

UPM GRI & SASB reporting index 2021



UPM follows the Global Reporting Initiative's (GRI) Sustainability Reporting Standards in its corporate responsibility reporting. The reporting has been prepared in accordance with the GRI Standards: Core option. For UPM's GRI content index, click [here](#).

The table below includes relevant Sustainability Accounting Standards Board (SASB) indicators for UPM and aligns them with the applicable GRI standard disclosures. Information on locations shows where the indicators are addressed in the [Annual Report 2021](#) (AR) and on UPM's webpage (web) <https://www.upm.com/responsibility/> and <https://www.upm.com/investors/governance/>.

UPM group level accounting metrics

SASB TOPIC	SASB ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	SASB CODE	GRI DISCLOSURE NUMBER	DISCLOSURE	LOCATION	COMMENT
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	RR-PP-110a.1	305-1	2,700,000 tons	AR pages 99, 94, web , web	
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and analysis of performance against those targets	Discussion and Analysis	n/a	RR-PP-110a.2		UPM Group level targets: <ul style="list-style-type: none"> - 65% reduction of fossil CO₂ emissions from own combustion and purchased electricity (scope 1 and 2) by 2030, from 2015 level -> Reduction of 27% compared to 2015 and 8% compared to 2020 - No coal and peat usage in on-site energy generation by 2030 -> Reduction of 9% compared to 2020 - 1% annual energy efficiency improvement (continuous) -> achieved in 2021 	AR pages 32-33, 93-95, web , web	
Air Quality	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO ₂ , (3) volatile organic compounds (VOCs), (4) particulate matter (PM), and (5) hazardous air pollutants (HAPs)	Quantitative	Metric tons (t)	RR-PP-120a.1	305-7	Nitrogen oxides 7,700 t Sulphur dioxide 820 t Particulates 1,100 t VOC 390 t	AR page 99	
	Number of incidents of non-compliance associated with air quality permits, standards, and regulations	Quantitative	Number	RR-BI-120a.2	307-1	No major environmental incidents occurred at UPM production plants in 2021. However, a total of 25 temporary deviations from permit, contractual or other obligations occurred over the course of the year. 12 cases were related to air, 12 to water and one to soil.	AR page 138	

SASB TOPIC	SASB ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	SASB CODE	GRI DISCLOSURE NUMBER	DISCLOSURE	LOCATION	COMMENT
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage from biomass, (4) percentage from other renewable energy	Quantitative	Gigajoules (GJ), Percentage (%)	RR-PP-130a.1	302-1	Renewable fuels 26,000 GWh Fossil fuels 11,000 GWh Purchased electricity and heat 13,600 GWh Sold electricity and heat 12,000 GWh	AR pages 98, 95, web	
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m ³), Percentage (%)	RR-PP-140a.1	303-3	1) Surface water, million m ³ 390 Groundwater, million m ³ 20 Communal water, million m ³ 4 No water withdrawal from areas with water stress.	AR page 98, web , web	The scope is pulp and paper mills: the impact of other UPM units is minor.
					303-5	(2) 24 million m ³ No water consumption or discharge in areas with water stress.		
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	RR-PP-140a.2	303-1, 303-2	For description and discussion, please see column LOCATION	AR pages 96-97, 138, web	
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	RR-BI-140a.3	307-1	No major environmental incidents occurred at UPM production plants in 2021. However, a total of 25 temporary deviations from permit, contractual or other obligations occurred over the course of the year. 12 cases were related to air, 12 to water and one to soil.	AR page 138	
Supply chain Management	Percentage of wood fiber sourced from (1) third-party certified forestlands and percentage to each standard and (2) meeting other fiber sourcing standards and percentage to each standard	Quantitative	Percentage (%) by weight	RR-PP-430a.1		84% of all wood used by UPM was sourced from certified forests in 2021. All wood, pulp and recovered paper is either FSC™ (N003385) and PEFC (PEFC/02-44-41) certified or complies with the FSC Controlled Wood standard or Due Diligence requirements for PEFC.	AR pages 33, 82	
	Amount of recycled and recovered fiber procured	Quantitative	Metric tons (t)	RR-PP-430a.2	301-2	Recovered paper procured 1.7 million t Recycled fibre accounted 22% of all fibre raw materials used in UPM's paper production.	AR page 83	

