

UPM Progress Report
2017/2018
To the Leadership Declaration of the



UPM leads the forest-based bioindustry into a sustainable, innovation-driven, and exciting future across six business areas.

We create renewable and responsible solutions that replace fossil-based materials by making the most of residues and side streams. We rely on renewable and biodegradable raw materials to produce recyclable everyday items and materials.

Thanks to our global capabilities and strong position in the forest biomass sourcing chain, we're in a unique position to advance a circular economy in all our businesses. Moreover, we're constantly challenging ourselves by expanding into new end-use areas.

At UPM, we see responsibility as a requirement for long-term value creation and live by our values – trust and be trusted, achieve together, renew with courage.

In 2018, UPM's sales totalled € 10.5 billion. UPM has production plants in 12 countries. Our 19,000 people work on six continents. UPM shares are listed on the NASDAQ Helsinki stock exchange.

UPM Biofore – Beyond Fossils - www.upm.com



UPM

The Biofore
Company

LEADERSHIP DECLARATION

All signatory companies acknowledge and support the three objectives of the international “Convention on Biological Diversity”:

1. Conservation of biological diversity
2. Sustainable use of its components
3. Fair and equitable sharing of the benefits that arise out of the utilization of genetic resources and commit themselves to:
 1. Analyzing corporate activities with regard to their impacts on biological diversity;
 2. Including the protection of biological diversity within their environmental management system;
 3. Appointing a responsible individual within the company to steer all activities in the biodiversity sector and report to the Management Board;
 4. Defining realistic, measurable objectives that are monitored and adjusted every two to three years;
 5. Publishing activities and achievements in the biodiversity sector in the company’s annual, environmental, and/or corporate social responsibility report;
 6. Informing suppliers about the company’s biodiversity objectives and integrating suppliers accordingly and step by step;
 7. Exploring the potential for cooperation with scientific institutions, non-governmental organizations (NGOs) and/or governmental institutions with the aim of deepening dialogue and continuously improving the corporate management system vis-à-vis the biodiversity domain.

To demonstrate ongoing commitment, member companies will provide the Initiative with a progress report every two years.

UPM’s commitment to

1. Analysing corporate activities with regard to their impacts on biological diversity

UPM business is based on natural, renewable and recyclable raw materials. Wood is the most important raw material for UPM and the annual wood consumption is at about 27 million m³. Therefore wood sourcing and forestry are the main areas of UPM’s business which have an impact on biodiversity.

Biodiversity has been one key element in UPM’s forestry and wood sourcing strategy for more than 20 years. UPM’s biodiversity programme aims to maintain and increase biodiversity in forests as well as promote best practices in sustainable forestry and wood sourcing.

This work has helped to create long-term value and established a tangible competitive advantage. Wood from sustainably managed forests forms the solid basis for UPM’s daily work as biodiversity targets are very closely integrated into the research and forestry operations.

Read more on UPMs biodiversity actions: <https://www.upm.com/responsibility/forests/biodiversity/>

Due diligence in UPM forestry operations is managed through a hierarchical approach with respect to regulations, starting with legislation (Forest Act, Nature Protection Act etc.), the Environmental Management System under ISO 14001, Forest Certification schemes and, finally, the UPM Global Biodiversity Programme and operational instructions, the continuous training of personnel and development activities. Biodiversity is addressed at all levels of UPM’s due diligence system as is described in detail in the Progress Report 2011/12. UPM has set ambitious targets for 2030. In 2018, company launched a new target for achieving positive impact on biodiversity in company owned forests in Finland. Group level targets concerning forests and biodiversity are:

<p>FORESTS AND BIODIVERSITY - Ensuring sustainable land use and keeping forests full of life</p>	<p>100% coverage of chains of custody (<i>continuous</i>)</p> <p>All fibre certified by 2030</p> <p>Positive impact on biodiversity (<i>continuous</i>): implementing biodiversity programme and developing monitoring system</p>	<p>Coverage is 100%.</p> <p>The certified fibre share was 85% in 2017 and 81% in 2018.</p> <p>The target was set in the end of 2018.</p>
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All UPM targets, including environmental targets, can be found at:

https://www.upm.com/siteassets/asset/investors/2018/upm_ar18_en_190227_web_secured.pdf

