GREEN BOND REPORT 2020

UPM

CONTENT

RESPONSIBLE SOLUTIONS

Mitigating climate change requires swift action. One key step is to reduce the use of fossil raw materials. We at UPM are doing meaningful work as we create a future beyond fossils.

Forests are part of the solution. Wood is a renewable raw material that can be used for various purposes from packaging to biochemicals. Wood also binds carbon as it grows. We ensure that we always grow more forest than we harvest.

We are committed to the UN's 1.5°C climate target and to science-based measures to mitigate climate change. With our renewable, low-carbon solutions, we also enable our customers and consumers to make more sustainable choices. Where there's action, there's hope.

Photo: UPM forestland in Uruguay.

Executive summary

We are in a unique position to advance circular economy and to take the world towards a future beyond fossils.

Responsibility is integrated into our Biofore strategy as a solid foundation for long-term value creation. Responsibility also plays an important role in UPM's financing and gives the investors a great opportunity to promote activities, such as climate change mitigation activities and contribution to the UN Sustainable Development Goals, together with us.

We have established a Green Finance Framework in November 2020 as part of our aim to create a future beyond fossils. Framework was reviewed by climate research institute CICERO Shades of Green and was awarded an overall rating of Dark Green.

Green Finance Framework Categories

Sustainable forest management – *Dark Green*
Climate positive products and solutions – *Dark Green*
Pollution prevention and control, including waste management – *Light to Medium Green*
Sustainable water and wastewater management – *Light to Medium Green*
Energy efficiency initiatives – *Light to Medium Green*
Renewable energy – *Dark Green*

°C | °CICERO Dark Green

The second party verifier CICERO has reviewed our Green Finance Framework with the best possible rating, CICERO Dark Green.

› Green Finance Framework
› CICERO second-party opinion
› Green Finance Framework Q&A
› UPM Annual Report 2020
› UPM Responsibility Statement
› UPM website

In 2020, we issued our first green bond of

EUR 750 m

using Eligible Assets and Projects from the following categories:

Sustainable forest management

EUR 672 m

- 765,000 certified hectares
- 6 million tonnes carbon sink
- Positive impact on biodiversity

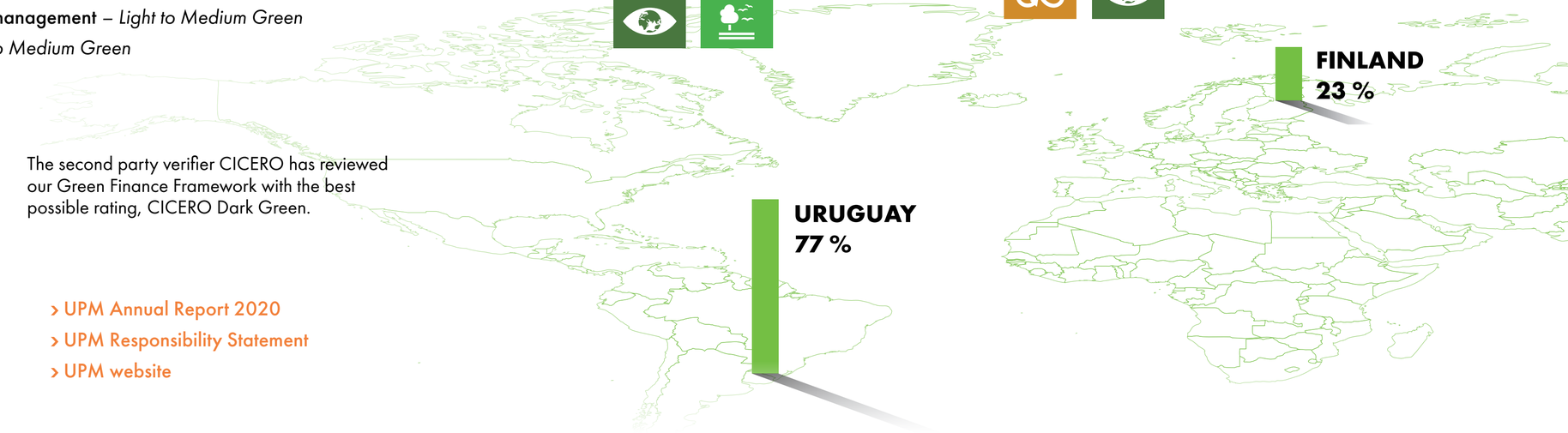
13 CLIMATE ACTION | 15 LIFE ON LAND

Climate positive products and solutions

EUR 78 m

- 1,221 patents
- 121 trademarks

12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 13 CLIMATE ACTION



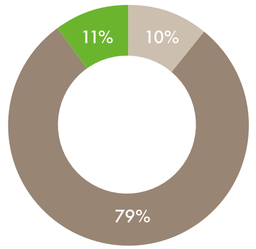
Inaugural Green Bond

In November 2020 we issued our first EUR 750 millon Green Bond under the Euro Medium Term Note programme. The proceeds of the bond were used for Eligible Assets and Projects from two categories: Sustainable forest management and Climate positive products and solutions. With these allocations, we support progress towards the Paris Agreement and contribute the UN Sustainable Development Goals #12 on responsible production and consumption, #13 on climate action and 15# on life on earth. The whole allocated amount of EUR 750 million has been used for refinancing with a look-back period of 2-3 years.

