report represent the entire Neova Group to the extent that the data was available. Any changes to previous reports are included in the topic-specific disclosures. The share of RPP certified peat of all peat used in 2020 has been reviewed and updated.
102-50 Reporting period	GRI Index	The reporting period is 1 January – 31 December 2021.
102-51 Date of most recent report	GRI Index	Neova Group's previous sustainability report was published in March 2021.
102-52 Reporting cycle	GRI Index	Neova Group reports on its sustainability annually since 2018.
102-53 Contact point for questions regarding the report	GRI Index	Sustainability and the sustainability strategy and targets: Petri Järvinen, Chief Supply Chain and Sustainability Officer, Environmental responsibility: Päivi Martikainen, Director, Group Operational Excellence & Sustainability Economic responsibility: Jarmo Santala, CFO Social responsibility: Jenni Nevasalo, Chief HR Officer
102-54 Claims of reporting in accordance with the GRI Standards	GRI Index	Neova Group reports on the economic, environmental and social impacts of its operations in accordance with the GRI Standards core scope.
102-55 GRI content index	GRI Index	
102-56 External assurance	GRI Index	This report has not been externally assured. Emission calculation logic and emission factors used in Neova Group's 2020 Scope 1 & 2 emission calculation have been checked by Gaia consulting Oy. The emission calculation for 2021 has been done with the same bases as in 2020, taking into account the recommendations received from the review to supplement Scope 2 location-based emission calculation with market-based calculation. Emission calculation for scope 3 has been done by third party Gaia Consulting Oy.

Management and economic performance	Page	Comments
103-1 Explanation of the material topic and its Boundary	62-68, 102	
103-2 The management approach and its components	59, 102, Corporate Governance	
103-3 Evaluation of the management approach	102, Corporate Governance	
Economic performance	Page	Comments
201-1 Direct economic value generated and distributed	74-75, 114, Financial Statements and Board of Directors' Report	
201-2 Financial implications and other risks and opportunities due to climate change	75	
Anti-corruption	Page	Comments
205-3 Confirmed incidents of corruption and actions taken	GRI Index	No reported incidents.
Anti-competitive behavior	Page	Comments
206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	GRI Index	No reported incidents.
Materials	Page	Comments
301-2 Recycled input materials used	77, 83	Reported partly.
Energy	Page	Comments
302-1 Energy consumption within the organisation	108	Total energy consumption includes the fuel consumption of the company's production facilities and work machines, as well as the consumption of electricity, heat and steam.
302-3 Energy intensity	GRI Index	The energy intensity in 2021 is 0,5 kWh/€. The energy intensity is calculated in relation to the Group revenue. In the intensity ratio is included the fuel consumption in production and on-site machinery as well as consumption of electricity, heating and steam.

Water and effluents	Page	Comments
303-1 Interactions with water as a shared resource	68, 107-108	Reported partly. For emissions into waterways, report nitrogen, phosphorus and solid matter emissions from Finnish peat operations where environmental permits include the obligation to calculate the annual load. The calculations are based on samples.
303-2 Management of water discharge-related impacts	GRI Index Sustainability Concept for Peat	Environmental permit is required for peat production. At peat production areas, the best available techniques (BAT) are defined on a case-by-case basis taking into account the particular conditions at each production area and the remaining operational time. The profile of the receiving waterbody is considered in permit processes.
Biodiversity	Page	Comments
304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	115, GRI Index Certificates	Reported partly. All peat production areas in Neova Group operate under environmental permits. Risks of peat production to nature are always assessed beforehand and the permits are not applied for areas classified in high natural state.
304-3 Habitats protected or restored	62, 66	Active Conservation Exchanges For Valuable Bogs
Own indicators - Reforestation and wetland development	62, 66	
Emissions	Page	Comments
305-1 Direct (scope 1) GHG emissions	62-64, 105	Direct fossil CO ₂ (scope 1) is calculated based on fuel usage and area reserved for peat production under company's control. GRI disclosure 305-1 soil emissions are reported as equivalents. Fuel use emission is reported as CO ₂ only. Emission factors used in the calculation are based on publicly-accessible material. Changes: Soil emission calculation was supplemented retrospectively by adding the calculated emission of peat stockpiles.
305-2 Energy indirect (scope 2) GHG emissions	62-64, 105	Indirect CO ₂ emissions from electricity usage (scope 2) are calculated with both market and location-based approach. In case the market-based data is not available, residual mix is used. Emission factors used in the calculation are based on publicly-accessible material. GRI 305-2 market based emissions are reported as equivalents. Changes: In 2020 report energy consumption at one site was incorrectly reported as a double. Error is fixed.
305-3 Other indirect (scope 3) GHG emissions	62, 106	Scope 3 indirect CO ₂ emissions are calculated based on data availability. In section 305-3, emissions are reported in CO ₂ equivalents.
305-4 GHG emissions intensity	62-64, GRI Index	The emissions intensity is calculated in relation to the Group revenue, t CO ₂ /M €.