UPM owns nearly 1 million hectares of forest land in Finland, Uruguay and USA. All these forests are certified under FSC and/or PEFC. Since forest certification standards vary in scope and emphasis from country to country UPM has developed a global biodiversity programme to ensure that biodiversity is adequately addressed. The UPM Global Biodiversity Programme is based on promoting the key elements vital to any forest ecosystem, each with global targets:

Key element	Global target
Native tree species	Maintain and promote native tree species and their natural composition.
Deadwood	Manage deadwood quality and quantity to enhance biodiversity.
Valuable habitats	Protect valuable habitats and manage them for their biodiversity value.
Forest structure	Manage variation in forest structure at landscape and stand level.

The UPM Global Biodiversity Programme is implemented in all UPM owned forests and the best practices defined by the programme are promoted in wood sourcing. The implementation of the UPM Global Biodiversity Programme has been reviewed by IUCN (International Union for Conservation of Nature) in Finland. The Programme is further developed based on research and stakeholder engagement. For more information, see:

<https://www.upm.com/responsibility/forests/biodiversity/>

2. Including the protection of biological diversity within their environmental management system

2.1. Wood sourcing

All of UPM's wood is legal and controlled. Furthermore it is PEFC & FSC CoC and FSC Controlled Wood/PEFC Controlled Sources certified. In 2017, 85 percent of all wood used at UPM was certified according to FSC or PEFC. In 2018, the percentage declined to 81 percent. The UPM approach to forestry and wood sourcing is described previously and the same approach applies to the mills.

2.2. Long term commitment

Protection of biodiversity calls for a long-term commitment which started in 1996 with UPMs first Environmental Policy. Information on actions from 1996 to 2013 can be found in the Progress Report 2013/14. Actions from 2015 to 2016 can be found in the Progress Report 2015/16. New actions since 2017 are listed below:

Year	Action
2017 & 2018	<ul style="list-style-type: none"> • EU Fire and Light LIFE continued 2017-2018: fire and esker habitat management projects, app. 100 ha in total • Finnish Association for Nature Conservation: peatland restoration continued in 2017 on chosen sites (Keuruu, Central Finland) • Ecosystem services: master's thesis from Uruguay (plantation forests) and Finland (boreal semi-natural forests). University of Helsinki and University of Eastern Finland. • Osprey Foundation: Guidelines for forestry operations near ospreys nesting trees 2017. Spatial information of osprey nests to UPM in 2018. • Ornithological Society of North Carelia: Spatial information of nests of large diurnal birds of prey • Centre for the Economic, Development, Transport and the Environment of Central Finland: To support restoration of migrating fish stocks by removing obstacles • Beetle research project continued, Harviala, Janakkala, Finland • Established private nature conservation areas: 319 ha • Sales for protection purposes: 54 ha

2.3. Mill site habitats

Mill sites themselves provide various habitats for a number of species. An initial survey of mill ground biodiversity data in Austria and Germany revealed the following biodiversity features at UPM paper mills in Germany:

UPM Ettringen

- Row deer uses grass fields around grey water treatment plant for grazing since 2015.
- Fish ladder installed at the Mühlbach hydropower plant in 2009. Still in use but in different ownership now.
- Fish ladder installed at the Wertach in 2011. Still in use but in different ownership now.
- Ecological compensation area of 76450 m³ including improvement of habitat interconnectedness in 2001 for mill development projects impacting natural areas.



UPM Schongau

- Reptile habitat and meadow habitat creation on company land as part of a larger partnership project "Lebensraum Lechtal" since 2016: <https://www.kreisbote.de/lokales/landsberg/lechtal-wird-uferwald-ausgeholt-mehr-platz-pflanzen-tiere-11760866.html> (in German)
- Hay thrashing slope planted and cared for since 2014.
- Meadow orchard planted and cared for to date.
- Embankment care under Natura 2000.