ALLOCATED PROCEED AND IMPACT: EUR 750 M GREEN BOND	
Issuer	UPM-Kymmene Corporation
ISIN	XS2257961818
Bond Ratings	Baa1 Moody's , BBB Standard & Poor's
Bond type	Senior, unsecured
Nominal value	EUR 750 million
Coupon	0.125%
Issue date	19 November 2020
Maturity date	19 November 2028
Listing	Euronext Dublin
Use of proceeds	Sustainable forest management
	Climate positive product and solutions
Second Party Opinion	CICERO
Net proceeds	EUR 750 million
Proceeds allocated, all refinancing	EUR 750 million
Unallocated categories	0

Distribution of committed proceeds

EUR 750 million bond



- Sustainable forest management costs
- R&D costs in Biobusinesses
- Carrying value of forest land

Sustainable forest management

EUR 672 million

Annual carbon sink (2020) 9,000 tonnes CO_2 equivalents/EUR 1 million

Categories	Total EUR 750 million	Impact indicator	Related SDGs
Sustainable forest management	**EUR 672 million in total**	• 765,000 hectares of certified forests (2020) and 31,000 hectares in the process to be certified. • Carbon sink of UPM's own and leased certified forests 6.0 million tonnes of CO_2 equivalents (2020). • Positive impact on biodiversity measured by selected indicators (2020)	13 CLIMATE ACTION, 15 LIFE ON LAND
Sustainable forest management costs (2018–2019)	EUR 80 million		
Carrying value of forest land (2020)	EUR 592 million		
Climate positive products and solutions	**EUR 78 million in total**	• 1,211 patents and 121 trademarks in Biocemicals, Biomedicals, Biocomposites and Biofuels at the end of 2019. This represents the amount of patents and trademarks that generated costs during 2018-2019	12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 13 CLIMATE ACTION
R&D costs in Biobusinesses (2018–2019)	EUR 78 million		

Note: Carbon sink information is based on a recent study by the Natural Resource Institute of Finland for UPM's own and leased forest assets in Finland and Uruguay.

A future beyond fossils

As a frontrunner in forest industry, we provide renewable solutions for various end uses. We invest in sustainable growth and innovate for a future beyond fossils. Responsibility is at the core of everything we do.

The Biofore strategy has driven our transformation for more than 10 years and the change continues with accelerating pace. We strongly believe that we have chosen the right operating model which is supported by a culture of high performance and integrity.

Our renewable and recyclable products respond to many global challenges, such as climate change and resource scarcity. However, our ambition is even higher. With consistent innovation work, we provide our customers and consumers completely new solutions, creating new profitable growth businesses.

We are in an intensive phase of building a world-scale pulp mill in Uruguay and a next generation biochemicals refinery in Germany. We have also started the basic engineering phase of a new biofuels refinery that would scale up our highly successful biofuels business.

We are in a great position to create value to our shareholders and the society, as a company and through our products and solutions. We create a future beyond fossils.

Sales in 2020
EUR 8,580 m

Company ratings

Moody's
Baa1
with stable outlook

Standard & Poor's
BBB
with stable outlook

THIS IS UPM

Wood-based raw materials

Low-carbon energy

BUSINESS AREAS:

- UPM BIOREFINING
- UPM ENERGY
- UPM RAFLATAC
- UPM SPECIALTY PAPERS
- UPM COMMUNICATION PAPERS
- UPM PLYWOOD
- NEW BUSINESSES

51
production plants

18,000
employees in 46 countries

RENEWABLE AND RECYCLABLE PRODUCTS FOR:

- PACKAGING
- LABELLING
- TRANSPORTATION
- ELECTRIFICATION
- CONSTRUCTION
- COMMUNICATION
- TISSUE AND HYGIENE PRODUCTS
- MANUFACTURING
- BIOPLASTICS
- BIOMEDICALS

13,400
customers

200
million end-users globally

Allocated categories

Sustainable forest management

Our business in based on the sustainable use of forests: We grow and harvest forests to create renewable, sustainable materials and products.

Climate positive products and solutions

We are developing innovative, high-quality products from wood-based biomass. Wood fibres, biomolecules, residues and side streams are becoming increasingly important raw materials of the future.