Effluents and waste	Page	Comments
306-1 Water discharge by quality and destination	67, 107-108 Monitoring reports	Reported partly. For peat production the volume of planned and unplanned water discharges are reported in emission and water monitoring reports, together with standards, methodologies, and assumptions used. Information is reported for Finnish operations.
306-2 Waste by type and disposal method	62, 67, 107	Reported for all Neova Group operations. Waste: Reported waste volume has been revised after the 2020 report was published. Corrected readings and recovery information can be found in the waste table.
306-3 Significant spills (if none, just in index)	GRI Index	Drainage waters from peat production had to be rerouted to diversion culverts and dams on 20 occasions to prevent damage to water protection structures, for an average of nine days per incident. The number of diversion incidents decreased by 50 % compared to 2020. Exceptions in water management have been notified to the supervisory authority in accordance with the permit conditions. The reasons for the exceptional situations are investigated and the necessary measures are taken to rectify the situation.
Environmental compliance	Page	Comments
307-1 Non-compliance with environmental laws and regulations	GRI Index	No reported incidents of non-compliance.
Supplier environmental assessment	Page	Comments
308-1 New suppliers that were screened using environmental criteria	GRI Index Code of Conduct	In 2021 were performed 29 supplier audits, 3 internal supplier audits and 27 supplier self-assessments.
Employment	Page	Comments
401-1 New employee hires and employee turnover	GRI Index	Reported partly. Employee turnover (outgoing): 112 cases of employment termination (11,8%). The number includes all causes of employment termination. Regional division: 54 FI, 4 EE, 28 SWE, 23 NL, 1 GER, 2 ES Gender division: 27 female (24%), 85 male (76%) Age division: 7 under 30 (6%), 61 30-50 years (54%), 44 over 50 (40%)

Occupational health and safety	Page	Comments
403-2 Hazard identification, risk assessment, and incident investigation	54, 69-70, 110-113	
403-5 Worker training on occupational health and safety	69-70	
403-9 Work related injuries	54, 69-70, 110-113	
G4-EU18 Health and safety training for suppliers	70	
Training and education	Page	Comments
404-2 Programs for upgrading employee skills and transition assistance programs	71	Reported partly. Programmes pertaining to retirement and the termination of employment have not been reported.
Diversity and equal opportunity	Page	Comments
405-1 Diversity of governance bodies and employees	GRI Index	Board of Directors: 8 members total: 2 women (25%) and 6 men (75%). Under 30 yrs: 0, 30-50 yrs: 2 (25%), over 50 yrs: 6 (75%). Group Management Team: 11 members, 2 women (18%) and 9 men (82%), under 30 yrs: 0, 30-50 yrs: 2 (18%), over 50 yrs: 9 (82%).
Non-discrimination	Page	Comments
406-1 Incidents of discrimination and corrective actions taken	71-72, GRI Index	13 reported cases and corrective actions taken (including follow up).
Public policy	Page	Comments
415-1 Political contributions	Gri Index	Neova does not support any political parties.
Marketing and labeling	Page	Comments
417-3 Incidents of non-compliance concerning marketing communications	GRI Index	No incidents of non-compliance.
Socioeconomic compliance	Page	Comments
419-1 Non-compliance with laws and regulations in the social and economic area	GRI Index	No incidents of non-compliance.

APPENDIX 1: DISCLOSURES ON MANAGEMENT APPROACH

	We do our business in balance with nature				We support the growth of our people and partners				We ensure profitability in a sustainable way	
Neova Group material topics	Greenhouse gas emissions	Biodiversity	Circularity	Water	Safety first!	Great workplace	Responsible partners	Discrimination and inappropriate behaviour	Economic and local employment impact	Financial implications and climate risks
	Pages 54, 58–59, 62–64, 77	Pages 54, 58–59, 62, 65–66, 77, 83	Pages 54, 58–59, 62, 67, 77, 81–82, 91, 93–94	Pages 58, 62, 68	Pages 54, 58–59, 69, 70, 73, 77, 79, 87	Pages 54, 58–59, 60, 71–72, 77, 79–80	Pages 58–59, 73, 80	Pages 69, 71	Pages 74–75	Page 75
Policies and commitments	Neova Group Sustainability strategy (updated 12/2021). Overall we apply the following policies to manage our approach for the material topics: Group corporate governance statement, Code of Conduct, Supplier Code of Conduct, Corporate responsibility policy incl. SEQ, Internal audit charter, Sourcing and procurement policy. Topic specific policies are mentioned below. We are committed to UN Global Compact and UN Guiding Principles on Business and Human Rights and the Fundamental Conventions of the International Labour Organization. In addition, we communicate our approach to the United Nations Sustainable Development Goals throughout this report, and are committed to making them part of the strategy, culture and day-to-day operations of our company.									
	Environmental sustainability strategy 2022–2025				Information security policy, Data privacy policy, Personnel policy, Compensation policy, Language policy.				Disclosure policy, Innovation and IPR policy, Risk management policy, Financial policies. As part of our Enterprise Risk Management process we will prepare the Task Force on Climate-related Financial Disclosures (TCFD) during 2022.	
Goals and targets	These are presented on page 57–58 (“Sustainability at Neova Group”) and in the indicator tables on pages 62, 69, 74, 77.									
Responsibilities and resources	These are presented on page 59 (“Sustainability tightly governed within Neova Group”)									
Grievance mechanisms	Environment observations recording tool. Environmental feedback and irregularities are handled by the business area in question and reported to the Board of Directors. Environmental permitting process is public and includes open grievance mechanisms. Responsibly Produced Peat (RPP) certification process includes open grievance mechanisms.				Safety observations recording tool, accident investigations, mandatory safety trainings	Annual employee satisfaction survey Great Place to Work, pulse surveys	Responsible Sourcing programme (incl. observations and audits)	Reporting and follow-up of incidents, Whistle-blowing channel		
Assessment of management approach	We measure our impacts and our progress towards the targets annually and evaluate our management approach based on our performance, including stakeholder and customer feedback. For example, increasing levels of reporting safety, environmental, quality and success observations give us a positive signal, that awareness is increasing and there is a proactive management of issues. We carry out regular internal and external audits as well as conduct management reviews to assess our progress and the effectiveness of our management approach.									