UPM Steyermühl

- Recording of all forestland in a forest register.
 - 43.5 ha are European Conservation Areas (ESG).
 - 23.7 ha natural forest area on steep slopes of the river Traun (erosion control forest) to be taken out of harvest.
 - 12.9 ha for close-to-nature forestry
- Four fish ladders completed 2015. In different ownership now.



UPM Nordland

- Successful nesting of Eurasian oystercatcher on the roof of UPM Nordland
- Green roofs
- Grass fields around grey water treatment plant
- Rabbit habitat



A more detailed follow-up survey with all paper mill sites is considered as a next step. As a guideline could serve the existing survey „Naturnahe Gestaltung von Firmengeländen“ created by the German Bundesamt für Naturschutz, financed by the German Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit. URL: www.naturnahefirmengelaende.de.

3. Appointing a responsible individual within the company to steer all activities in the biodiversity sector and report to the Management Board

UPM Stakeholder Relations is a global function of UPM, headed by Executive Vice President, and responsible for all environmental, communication and stakeholder issues in support of UPMs business groups. UPM Stakeholder Relations supports environmental excellence in sourcing, production and markets. In addition, each UPM business area's production units and mills have

personnel responsible for management of environmental issues on site. Total number of Stakeholder Relations is 100 persons.

4. Defining realistic, measurable objectives that are monitored and adjusted every two to three years

UPM's responsibility principles are accompanied by operational targets that create the framework of responsibility for all company operations which can be found:

<https://www.upm.com/responsibility/fundamentals/Our-responsibility-targets/>

The environmental targets have improved from 2015 as follows:

UPM's responsibility targets to 2030:

UPM RESPONSIBILITY FOCUS AREA	2030 TARGET	2030 FOLLOW-UP / 2017 RESULTS
PRODUCT STEWARDSHIP - Taking care of the entire lifecycle	Environmental Management Systems in 100% use (<i>continuous</i>) Environmental Product Declarations for all products (<i>continuous</i>) ³⁾ All applicable products ecolabelled by 2030	96% of production sites have a certified environmental management system in place, remaining have implementation underway (unchanged from 2016). Environmental declarations are available for all relevant UPM products. (Unchanged from 2016) The share of ecolabelled products was 85% (16% up from 2016)
WASTE - Promoting material efficiency and circular economy - reduce, reuse and recycle	No process waste to landfills or to incineration without energy recovery by 2030	89% of UPM's total process waste was recycled or recovered. (1% down from 2015). The amount of waste to landfills was decreased by 13% compared to 2016)
CLIMATE - Creating climate solutions and working towards carbon neutrality	Fossil CO ₂ emissions from own combustion and purchased electricity (Scope 1 and 2) reduced 30% by 2030 Maximise the business benefits of greenhouse gas claims (<i>continuous</i>) Acidifying flue gases (NO _x /SO ₂) reduced 20% by 2030 ⁴⁾	Fossil CO ₂ emissions reduced by 6% compared to 2016. However, the increase in 2011 due to Myllykoski acquisition has not been compensated yet. UPM sold greenhouse gas claims worth of 520,000 tonnes. Without these, UPMs reported emissions (Scope 1 and 2) would have been over 8% lower. 31% reduction achieved since

2008 for the UPM average product. (11% down from 2015).