SASB TOPIC	SASB ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	SASB CODE	GRI DISCLOSURE NUMBER	DISCLOSURE	LOCATION	COMMENT
Ecosystem Services & Impacts	Area of forestland certified to a third-party forest management standard, percentage certified to each standard	Quantitative	Acres (ac), Percentage (%)	RR-FM-160a.1		All UPM-owned forests are certified, or in the process of being certified if the site is new. At the end of 2021, UPM owned approximately 890,000 hectares (2,200,000 acres*) of forest land in Finland, Uruguay and the USA.	AR page 85-86	
	Area of forestland with protected conservation status	Quantitative	Acres (ac)	RR-FM-160a.2	304-1	180,000 hectares (445,000 acres*)	AR page 84, web	
	Area of forestland in endangered species habitat	Quantitative	Acres (ac)	RR-FM-160a.3		Qualitative information available on UPM's webpage	web	Not disclosed
	Description of approach to optimizing opportunities from ecosystem services provided by forestlands	Discussion and Analysis	n/a	RR-FM-160a.4		Forests provide a renewable source of raw materials for a broad range of products, from everyday necessities to ground-breaking innovations and alternatives to fossil-based materials. Forests are also one of the biggest absorbers of carbon on the planet, second only to oceans. They are critical to biodiversity and they protect water systems. For many, they provide a livelihood and are a source of wellbeing and recreation. Today, they're more important than ever.	AR pages 12-13, web	
Rights of Indigenous Peoples	Area of forestland in indigenous land	Quantitative	Acres(ac)	RR-FM-210a.1	411-1	No operations in areas where the rights of indigenous peoples are endangered.	AR page 85	
	Description of engagement processes and due diligence practices with respect to human rights, indigenous rights, and the local community	Discussion and Analysis	n/a	RR-FM-210a.2	412-1, 413-1	For discussion and analysis, please see column LOCATION	AR pages 67, 137, web	
Climate Change Adaptation	Description of strategy to manage opportunities for and risks to forest management and timber production presented by climate change	Discussion and Analysis	n/a	RR-FM-450a.1	102-15	For discussion and analysis, please see column LOCATION	AR pages 12-15, 30-31, 34-35	
Lifecycle Emissions Balance	Life cycle greenhouse gas (GHG) emissions, by biofuel type	Quantitative	Grams of CO ₂ -e per megajoule (MJ)	RR-BI-410a.1		UPM BioVerno reduces GHG emissions by over 80% compared to fossil diesel.	AR pages 54-55	

*conversion rate: 1 hectare = 2.4711 acres

SASB TOPIC	SASB ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	SASB CODE	GRI DISCLOSURE NUMBER	DISCLOSURE	LOCATION	COMMENT
Sourcing & Environmental Impacts of Feedstock Production	Discussion of strategy to manage risks associated with environmental impacts of feedstock production	Discussion and Analysis	n/a	RR-BI-430a.1		For discussion and analysis, please see column LOCATION	web	
	Percentage of biofuel production third-party certified to an environmental sustainability standard	Quantitative	Percentage (%) of gallons	RR-BI-430a.2		100%	AR page 55, web	
Management of the Legal & Regulatory Environment	Amount of subsidies received through government programs	Quantitative	Reporting currency	RR-BI-530a.1	201-4		AR pages 166-167	Not disclosed.
	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	n/a	RR-BI-530a.2		For discussion and analysis, please see column LOCATION	AR page 66-69	
Operational Safety, Emergency Preparedness & Response	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Quantitative	Number, Rate	RR-BI-540a.1	403-9	Total recordable injury frequency for UPM workforce including contractors (as total injuries per one million hours worked) was 7.2 In May 2021, a major incident occurred at the UPM Lappeenranta Biorefinery when there was a rupture and leakage in the process gas pipeline, which caused an explosion and a fire. No one was injured, and the fire was quickly extinguished.	AR pages 74-75	

Activity metrics – Pulp & Paper, Forestry Management, Biofuels

SASB ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	SASB CODE	GRI DISCLOSURE NUMBER	DISCLOSURE	LOCATION	COMMENT
Pulp production	Quantitative	Air-dried metric tons (t)	RR-PP-000.A		3.8 million t	AR page 98	
Paper production	Quantitative	Air-dried metric tons (t)	RR-PP-000.B		7.4 million t	AR page 98	
Total wood fiber sourced	Quantitative	Metric tons (t)	RR-PP-000.C	301-1	Wood: 26 million cubic metres Market pulp: 1.7 million t Recovered paper: 1.7 million t	AR page 98	
Area of forestland owned, leased, and/or managed by the entity	Quantitative	Acres(ac)	RR-FM-000.A		Owned: 890,000 hectares (2.2 million acres*) Leased: 160,000 hectares (0.4 million acres*) Managed: 1.3 million hectares (3.2 million acres*)	AR page 84	
Aggregate standing timber inventory	Quantitative	Cubic meters (m ³)	RR-FM-000.B		-	-	Quantity not disclosed
Timber harvest volume	Quantitative	Cubicmeters (m ³)	RR-FM-000.C		3.6 million m ³ from UPM forests and plantations	AR page 84	
Biofuel production capacity	Quantitative	Millions of gallons (Mgal)	RR-BI-000.A		160 million l/a (42 Mgal**) of advanced biofuels	web	
Production of: (1) renewable fuel, (2) advanced biofuel, (3) biomass-based diesel, and (4) cellulosic biofuel	Quantitative	Millions of gallons (Mgal)	RR-BI-000.B		100% advanced biofuels	web	Quantity not disclosed
Amount of feedstock consumed in production	Quantitative	Metric tons (t)	RR-BI-000.C		Raw material is crude tall oil, a residue from pulp production.	AR page 54	Quantity not disclosed

*conversion rate: 1 hectare = 2.4711 acres

**conversion rate: 1 liter = 0.26417 US gallon