APPENDIX 2: EXTERNAL SUSTAINABILITY REFERENCES

Sustainability frameworks

- **UN Sustainable Development Goals (SDGs)** – UN SDGs are 17 sustainability goals with 169 targets that all UN Member States have agreed to work towards achieving by the year 2030. For businesses it is as a universal framework for businesses to communicate performance, set targets and actions, engage with various stakeholders, including investors and gain access to new market opportunities. The framework fosters collaboration to solve the world's most challenging tasks in sustainability.
- **Global Reporting Initiative (GRI) framework** – a sustainability reporting framework that helps businesses and governments worldwide understand and communicate their impact on critical sustainability issues such as climate change, human rights, governance and social wellbeing.
- **Upright Project net impact assessment methodology** – a model to quantify in automated way the net impact of companies on people, planet, society and knowledge. Upright enables smarter decision-making for investors, companies and governments by quantifying the net impact of companies.
- **NEW – Taskforce on Climate Related Financial Disclosures (TCFD)** – a framework to incorporate evaluation of climate-related risks and opportunities into companies risk management and strategic planning processes.
- **NEW – Carbon Disclosure Project (CDP)** – a not for profit charity that runs the global disclosure system for *investors, companies, cities, states and regions* to manage their environmental impacts.
- **NEW – Greenhouse Gas Protocol (GHG)** – a comprehensive global standardized framework to measure and manage greenhouse gas (GHG) emissions from private and public sector operations, value chains and mitigation actions.
- **NEW – Global Logistics Emissions Council (GLEC) framework** – global method for calculating and reporting logistics emissions.

Sustainability commitments

- **NEW – UN Global Compact** – a framework for voluntary initiative based on CEO commitments to implement universal sustainability principles and to take steps to support UN goals.
- **NEW – UN Guiding Principles on Business and Human Rights** – the global standard for preventing and addressing the risk of adverse impacts on human rights linked to business activity, and they provide the internationally-accepted framework for enhancing standards and practices with regard to business and human rights.

Product specific sustainability certificates

- **RPP (Responsibly Produced Peat)** – certificate system for growing media applications. Goal is to ensure that peat used as a constituent for growing media can be guaranteed from responsible resources.
- **PEFC** – Certification system to ensure that wood products come from sustainable forest management.
- **FSC (Forest Stewardship Council)** – Certification system to ensure that wood products come from forest that is being managed in a way that preserves biological diversity and benefits the lives of local people and workers, while ensuring it sustains economic viability.
- **RHP (certified for horticulture)** – The RHP quality mark gives a thorough quality judgement on the certified substrates. Substrates, soil supply and soil improving materials with the RHP quality mark are stable and guarantee an optimal nutrient medium.
- **QMGS – Quality Mark Good Soil (QMGS)** is intended for companies that supply and / or sell potting soils is the ground covers and soil improvers within the hobby sector. QMGS is the quality mark, which guarantees the safety, quality, composition, purity and usability of the product.

- **NEW – Sustainable biomass program (SBP)** – a certification system designed for woody biomass, mostly in the form of wood pellets and woodchips, used in industrial, large-scale energy production to provide assurance that woody biomass is sourced from legal and sustainable sources.

Management systems certifications

- **ISO 9001 Quality Management System** – an international standard that helps organizations ensure they meet customer and other stakeholder needs within statutory and regulatory requirements related to a product or service.
- **ISO 14001 Environmental Management System** – an international standard that enables organizations to improve their environmental performance.
- **NEW – ISO 45001 Occupational Health & Safety System** – an international standard for occupational health and safety, issued to protect employees and visitors from work-related accidents and diseases.

Non-competitive collaboration forums (through memberships)

- **FIBS** – a community for Finnish companies to share best practices and insights on corporate responsibility topics.

NEW refers to references to be implemented during 2022.

APPENDIX 3: THE TEN PRINCIPLES OF THE UN GLOBAL COMPACT ADDRESSED IN THIS REPORT

Human rights	Chapter	Subchapter
Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and	Sustainability at Neova Group	
Principle 2: make sure that they are not complicit in human rights abuses	Sustainability at Neova Group	
Labour	Chapter	Subchapter
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	Sustainability at Neova Group, We support the growth of our people and partners, Appendix	
Principle 4: the elimination of all forms of forced and compulsory labour	Sustainability at Neova Group, We support the growth of our people and partners	
Principle 5: the effective abolition of child labour; and	Sustainability at Neova Group, We support the growth of our people and partners, GRI Index	
Principle 6: the elimination of discrimination in respect of employment and occupation	Sustainability at Neova Group, We support the growth of our people and partners, GRI Index	
Environment	Chapter	Subchapter
Principle 7: Businesses should support a precautionary approach to environmental challenges;		
Principle 8: undertake initiatives to promote greater environmental responsibility; and	Common targets and initiatives through our own operations: We do our business in balance with nature, Appendix	Business specific objectives through products and services: Grow&Care, Energy, New Businesses divisions
Principle 9: encourage the development and diffusion of environmentally friendly technologies		
Anti-Corruption	Chapter	Subchapter
Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	We ensure profitability in a sustainable way, GRI Index	