WATER - Using water responsibly	Effluent load (COD) reduced 40% by 2030 ⁴⁾ Wastewater volume reduced 30% by 2030 ⁴⁾ 100% nutrients used at effluent treatment from recycled resources by 2030	32% reduction in effluent load achieved since 2008 for the UPM average product. (3% down from 2015) 13% reduction in wastewater achieved since 2008 for the UPM average product (2% down since 2015). Project started in 2016. Already 17% of nutrients from recycled resources.
FORESTS AND BIODIVERSITY - Ensuring sustainable land use and keeping forests full of life	100% coverage of chains of custody (<i>continuous</i>) All fibre certified by 2030	Coverage is 100%. The certified fibre share increased to 85%. (1% up from 2015)

- 1) Covers all UPM raw material spend including wood and wood-based biomass sourcing and excluding energy
- 2) Environmental targets: from 2008 levels
- 3) Includes paper, timber, plywood, pulp and label
- 4) Numerical targets relevant for pulp and paper production

UPMs Global Biodiversity Programme and related targets can be found at:

<https://www.upm.com/responsibility/forests/biodiversity/>

5. Publishing activities and achievements in the biodiversity sector in the company's annual, environmental, and/or corporate social responsibility report

UPM does not publish a separate environmental and corporate responsibility report but has integrated this information into its Annual Report since 2007. UPM environmental and corporate social responsibility issues can be found in the UPM Annual Report 2017, see pages 68-79: https://www.upm.com/siteassets/asset/investors/2018/upm_ar18_en_190227_web_secured.pdf

UPM reports activities and achievements in biodiversity in the company's annual report (produced in accordance with the Global Reporting Initiative), web pages as well as many other reporting initiatives. Over the past years UPM's performance and consistent work on corporate responsibility has been recognised by several external international parties. Here are some examples:

UN Global Compact LEAD

Since 2016 UPM has been repeatedly been recognized as a Global Compact LEAD company for its strong engagement to the United Nations Global Compact, the world's largest corporate

sustainability initiative. The recognition was addressed to only 34 global companies at the Global Compact Leaders Summit in New York on 24 September 2018. Read more at <https://www.upm.com/about-us/for-media/releases/2018/09/united-nations-recognises-upm-as-one-of-34-global-compact-lead-companies-demonstrating-world-class-commitment-to-corporate-sustainability/>

Dow Jones Sustainability Index

In September 2018 UPM has been listed as the forest and paper industry leader in the in the Dow Jones European and World Sustainability Indices (DJSI) for 2018-2019 for the sixth time. Read more at <https://www.upm.com/about-us/for-media/releases/2018/09/upm-recognised-as-the-industrys-most-responsible-company-in-the-global-dow-jones-sustainability-index/>

Industry Mover distinction in RobecoSAM's annual Sustainability Yearbook

In January 2018, UPM has been listed in the RobecoSAM's Sustainability Yearbook 2018 with the Gold Class and Industry Mover distinctions. The company that has achieved the largest proportional improvement in its sustainability performance compared to the previous year is named the RobecoSAM Industry Mover. More details here: <https://www.upm.com/about-us/for-media/releases/2018/02/upm-receives-robecosams-industry-mover-distiction/>

CDP's Forest Program

In January 2019 we were recognised among the global leaders on the CDP Forest A List as well as ranked on the 23rd place in the list of 100 most sustainable corporations by the Corporate Knights, the Canadian-based media and research company. UPM is the only company listed in the Paper and Forest Products category. In the CDP's Climate and Water Programs UPM did not receive recognition in the A lists in 2018. Read more at: <https://www.upm.com/about-us/for-media/releases/2019/01/upm-gains-valuable-sustainability-recognitions-by-corporate-knights-and-cdp/>

Euronext Vigeo Europe 120 Index

UPM has been listed on the Euronext Vigeo Europe 120 Index since 2015. This index recognizes companies achieving advanced standards of excellence in Environmental, Social and Governance performance. The 330 index components are reviewed every six months in December and June.

A list of the full SRI index range can be viewed on the [Euronext](#) and [Vigeo Eiris](#) websites.

Renewed biodiversity commitment

In November 2018, UPM renewed a new biodiversity commitment, which is one of the company's responsibility targets for 2030, at the Conference of the Parties (COP14) of the United Nations' Convention on Biological Diversity (CBD), held in Sharm el-Sheikh, Egypt. Read more at <https://www.upm.com/about-us/for-media/releases/2018/11/upm-strengthens-the-foundations-of-the-bioeconomy-with-a-new-biodiversity-commitment/>

UPM's new 2030 target: positive impact on biodiversity

In 2018 UPM announced a new biodiversity commitment to achieve positive impact on biodiversity in company owned forests. This target is included into company's responsibility targets for 2030. The aim is to preserve biodiversity alongside modern forestry in UPM's own forests in Finland. The commitment was presented at the Conference of the Parties (COP14) of the UN Convention on Biological Diversity, held in Egypt in November.