Sustainable forest management

Our business is based on the sustainable use of forests: We grow and harvest forests to create renewable, sustainable materials and products.

ICMA CATEGORY
Environmentally sustainable management of living natural resources and land use

Use of proceeds

Sustainable forest management includes acquisition, maintenance and management of forest certified under The Forest Stewardship Council™ (FSC™) and the Programme for the Endorsement of Forest Certification (PEFC). The total amount used for this category was EUR 672 million, of which EUR 592 million was allocated to carrying value of forest land (end of 2020 value) and EUR 80 million to sustainable forest management costs in 2018 and 2019. Sustainable forest management costs include, but are not limited to: maintenance and establishment of nurseries, new plating activities as well as maintenance and harvesting of sustainable managed certified forest. The geographical split of the EUR 672 million allocated is 86% Uruguay and 14% Finland.

Commitments and targets

By managing our forests sustainably, we safeguard the availability of wood, protect biodiversity and mitigate and adapt to climate change. We take a holistic approach to sustainable forestry wherever we operate, adhering to the following commitments:

- Third party-verified and credible certification systems for all our forests
- Third party-verified and certified chain of custody systems to ensure 100% wood traceability
- No wood from tropical rainforests or from forest plantations that have been established by converting natural forests
- No operations in areas where the rights of indigenous peoples are endangered
- No plantation operations in water-stressed areas
- Strong stakeholder engagement
- Focus on UPM's 2030 responsibility targets: Climate-positive land use and positive impact to biodiversity

Our impacts

Forest certification

Finland and Uruguay are the most important countries for our wood sourcing. At the end of 2020, we owned a total of about 796,000 hectares of forest land in Finland and Uruguay of which 765,000 is certified. 31,000 hectares are in the process of certification as the land was acquired only recently. Most of the forest land is in Finland, totalling 515,000 hectares, followed by Uruguay 281,000 hectares. We also lease 153,000 hectares in Uruguay and manage around 1,2 million hectares of private forest globally.

We also promote forest certification to private forest owners and our other customers. We have established the FSC group certification scheme. In 2020, our FSC group covered approximately 460,000 hectares in Finland and over 13,000 hectares in Uruguay. We actively participate in developing forest certification on a national and global level. We have active dialogue with the FSC and PEFC organisations and we participate in national and international working groups for certification development.

765,000 hectares certified forest land

Forest carbon sink

Maintaining our forests as carbon sinks means that they grow more than we harvest. We manage our forests to maintain their health and ability to grow and absorb more carbon. Together with the scientific community we further develop the measurements and monitoring of forest carbon. Harmonising the methodologies for different countries for both soil and tree carbon is the key area of development.

Five years annual average carbon sink of 6.0 million tonnes of CO_2 equivalents

In 2020 the annual carbon sink of the allocated proceeds was 9,000 t CO_2 equivalents per EUR 1 million and the five year annual average carbon sink of UPM´s own and leased forest was approximately 6.0 million tonnes of CO_2 equivalents 1.1million tonnes in Finland and 4.9 tonnes in Uruguay.

Biodiversity indicators and targets

Actions to increase biodiversity are a part of our everyday forestry operations. In the end of 2019 we set a target of having a positive impact on biodiversity in our own forests in Finland and developing the respective monitoring system.

To measure our impact we monitor extensively the status of forest nature. Changes in forest structure are identified and impact of protection is monitored by using selected biodiversity indicators. Indicators are also set to follow implementation of biodiversity projects and indicator development.

We have set indicator-specific targets which are followed by using chosen metrics (see the table below).

In 2020:

- **we published our biodiversity indicators for evaluating our progress towards the target.**
- **improvement was measured in all quantitative biodiversity indicators in Finland.**
- **we developed a biodiversity framework for our plantations and other company-owned land in Uruguay.**

We act through forests

Indicator	Target	Metrics
Tree species	Increase the broadleaved tree species volumes	Share of broadleeaved trees
Forest age	Maintain diverse forest age structure	Share of different forest age classes
Forest structure	Maintain and increase diverse forest structure	Share of alternative regeneration methods
Indicator development	Complement the set of indicators and develop monitoring with researchers	Create deadwood volumes and diversity monitoring for commercial experts. Biodiversity index and indicator development with external parties.
Protected areas	Improved nature conservation network	Nature conservation areas (protected areas/total hectares)
Valuable habitats	Protected valuable habitats with increased deadwood	Valuable habitats protected (protected habitat hectares/total hectares)
Habitat restoration	Improved biodiversity on restored environments	Existence of habitat restoration projects
Species and habitat projects	More joint stakeholder projects to protect biodiversity	Existence of species and habitat projects

Case examples

New biodiversity indicators in Uruguay

We have determined three biodiversity indicators for the company-owned land as part of our global biodiversity programme, which was established in 1998. These indicators are:

- Developing the nature conservation area network;
- Maintaining and enhancing endemic and threatened species populations in formal conservation areas; and
- Controlling and decreasing invasion of exotic woody species populations in conservation areas.