APPENDIX 4: WE DO OUR BUSINESS IN BALANCE WITH NATURE

CO₂ emissions (scope 1+2) from Neova Group's own operations 2021 (2020 with Nevel)

	Finland	Sweden	Estonia	The Netherlands	Neova Group
	kt CO ₂ e	kt CO ₂ e	kt CO ₂ e	kt CO ₂ e	kt CO ₂ e
Peat operations	525 (607)	61 (61)	65 (54)		651 (723)
Kekkilä-BVB operations	4 (3)	1 (1)	1 (2)	4 (5)	10 (10)
Pellet operations	33 (22)				33 (22)
Nevel*	- (234)	- (4)	- (11)		- (249)
Power plant (Ilomantsi)	20 (20)				20 (20)
Novactor/New Businesses	0.5 (-)				0.5 (-)
Shared/Group	0.1 (0.1)				0.1 (0.1)
Total	582 (886)	62 (65)	66 (67)	4 (5)	714 (1 023)

Neova Group's emissions consist of direct and indirect energy consumption on production sites, fuel use of on-site vehicles, soil and stockpile emissions of peat production areas (note: stockpile emissions have been updated also to 2020 emissions after 2020 GRI Reporting). The emission factors used to calculate soil emissions of peat production are based on national greenhouse gas inventories. Emissions for direct energy consumption is calculated based on actual fuel consumption figures and fuel-specific emission factor. Direct energy consumption of pellet and power plant operations in Finland includes only fossil fuels. For indirect energy consumption country is used market-based emission factors. Emissions from on-site vehicles are calculated based on fuel use. Emission of peat production machines is estimated based on the total production volume and average fuel consumption in peat production.

Scope 1 and 2 emissions calculation for 2020 has been reviewed and validated externally by Gaia Consulting. Emissions for 2021 have been calculated according to the same principles.

*2020 including Nevel

Greenhouse gas emissions 2021 (2020 without Nevel)

	Finland	Sweden	Estonia	The Netherlands	Neova Group	Description
	kt CO ₂ e	kt CO ₂ e	kt CO ₂ e	kt CO ₂ e	kt CO ₂ e	
SCOPE 1 soil emission	514 (598)	59 (59)	63 (53)		636 (709)	Emissions from land areas reserved for peat production. Emission from peat stockpiles.
SCOPE 1 other fossil emission	50 (40)	3 (2)	3 (2)	2 (2)	57 (27)	Fuel use in own facilities and production in CO ₂ . Fuels consumption of on-site vehicles.
SCOPE 1 biogenic emission	7 (-)				7 (-)	Fuel use in own facilities and production in CO ₂ . Not included in total emissions. Added to report from 2021.
SCOPE 2 market based electricity emission	12 (14)	0.1 (0.2)	1 (1)	2 (3)	15 (18)	Purchased electricity emission as market-based and district heating. Company target setting is based on market based calculation.
SCOPE 2 location based electricity emission	7 (10)	0.1 (0.1)	1 (1)	2 (2)	9 (14)	Purchased electricity emission as location-based and district heating.
SCOPE 3 total	2 354 (2638)	459 (447)	309 (284)	445 (485)	3 568 (3 855)	See separate table for detailed breakdown.
Total emissions	2 936 (3 291)	521 (508)	376 (340)	449 (490)	4 282 (4 609)	Including + SCOPE 1 soil + other fossil emissions + SCOPE 2 market based emissions

Greenhouse gas scope 3 emissions 2021 (2020 without Nevel)

	Finland	Sweden	Estonia	The Netherlands	Neova Group	
Categories	kt CO ₂ e	kt CO ₂ e	kt CO ₂ e	kt CO ₂ e	kt CO ₂ e	Description
1. Purchased goods and services	47 (57)	16 (14)	12 (8)	104 (129)	179 (208)	Purchased goods and services in the reporting year based on data in amount of materials and when not available, calculation was done based on spend.
2. Capital goods	1 (9)	1 (1)	3 (0.1)	2 (0)	8 (10)	Capital investments in, e.g. construction projects.
3. Fuel and energy related activities	7 (5)	2 (1)	1 (1)	1 (1)	11 (8)	Extraction, production, and transportation of fuels and energy purchased or acquired. Calculated based on scope 1 and 2.
4. Transportation and distribution	18 (18)	2 (2)	19 (19)	6 (6)	45 (45)	Transportation and distribution paid by the company.
5. Waste generated in operations	1 (1)	0.05 (0.03)	1 (0.03)	0.1 (0.1)	2 (1)	Waste and waste water generated by the company.
6. Business travel	0.5 (1)	0.1 (0.2)	0.02 (0.02)	0.1 (0.1)	1 (1)	Emissions from flights and other travels as well as hotel stays.
7. Employee commuting	0.4 (0.4)	0.1 (0.1)	0.1 (0.1)	0.4 (0.4)	1 (1)	Daily commuting of employees to workplace.
8. Upstream leased assets	1 (1)	0.1 (0.1)	0.1 (0.1)	0.1 (0.002)	1 (1)	Leased assets not already included in scope 1 or scope 2 inventories and fuel consumption of leased vehicles that was not included in the scope 1 calculation.
9. Downstream transportation and distribution	5 (0.6)	0.1 (1)	3 (5)	2 (0.6)	10 (7)	Transportation and distribution of sold products not paid by the company (and vehicles and facilities not owned or controlled by the reporting company).
10. Processing of sold products	Neova Group companies does not sell intermediate products which would require processing.					
11. Use and 12. End-of-life of sold products	2 274 (2 546)	438 (428)	269 (251)	329 (349)	3 310 (3 573)	The use and the total expected end-of-life emissions from all products sold in the year. Categories 11 and 12 were combined, as the emissions for horticultural peat were given as one value and could not be separated. The main emission source here is the use of energy peat.
13. Downstream leased assets	Neova Group companies do not have assets leased to others.					
14. Franchises	Neova Group companies do not have franchising business.					
15. Investments	Neova Oy owns 51% of a Swedish pellet company Scandbio. Scandbio has done an LCA but not calculated organizational level carbon footprint. As the standard behind the calculation is different, these were not mixed.					
Total	2 354 (2 638)	459 (447)	309 (284)	445 (485)	3 568 (3 855)	