With this target and through our actions, we seek to open up new opportunities for different land use practises that promote the preservation of natural resources or habitats. Biodiversity helps to protect water resources, promote multiple forest uses and ensure the growth of forests that act as carbon sinks to mitigate climate change.

The biodiversity programme will be carried out according to the annual plan, and the operations and results will be reported transparently. The key performance indicators for the programme are variation in the forests' successional stages, the number and type of set-asides, diversity of tree species, variation in forest structure, and deadwood, which provides a habitat to as many as one fifth of forest species.

An independent group of researchers will monitor the progress of the programme. "The indicators used by UPM are strongly aligned with the UN's Aichi-biodiversity targets. We will closely monitor the progress of UPM's biodiversity programme," says Liisa Rohweder, the Secretary General of WWF Finland.

6. Informing suppliers about the company's biodiversity objectives and integrating suppliers accordingly and step by step, simplify and focus on standards

UPM's tiered due diligence in forestry operations is outlined in detail in the Progress Report 2011/12. To proactively support suppliers in sustainable forestry and biodiversity conservation, UPM continues to invest in collaboration and education as outlined in the Progress Report 2011/12. Internal and external environmental training is an on-going exercise, since new needs continuously arise. In regions of risk UPM continued to carry out audits at the suppliers and their upstream-suppliers.

In May 2017, UPM and the Forest Stewardship Council® (FSC) announced a global strategic partnership to develop solutions for advancing the uptake of FSC in the market. Our joint target is to extend the use of the FSC system in general as well as to develop UPM forest management and solutions for group certification to expand in the Finnish private smallholder structure.

7. Exploring the potential for cooperation with scientific institutions, non-governmental organizations (NGOs) and/ or governmental institutions with the aim of deepening dialogue and continuously improving the corporate management system vis-à-vis the biodiversity domain

As already laid out in previous Progress Reports, UPM's stakeholder engagement with communities is founded on decades of close cooperation. In many cases the community has grown around UPM's operations over the years.

UPM actively seeks to maintain and develop good relations with its various stakeholders. The company's key stakeholders are employees, customers, private forest owners, investors, suppliers, local communities, non-governmental organisations, media, researchers, governments and regulators.

Local environmental organizations perform hands-on conservation work at grassroots level. UPM also acts at the local level, and its representatives are part of local communities. Therefore, it is only logical that UPM's natural resource specialists collaborate with local environmental organizations.

Such partners include Aves Uruguay, Vida Silvestre, local BirdLife organizations, The Finnish Association for Nature Conservation, and The Osprey Foundation. In addition to ENGOs the most important stakeholders in biodiversity projects are authorities, forest owners, and research organizations.

In addition to local and national level actions, we are actively involved in international stakeholder forums, such as The Forests Dialogue (TFD) and WWF New Generation Plantations (NGP). TFD is a civil society-driven, multi-stakeholder dialogue platform that aims at forging relationships and spurring collaborative action on the highest priority issues facing the world's forests. The founders of TFD are the World Bank, the WBCSD, the World Resources Institute and the WWF. The NGP platform is a place to learn about better plantation management through real world experiences, and influence others to follow good examples. NGP brings together leading plantation companies and some government agencies that manage and regulate plantations. NGP started with the premise that well-managed plantations in the right places can help conserve biodiversity and meet human needs, while contributing to sustainable economic growth and local livelihoods.

UPM and FSC International signed a three-year partnership agreement in 2017. One of the key targets of this partnership is to develop and expand FSC forest management certification in smallholder field. UPM considers forest certification as a great tool for promoting sustainable forestry.