Our plantations in Uruguay are situated on grasslands that were formerly used for cattle grazing. We do not convert natural forests into plantations. All valuable biodiversity hotspots such as wetlands, natural forests and unique areas for protecting specific birds and other species are protected.

Biological surveys have been conducted in areas owned by UPM since the early 1990s to identify and classify species and native ecosystems to be protected. Currently, the network of formal conservation areas covers around 13,000 hectares. To achieve our long-term biodiversity targets, we plan to increase protected area under defined conservation categories and continue with our long-term monitoring programme.

This conservation work is being carried out in cooperation with local environmental organisations such as Vida Silvestre and Aves Uruguay.

Deciduous trees improve climate resistance

We will double the number of deciduous trees in ous forests in Finland. Deciduous trees improve forest growth and yield and increase the diversity of forest species. Biodiversity makes forests more resilient to the effects of climate change such as adverse weather conditions and helps forests remain healthy.

With the goal, one fifth of trees on sites that accommodate birch will be deciduous. UPM's own nursery in Joroinen has also grown small amounts of oak and black alder saplings to increase biodiversity.

The intensified competition within the more diverse group of species brings balance to the ecosystem and reduces the risk that one species will overpower the others and cause damage.

Most species provide opportunities to expand the range of wood-based products. Thriving mixed forests also increase carbon sequestration, which is important in combating climate change. We are the first forest company to set the target to verifiably improve the state of forest nature in our own forests in Finland.

Climate positive products and solutions

We are developing innovative, high-quality products from wood-based biomass. Wood fibres, biomolecules, residues and side streams are becoming increasingly important raw materials of the future.

ICMA CATEGORY
Eco-efficient and/or circular economy adapted products, production technologies and processes

Use of proceeds

Climate positive products and solutions include financing the development, operations, maintenance and expansion of the production of climate positive products and solutions.

The total amount used for this category was EUR 78 million and it was allocated to R&D costs of biochemicals, biocomposites, biofuels and biomedicals businesses in 2018 and 2019. The majority of the EUR 78 million costs occurred in Finland. Examples of recent product developments are available on page 12.

Innovation and R&D programmes are essential in the development of new products and technologies. Research and development funding is primarily being used on studying new technologies and developing businesses and processes.

Commitments and targets

A global network of research centres provides support for our R&D activities. The activities are guided by our 2030 responsibility targets and integrate contribution to the UN Sustainable Development Goals (SDGs) into product development.

In 2019, we built Biofore Base, a new state-of-the-art R&D piloting plant and expanded R&D operations in Lappeenranta, Finland. It unites UPM's technologies, globally accumulated experience and expertise. Operations range from strategic research to commercial scale-up that further strengthen UPM's expertise and enhance future capabilities.

Biofore Base also accelerates the development and commercialisation of bio-based solutions into viable industrial processes in a cost efficient way. To support UPM's new business development, the Biofore Base is designed with the scope to further expand on a global scale.

The significance of the patents, trademarks and intellectual property rights protecting our innovations is more pronounced in our new businesses, supporting the journey from innovation to business. A solid patent portfolio boosts our competitive edge. Licensing of innovations and technologies provides an excellent basis for value creation with customers and technology partners.

Guided by the goal of innovating for a future beyond fossils, we develop safe and sustainable products and offer alternatives to fossil-based materials.

We act through products

Our impacts

Biochemicals – Strong market for replacing fossil-based chemicals

UPM Biochemicals offers and develops innovative, sustainable and competitive wood-based biochemicals. The product segments are glycols and lignin products. The products can be used to replace oil, gas or coal-based materials, and they will significantly reduce the CO_2 footprint of the end-use products.

UPM Biochemicals has been actively developing and testing industrial applications to create industrial-scale mill concepts and meet the market demand. In 2019, UPM completed the basic engineering studies on the new biorefinery in Germany. The investment decision was made in January 2020 and the production is expected to start by the end of 2022.

Biofuels – Future plans for decarbonisation

Advanced biofuels play an important role in our Biofore strategy by offering sustainable alternatives to fossil economy solutions. Research on raw materials has been focused on forest industry residues. Alternatives made from waste and residue-based raw materials that do not compete with food production have been tested. We have also been developing a new climate-positive feedstock concept by cultivating brassica carinata as a sequential crop in Uruguay and exploring the opportunities to expand biofuel business with new types of technology concepts and raw materials.