Waste volume

	2019	2020	2021
Recovery, tonnes	21 265	26 479	13 256
Energy, tonnes	3 379	4 632	7 897
Recycling, tonnes	17 886	21 847	5 359
Disposal, tonnes	2 594	3 591	1 650
Landfill, tonnes	1 176	2 222	1 606
Other disposal, tonnes	1 418	1 369	44
Total, tonnes	23 859	30 070	14 905
Recycling rate, %	75	73	37
Recovery rate, %	89	88	89

2019: Excluding data from Kekkila BVB the Netherlands.

2020: After the GRI reporting in 2020, the waste volume data has been updated due to additional information received after the reporting.

2021: Total waste volume in Neova Group halved after Nevel is sold. This has a major effect to recycling rate.

Use of ash generated in Neova Group's facilities

	2019	2020	2021
Landfill disposal, %	4	4	43
Soil construction, %	71	66	10
Forest fertiliser, %	12	4	0
Intermediate storage / Future utilisation, %	13	26	47
Total, tonnes	19 113	15 309	703

Number of environmental observations 2021 (2020)

	Finland	Sweden	Estonia	The Netherlands
Nevel	- (90)	- (68)	- (3)	
Energy	64 (38)			
Kekkila-BVB	33 (75)	74 (46)	11 (5)	34 (21)
New Businesses	16 (3)			
SCM	149 (273)	177 (88)	19 (8)	
Group Services	7 (17)	1 (8)	0 (3)	0 (0)
Total	269 (496)	252 (210)	30 (19)	34 (21)

Observation tool for logging environmental observations combines the reporting of various observations, inspections and audits as well as related management and documentation tasks. People outside the organisation can also be authorised to record observations on the system. Deviations to environmental permits are always reported to environmental authority in accordance with the environmental permits, but also in the observation system. The causes of deviations are investigated, and the necessary measures are taken to rectify the situation. Environmental feedback and irregularities are processed by the business area in question and reported to the Board of Directors.

2021: Nevel is not included in figures.

Water effluent monitoring in Neova's peat production

	2019	2020	2021
Samples	1 4626	1 2913	1 0616
Analyses	9 1454	7 9619	7 7373

Water effluent monitoring samples are taken to calculate the water load from peat production areas.

Reported data from Neova's peat production operations in Finland.

Neova's monitoring of receiving water bodies

	2019	2020	2021
Samples	2 066	2 146	2 212
Analyses	24 944	25 943	24 204

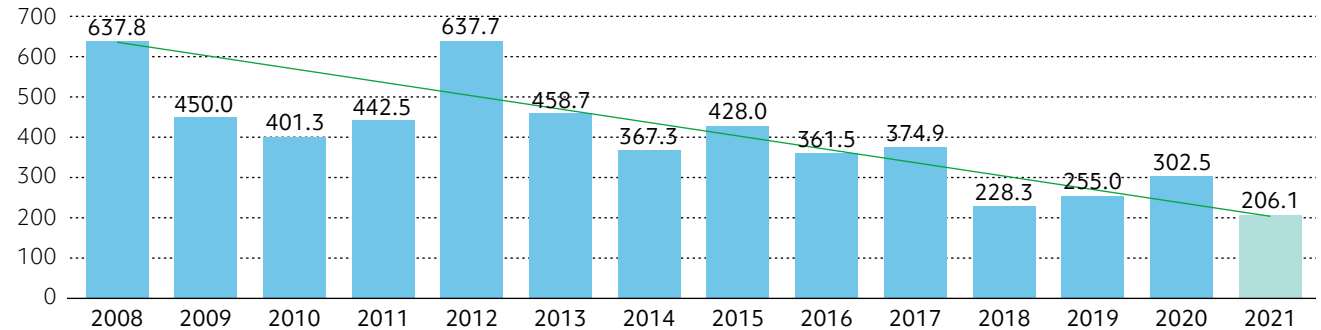
Samples taken to measure water quality in receiving water bodies.