We started a detailed basic engineering phase in 2021 including site option assessment primarily in two locations: Kotka, Finland and Rotterdam, the Netherlands. The potential next-generation multi-feedstock biorefinery would produce 500,000 t/a of renewable fuels including sustainable jet fuel. The products would significantly reduce carbon footprint in the road transport and aviation, as well as replace fossil raw materials with renewable alternatives in chemicals and bioplastics.

Biomedicals – strengthening the role and patent portfolio

UPM Biomedicals develops and supplies innovative and sustainable wood-based biomedical products for a variety of uses. The main ingredient of our products is high-quality nanocellulose, extracted from birch. In the long term, we are aiming for personalised medicine, where treatments are developed from patient's own cells. Our gels can be used in manufacturing and in treatments.

The key enabling factor is the fact that our gels are animal-free and therefore also do not introduce animal DNA to the patients. Meanwhile, we sell our products to two application areas: clinical and life science. In the clinical field, FibDex® wound dressing took the significant step of being introduced to market, when a medical device distributor Steripolar Oy started to sell the product to Finnish healthcare professionals and hospitals. In life science, our main products are GrowDex®, a range of hydrogels for 3D cell culturing and GrowDase®, an enzyme to release the cells from the gel.

Biocomposites – the frontrunner in circular bioeconomy

UPM Biocomposites offers innovative and sustainable composite materials for various uses in outdoor construction and consumer products. The materials are based on UPM's own research and development. UPM ProFi biocomposite utilises the cellulose fibres and plastic polymers generated as manufacturing surplus from self-adhesive label material production and from label customers' label waste. Our target is to further increase the use of recycled materials in products. UPM Formi composite material, made from wood-based fibres and polymers, is suitable for different types of industrial and consumer products such as furniture and home appliances. The material has a 30–60% lower carbon footprint than fossil-based materials.

At the end of 2019, we had totally 1,221 patents and patent applications and 121 trademarks active in our biobusinesses portfolio. This represents the amount of patents and trademarks that generated costs during 2018-2019

At the end of 2019 we had 1 221 patents and patent applications and 121 active trademarks globally.

Case examples

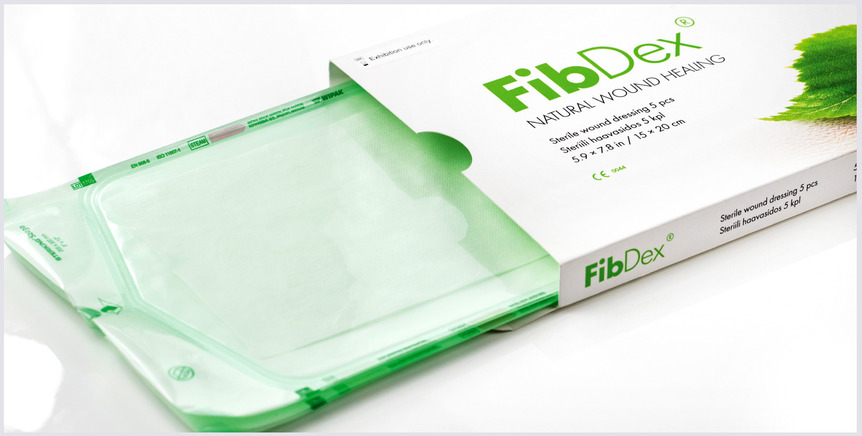
Strong market for replacing fossil-based chemicals

UPM's biochemicals respond to customers' increasing needs for renewable alternatives. We are now creating a completely new sustainable business in biochemicals with large growth potential.

This is a great showcase of our focused and efficient R&D. UPM has been actively developing and testing industrial applications to create industrial-scale mill concepts and meet the market demand. After completing the basic engineering studies, the investment decision was made in January 2020.

Raw materials and key services for the biorefinery will be sourced locally. A combination of sustainable wood supply, unique technology concept and the proximity to customers will ensure competitiveness of operations. The safety and sustainability of the value chain will be based on our high standards.

The biorefinery will convert solid wood into next generation biochemicals: bio-monoethylene glycol (BioMEG) and lignin-based renewable functional fillers. The biorefinery will also produce bio-monopropylene glycol (BioMPG) and industrial sugars. End-use segments for glycols include textiles, PET- bottles, packaging, de-icing products, composites, cosmetics, pharma and detergents. Renewable functional fillers are used to substitute carbon black and silica.



FibDex® wound dressing, our first clinical product on the market

FibDex® wound dressing – made from nanofibrillar cellulose by UPM Biomedicals – has taken a significant step in its path to market, as leading medical device distributor Steripolar Oy now sells the product in Finland. FibDex is the first clinical product of UPM and shows promising signs for future developments, such as cell therapy.