Reported data from Neova's peat production operations in Finland.

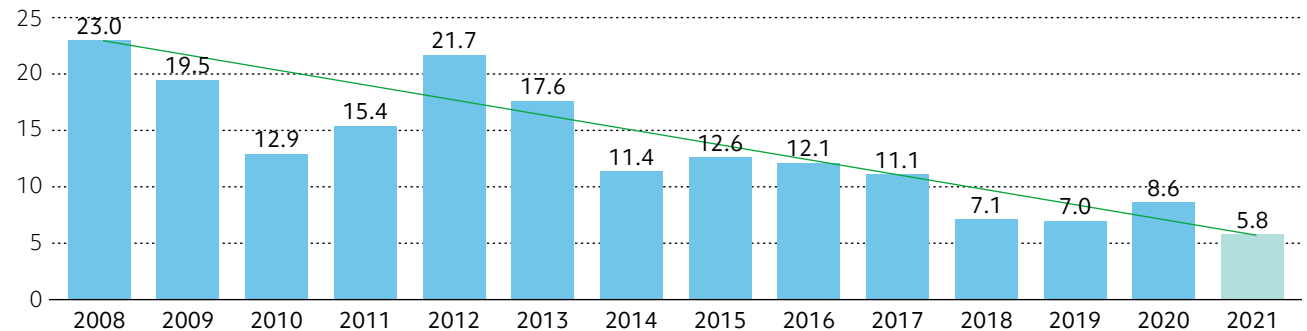
Energy consumption 2021

Kekkilä-BVB	MWh
Total energy consumption	37 384
Direct energy consumption	22 716
Non-renewable	6 573
Solar energy	961
Other renewables	1 131
On-site vehicles	14 051
Indirect energy consumption	15 373
Electricity	14 703
Heating	670
Energy sold	705
Pellet	MWh
Total energy consumption	122 503
Direct energy consumption	111 141
Non-renewable	53 463
Renewable	16 470
On-site vehicles	808
Indirect energy consumption	48 272
Electricity	29 018
Heating	40 400
Steam	19 254
Total energy sold	36 909
Ilomantsi power plant	MWh
Total energy consumption	21 108
Direct energy consumption	50 892
Non-renewable	50 892
Total energy sold	29 784
Novactor	MWh
Total energy consumption	1 940
Direct energy consumption	1 940
Non-renewable	1 940
Peat production	MWh
Total energy consumption	63 057
Direct energy consumption	47 018
On-site vehicles	47 018
Indirect energy consumption	16 039
Electricity	16 039

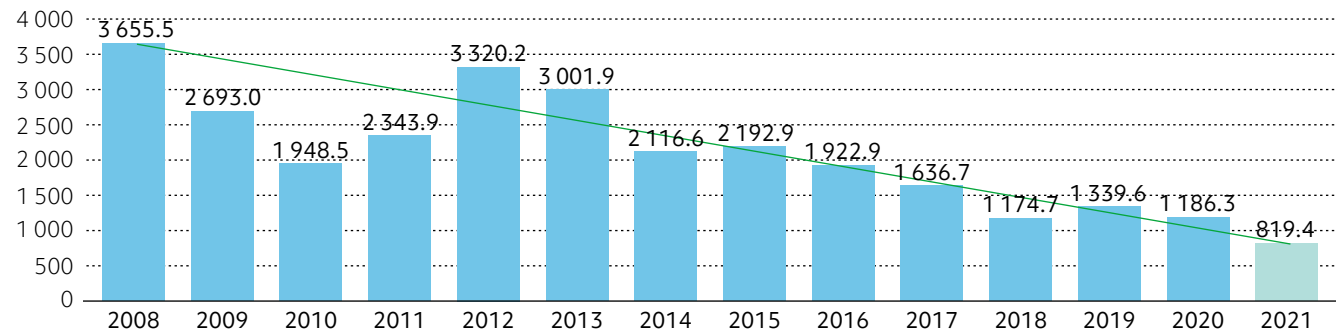
Water effluent in peat harvesting (Finland): nitrogen, tonnes



Water effluent in peat harvesting (Finland): phosphorus, tonnes



Water effluent in peat harvesting (Finland): suspended solids, tonnes



APPENDIX 5: WE SUPPORT THE GROWTH OF OUR PEOPLE AND PARTNERS

Share of personnel, 31.12.2021

	Finland	Sweden	Estonia	The Netherlands	Spain	Germany
Energy	99	0	14	0	0	0
Kekkilä-BVB	148	75	19	314	5	6
New Businesses	22	0	0	0	0	0
SCM	106	23	13	2	0	0
Group Services	51	20	8	17	0	3
Total	426	118	54	333	5	9

Total number of personnel in all countries 945

Personnel covered by collective bargaining agreements

	Number of personnel			Personnel covered by CBAs, %			Number of CBAs		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Finland	524	527	426	45	48	36	7	6	4
Sweden	142	160	118	100	100	100	2	2	2
Estonia	56	57	54	0	0	0	0	0	0
The Netherlands	291	302	333	8	8	8	1	1	1
Spain	4	5	5	100	100	100	1	1	1
Germany	15	9	9	0	0	0	0	0	0

Gender distribution

	2019	2020	2021
Women	277	291	289
Men	755	769	656
Total	1 032	1 060	945

Duration of employment

	2019	2020	2021
Under 5 years	41%	45%	49%
5–10 years	20%	17%	15%
10–20 years	22%	21%	21%
over 20 years	17%	17%	15%

Type of employment

	2019	2020	2021
Permanent	914	939	814*
Female	246 (27%)	253 (27%)	245 (30%)
Male	668 (73%)	686 (73%)	569 (70%)
Fixed term	118	121	131**
Female	31 (26%)	31 (27%)	44 (34%)
Male	87 (74%)	87 (74%)	87 (66%)

*Region: EST 54, FI 399, GER 8, SPAIN 4, SWE 102, NL 247

**Region: EST 0, FI 27, GER 1, SPAIN 1, SWE 16, NL 86

Type of employment

	2019	2020	2021
Permanent	946	955	838*
Female	253 (27%)	233 (24%)	225 (27%)
Male	639 (73%)	722 (76%)	613 (73%)
Fixed term	86	105	107**
Female	24 (28%)	58 (55%)	64 (60%)
Male	62 (72%)	47 (45%)	43 (40%)

*Region: EST 54, FI 414, GER 4, SPAIN 4, SWE 109, NL 253

**Region: EST 0, FI 12, GER 5, SPAIN 1, SWE 9, NL 80

Employee turnover

	2019	2020	2021
Employee turnover (outgoing)*	11.6% (106)	10.2% (96)	11.8% (112)

* Includes all causes of employment termination.

Number of all accidents 2019–2021 (MTR*)

	Finland			Sweden			Estonia			The Netherlands			Spain			Germany			Total		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Nevel	7	6		0	0		1	0											8	6	N/A
Energy	2	3	1				0	0	0										2	3	1
Kekkilä-BVB	4	2	3	2	2	6	0	0	0	12	8	10	0	0	0	0	0	0	18	12	19
New Businesses	0	0	2																0	0	2
SCM	4	5	2	0	0	0	0	0	0	0	0	0							4	5	2
Group Services	0	3	1	0	0	0	0	0	1	0	0	0							0	3	2
Total																			32	29	26

* MTR count includes all workplace accidents, including those that did not lead to absence from work. It also includes accidents during commute (between the home and workplace).

Note: No fatalities during 2018–2021.

Number of accidents that lead to absence from work 2019–2021 (LTA1*)

	Finland			Sweden			Estonia			The Netherlands			Spain			Germany			Total		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Nevel	0	3		0	0		1	0											1	3	N/A
Energy	0	1	0				0	0	0										0	1	0
Kekkilä-BVB	0	0	0	1	1	1	0	0	0	9	5	10	0	0	0	0	0	0	10	6	11
New Businesses	0	0	0																0	0	0
SCM	1	2	0	0	0	0	0	0	0	0	0	0							1	2	0
Group Services	0	1	0	0	0	0	0	0	1	0	0	0							0	1	1
Total																			12	13	12

* LTA1 count includes those workplace accidents that lead to a minimum of one day of absence from work. It also includes accidents during commute (between the home and workplace).

Accident frequency over 1 million working hours 2019–2021 (MTRf*)

	Finland			Sweden			Estonia			The Netherlands			Spain			Germany			Total		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Nevel	46.2	36.8		0	0		122.1	0											35	25.2	N/A
Energy	17	20.2	5.9				0	0	0										15.7	18.8	5
Kekkilä-BVB	18.6	8.7	11.3	16.3	15.1	40	0	0	0	24.5	16.5	19	0	0	0	0	0	0	20.6	13.4	19.4
New Businesses	0	0	46.3																0	0	46.3
SCM	12.3	19.2	8.5	0	0	0	0	0	0	0	0	0							10.3	15.3	6.8
Group Services	0	30.4	10.9	0	0	0	0	0	80.2	0	0	0							0	21.9	14.4
Total																			18	16.1	15.7

* MTRf accident frequency reflects count of workplace accidents over million working hours. It includes all workplace accidents including those that did not lead to absence from work.

Accident frequency over 1 million working hours 2019–2021 (LTA1f*)

	Finland			Sweden			Estonia			The Netherlands			Spain			Germany			Total		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Nevel	0	18.4		0	0		122.1	0											4.4	12.6	N/A
Energy	0	6.7	0				0	0	0										0	6.3	0
Kekkilä-BVB	0	0	0	8.2	7.5	6.7	0	0	0	18.4	10.3	19	0	0	0	0	0	0	11.5	6.7	11.2
New Businesses	3.1	0	0																0	0	0
SCM	3.1	7.7	0	0	0	0	0	0	0	0	0	0							2.6	6.1	0
Group Services	0	10.1	0	0	0	0	0	0	80.2	0	0	0							0	7.3	7.2
Total																			6.7	7.2	7.2

* LTA1f accident frequency reflects count of workplace accidents over million working hours. It includes those workplace accidents that lead to a minimum of one day of absence from work.

Number of recorded safety observations 2019–2021

	Finland			Sweden			Estonia			The Netherlands			Spain			Germany			Total		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019*	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Nevel site	603	520		62	163		9	11											674	694	
Energy	514	386	505				2	2	1										516	388	506
Kekkila-BVB	756	516	391	262	343	402	170	75	78	196	407	685	0	0	0	0	0	0	1 385	1 341	1 556
New Businesses	7	34	63																7	34	63
SCM Sites	1 447	969	448	97	134	204	22	19	22										1 566	1 122	674
Office sites	404	248	118	53	24	17	1	9	3	0	1	20	0	0	0	0	0	0	458	282	158
Other	57	35	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57	35	8
Total																			4 709	3 986	2 965

Safety observations are done by all own personnel as well as by our contractors working in our production/ operations sites.