UPM Biomedicals products are made from Finnish birch traceably sourced from sustainably managed forests. FibDex was developed in collaboration with researchers from the University of Helsinki and surgeons and nursing staff from the Helsinki Burn Centre. The research and development began in 2007 and has so far led to three commercial products; including the GrowDex® and GrowInk™ hydrogels used in drug development and 3D cell culture.

Unallocated categories

Pollution prevention and control, including waste management

We have ambitious targets to cut our fossil CO2 emissions and acidifying flue gases in our own operations. We promote circular economy thinking by recycling and reusing production waste.

Water and wastewater management

We aim to use water in a way that is environmentally sustainable, socially equitable and economically beneficial. All water we use is circulated and reused to a maximum extent and the effluents are cleaned.

Energy efficiency

We are constantly seeking new solutions to minimize our environmental impact by selecting optimised energy sources and generation methods, and by improving energy efficiency.

Renewable energy

We favour the use of renewable and other carbon-neutral energy sources. Biomass-based fuels account more than 70% of our fuel usage.

Pollution prevention and control, including waste management

ICMA CATEGORY
Pollution prevention and control

We act through emissions

We use materials, water and energy in a responsible and efficient manner, and aim to continuously reduce our environmental impact.

We are constantly seeking new solutions to minimise our environmental impact by selecting optimised energy sources and generation methods, and by improving energy efficiency. We favour the use of renewable and other carbon-neutral energy sources.

We see the circular economy as the cornerstone of a sustainable future. Our goal is to minimise waste and maximise recycling and create added value through smart solutions. We are actively looking for partners to co-create circular innovations linked to side stream utilisation, product development and supply chain efficiency.

- 89% of UPM's total process waste was recovered or recycled
- 28% of nutrients were from recycled sources in our effluent treatment plants
- 19% acidifying flue gas reduction achieved since 2015 for the UPM average product (NOx, SO_2)

Water and wastewater management

ICMA CATEGORY
Sustainable water and wastewater management

The water we need for our pulp and paper production processes is circulated and reused as much as possible. Only a small proportion eventually leaves the process as effluent and needs to be replaced with fresh water. Approximately 95% of the water we use in our paper mill processes is internally recirculated, and thus only 5% is replaced by fresh water. Using less water also means using less electricity, fewer chemicals and less thermal energy. All effluents from our pulp and paper mills are cleaned in both mechanical and biological effluent treatment processes.

- 33% reduction in effluent load achieved since 2008 for the UPM average product
- 10% reduction in wastewater volume achieved since 2008 for the UPM average product
- An old mill and a mill dam at the Sapsokoski rapids in Sotkamo in Finland was dismantled, which opened up a migration route to twelve riffles upstream of the site
- UPM Energy funded also the construction of a reproduction area for Saimaa landlocked salmon in the Pielisjoki river. The area was inaugurated in 2020.

Energy efficiency initiatives

ICMA CATEGORY
Energy Efficiency

We act through emissions

Reduction of fossil fuel consumption is the most important way to mitigate climate change. We have completed a systematic global review of our opportunities for reducing emissions using existing technologies and have analysed the financial impact of each action. We are constantly looking for ways to improve our energy efficiency across our operations with audits, innovations and investments. Our fossil carbon dioxide emissions are constantly decreasing and going forward we aim to continue reducing emissions significantly in line with Science Based Targets (SBT).

- Fossil CO_2 emissions reduced by 20% compared to 2015 and 6% compared to 2019
- As a result of the energy-saving investments carried out in 2020, we avoided emitting 2,400 tonnes of CO_2

Renewable energy

ICMA CATEGORY
Renewable energy

We favour the use of renewable and other carbon-neutral energy sources. UPM Energy is the second largest electricity producer in Finland. It generates low-emission electricity in its own and co-owned power plants. UPM also has power generation assets in other businesses. Combined heat and power plants (CHP) and small hydropower plants are located in paper, pulp, timber and plywood mill sites, and they are primarily serving the local mills.

- UPM sold greenhouse gas claims worth nearly 1.1 million CO_2 tonnes
- 72% of the fuels we use are renewable
- We are currently renovating and modernising the Kuusankoski hydropower plant. The project will be completed by the end of 2022.

Governance

We established a Green Finance Framework in November 2020. The framework is based on the Green Bond Principles published by the International Capital Markets Association (ICMA) and the Green Loan Principles, published by the Loan Market Association (LMA), the Asia Pacific Loan Market Association (APLMA) and the Loan Syndications and Trading Association (LSTA), respectively.

The framework was reviewed by the second-party verifier CICERO and received the best possible rating, CICERO Dark Green. The review also included an assessment of the governance structure of the framework, which was rated to be excellent.

We have designed and implemented a process to ensure that only projects aligned with the criteria set out will be selected for Green Finance Instruments. We have also has established a Green Finance Committee, including members from the treasury, responsibility, investor relations and finance.

We have a Green Finance Register for Green Finance Instruments issued by UPM for the purpose of monitoring the Eligible Assets and Projects and the allocation of net proceeds from Green Finance Instruments. The Green Finance Register is forming the basis for impact reporting.

In March 2021 the Green Finance Committee approved the allocation of Eligible Asset and Projects and the impact reporting for the EUR 750 million Green Bond issued in November 2020. Following the approval, this first Green Bond Report is published containing also the assurance report of the independent auditor.

› UPM as an investment – Debt
› Green Finance Framework
› CICERO second-party opinion

GREEN FINANCE FRAMEWORK

Use of Proceeds

- Sustainable forest management
- Climate positive products & solutions
- Pollution prevention & control including waste management
- Water & wastewater management
- Energy efficiency initiatives
- Renewable energy

Project Evaluation & Selection

Process designed and implemented to ensure Eligible Assets and Projects are aligned with eligibility criteria

Green Finance Committee

- Treasury
- Responsibility
- Finance
- IR

Management of Proceeds

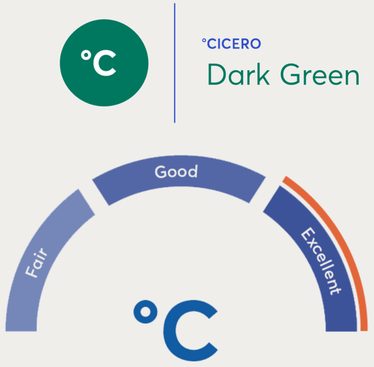
Green Bond Register monitoring the Eligible Assets and Projects and allocation of net proceeds from Green Bonds. Excess proceeds to be held in accordance with UPM's liquidity management policy

Reporting

UPM will annually publish a report on the allocation and impact of Green Bonds issued under this framework

Allocation report

- List of Eligible Assets and Projects
- Case studies and descriptions
- Amounts invested in each category



Independent Practitioner's Assurance Report

To the Management of UPM-Kymmene Corporation

We have been engaged by the Management of UPM-Kymmene Corporation (hereinafter also "the Company") to provide limited assurance on the Selected Information described below and set out in UPM-Kymmene Corporation's Green Bond Report 2020.

Our conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information for the reporting year 2020 has not been prepared, in all material aspects, in accordance with UPM-Kymmene Corporation's Green Finance Framework.

When reading our assurance report, the inherent limitations to the accuracy and completeness of sustainability information should be taken into consideration.

Our assurance report has been prepared in accordance with the terms of our engagement. We do not accept, or assume responsibility to anyone else, except to UPM-Kymmene Corporation for our work, for this report, or for the conclusions that we have reached.

Selected Information

The scope of our work was limited to assurance over the information presented in UPM-Kymmene Corporation's Green Bond Report 2020 on page 4 table 'Allocated proceed and impacts' covering under it the use of proceeds in section 'Category' and the impacts in section 'Impact indicator' (the 'Selected Information') as of 31.12.2020.

Practitioner's independence, qualifications and quality control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our multi-disciplinary team of corporate responsibility and assurance specialists possesses the requisite skills and experience within financial and non-financial assurance, corporate responsibility strategy and management, social and environmental issues, as well as the relevant industry knowledge, to undertake this assurance engagement.

PricewaterhouseCoopers Oy applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Management's responsibility

The Management of UPM-Kymmene Corporation is responsible for preparing the Green Bond Report 2020 in accordance with the Reporting criteria as set out in the Company's Green Finance Framework. The Management of UPM-Kymmene Corporation is also responsible for such internal control as the management determines is necessary to enable the preparation of the Green Bond Report 2020 that is free from material misstatement, whether due to fraud or error.

pwc

Practitioner's responsibility

Our responsibility is to express a limited assurance conclusion on the Selected Information in the Green Bond Report 2020 based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised) "Assurance Engagements Other than Audits or Reviews of Historical Financial Information". That Standard requires that we plan and perform the engagement to obtain limited assurance about whether the Selected Information is free from material misstatement.

In a limited assurance engagement the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. An assurance engagement involves performing procedures to obtain evidence about the amounts and other disclosures on the Selected Information in the Green Bond Report 2020. The procedures selected depend on the practitioner's judgement, including an assessment of the risks of material misstatement of the Selected Information.