* Statistics includes BVB Substrates safety observations from June 2019 onwards.

Main types of workplace injuries 2019–2021, %

	2019	2020	2021
Fall, slip, trip (impact with fixed object)	33	43	42
Collision, hit, pressure (impact with moving object)	26	18	27
Crush, compression, contusion (caused by object)	19	18	0
Cut, stab, sting (caused by object)	13	7	23
Shock, burn, poisoning, pressure (impact of electrical voltage, temperature, noise, hazardous substances)	3	3	4
Other	6	11	4

Statistics also include injuries from accidents during commute (between the home and workplace). Statistics include Nevel operations for 2019-2020.

Contractors – Number of all accidents 2020–2021 (MTR*)

	Finland		Sweden		Estonia		The Netherlands		Total	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Nevel	0		2		0				2	
Energy	1	1			0	0			1	1
Kekkilä-BVB	1	1	0	1	0	0	2	3	3	5
New Businesses	1	0							1	0
SCM	5	1	1	1	0	0			6	2
Group Services									0	0
Total									13	8

* MTR count includes all workplace accidents that have been reported to us, including those that did not lead to absence from work. Statistics for 2020 have been updated since 2020 GRI Reporting.

Contractors – Number of accidents that lead to absence from work 2020–2021 (LTA1*)

	Finland		Sweden		Estonia		The Netherlands		Total	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Nevel	0		1		0				1	
Energy	1	0			0	0			1	0
Kekkilä-BVB	1	1	0	0	0	0	1	1	2	2
New Businesses	1	0							1	0
SCM	4	0	0	0	0	0			4	0
Group Services									0	0
Total									9	2

* LTA1 count includes those workplace accidents that lead to a minimum of one day of absence from work that have been reported to us. Statistics for 2020 have been updated since 2020 GRI Reporting.

APPENDIX 6: WE ENSURE PROFITABILITY IN A SUSTAINABLE WAY

Neova Group's investments kEUR 2019–2021

	Gross investments			Asset sales			Net investments		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Finland	59 123	46 446	62 182	19 796	14 976	6 152	39 327	31 470	56 030
Sweden	5 635	12 059	9 635	153	128	458	5 483	11 931	9 177
Estonia	3 831	12 019	3 277	998	334	109	2 833	11 685	3 168
The Netherlands	9 463	5 953	9 409	31	2 061	158	9 432	3 892	9 251
Denmark								0	0
Spain								0	0
Germany	44	111	90				44	111	90
Total	78 096	76 588	84 593	20 977	17 499	6 877	57 119	59 089	77 716

Wages paid by Neova Group, EUR

	2019*	2020**	2021***
Finland	31 474 800	31 795 056	27 441 557
Sweden	7 525 431	7 954 409	4 569 712
Estonia	1 401 817	1 437 818	1 706 221
The Netherlands	14 948 391	18 880 905	19 543 542
Total	55 350 439	60 068 188	53 261 032

*1 SEK=0.09 € (26.5.2020)

**1 SEK=0.10 € (8.3.2021)

***1 SEK = 0.09 € (17.1.2022)

*** Nevel Oy or Nevel Ab not in the figures for 2021.

Nova Group's tax footprint 2021, total EUR 24.30 million

	Finland	Sweden	Estonia	The Netherlands	Spain	Germany
Direct taxes payable for the financial year, EUR million						
Income taxes	1.6	0.0	0.0	1.0	0.1	0.2
Employer contributions	0.4	2.0	0.4	2.2	0.1	
Property taxes	0.2	0.0	0.0			
Other taxes		0.2	0.0			
Indirect taxes payable for the financial year, EUR million						
Excise taxes	0.5		0.4			
Taxes remitted for the financial year, EUR million						
Payroll taxes	7.1	2.1	0.1		0.1	
Value added tax. sales	58.0	16.6	6.7	17.5		
Value added tax. purchases	-60.2	-14.7	-4.7	-14.8	0.0	
Other taxes	1.0	0.0				
Total	8.7	6.2	3.0	6.0	0.2	0.2

Neova Group's certificates

	ISO 9001	ISO 14001	ISO 45001	PEFC	FSC	RHP*	RPP*	Good Soil	KRAV	BRL 9335 -4/9341
Finland										
Neova Oy	x	x		x		x				
Kekkilä Oy	x	x				x	x			
Neova Oy: Novactor business	x	x								
Sweden										
Neova AB		x				x				
Hasselfors Garden AB	x	x					x		x	
Estonia										
AS Tootsi Turvas					x	x	x			
Kekkilä Eesti OÜ	x	x	x				x			
The Netherlands										
Bas van Buuren (de Lier)	x					x		x		
Euroveen (Grubbenvorst)	x					x		x		
Veenbaas (Drachten)	x							x		
Bogro (Hardenberg)	x							x		
Landscaping (Nijmegen)	x					x**				x***

* For specific Neova Group peat production areas

** Cocos operations

*** Landscaping operations



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