Our work consisted of, amongst others, the following procedures:

- Making enquiries of relevant UPM-Kymmene Corporation management to assess to whether the reporting has been prepared in accordance with the UPM Green Finance Framework';
- Accessed the design of the processes and internal controls for managing, recording and reporting the Selected Information;
- Inspected minutes of the Green Finance Committee to confirm that the allocation of proceeds to eligible assets had been considered and approved according to the process described in the Green Finance Framework.
- Inquiring of employees from various organisational levels of the Company with regards to whether the reporting has been prepared in accordance with the UPM-Kymmene Corporation Green Finance Framework.
- Performed substantive testing to verify existence and accurate allocation of green bond proceeds per eligible assets as disclosed in the table Allocated Proceed and Impact of the Green Bond Report 2020.
- Evaluating the evidence obtained.

This report, including our conclusions, has been prepared solely for the Board of Directors of UPM-Kymmene Corporation and the green bond investors in accordance with the agreement between us, to assist the Board of Directors in reporting on UPM's green bond performance and activities. We permit this report to be disclosed in the UPM-Kymmene Corporation's Green Bond Report 2020 in respect of the 2020 reporting year, to assist UPM-Kymmene Corporation in responding to their governance responsibilities by obtaining an independent assurance report in connection with the Selected Information.

Helsinki 7 April 2021

PricewaterhouseCoopers Oy

Tiina Puukkoniemi
Partner
Authorised Public Accountant

Jussi Nokkala
Director
Sustainability & Climate Change

Sustainability ratings and memberships

Our consistent responsibility efforts have received recognition from several third parties.

UN Global Compact LEAD: A Global Compact LEAD company for demonstrating world-class commitment to corporate responsibility. We are one of 41 companies globally—the only forest-industry company and the first Finnish company—participating.

Dow Jones Sustainability Index: The industry leader in the forest and paper sector in the Dow Jones Sustainability World and Europe Indices (DJSI) for 2020–2021.

MSCI ESG ratings: An AAA rating in the assessment. MSCI ESG Research provides MSCI ESG ratings on global public companies, according to each company's exposure to industry-specific ESG risks and its ability to manage those risks relative to its peers.

CDP Programs: One of the only ten Triple A List companies globally for our significant actions to mitigate climate risk, prevent deforestation and enhance water stewardship.

Corporate Knights: 22nd in the Corporate Knights list of the world's 100 most sustainable corporations, and the highest company listed in the Paper and Forest Products category.

Science Based Targets initiative: Validated for our 2030 responsibility target to decrease our CO_2 emissions (Scope 1 and 2) by 65%, proving that our target is aligned with the Paris Agreement goal to limit global warming to 1.5 degrees.

EcoVadis: The highest possible Platinum level for our responsible performance.

Bloomberg Gender-Equality Index (GEI): UPM is among the 380 public companies globally and one of the few Finnish companies in this index. The GEI lists the companies most committed to transparency in gender reporting and advancing women's equality.

Appendix: Impact calculation methodology

Accounting of impacts

More detailed information of all UPM's responsibility indicators are disclosed in our 'Annual Report 2020' and in our GRI content index which are available at our website.

UPM follows sustainability reporting standards published by the Global Reporting Initiative (GRI) to measure and report on corporate responsibility at Group level. UPM's corporate responsibility reporting in 2020 has been prepared in accordance with the GRI Standards: Core option.

Standard disclosures for 2020 in English with a reference to external assurance in the GRI content index have been externally assured by an independent third party PricewaterhouseCoopers Oy. Furthermore, UPM is committed to the principles of inclusivity, materiality and responsiveness, as defined in the AA1000 AccountAbility Principles Standard (2008).

Forest indicators

Sustainable forest management indicator is based on hectares certified by the PEFC (PEFC/02-44-41) and/or by the FSC™ (FSC N003385) by third party auditors. Certificates can be downloaded from:

› UPM Certificate finder

Carbon sink calculations have been done together with Natural Resource Institute of Finland (Luke). Together with the scientific community we further develop the measurement and monitoring of forest carbon. Harmonising the methodologies for both soil and tree carbon is the key area of development. More information from here:

› Luke

The indicator on carbon sink per EUR 1 million (see page 3) has been calculated based on the results of the carbon sink calculations for Uruguay and Finland (6.0 million tonnes) for the year 2020 divided by the proceeds in the area of sustainable forest management (EUR 672 million).

Biodiversity indicators have been developed by UPM in cooperation with various third parties. More about indicators here:

› UPM Biodiversity indicators

Indicator for climate-positive products and solutions

A solid patent portfolio boosts our competitive edge. Licensing of innovations and technologies provides an excellent basis for value creation with customers and technology partners. The number of patents and trademarks which generated costs during a certain time period and for certain businesses is used as indicator. The number is reported by UPM IPR.

We are committed to a climate-positive product portfolio. Many of our products are already proven to be climate positive. In the future, we aim to scientifically verify the climate impacts of all our products. At the end of 2020, we started a study on climate-related substitution and the carbon storage effects of our products with two research institutes, the German IFEU and the Finnish Environment institute (SYKE).

UPM

upm.com