

31 December, 2008

Paper and Pulp mills: production, most important raw materials, energy consumption, emissions and solid waste

Production, tonne	2008	2007	2006	2005	2004
Paper	10 480 000	11 400 000	11 150 000	10 190 000	10 890 000
Chemical pulp	2 010 000	2 150 000	2 095 000	1 840 000	2 240 000
Raw materials and energy					
Wood, m3	18 400 000	19 400 000	18 800 000	16 900 000	19 800 000
Market pulp, tonne	1 200 000	1 300 000	1 400 000	1 300 000	1 300 000
Recovered paper, tonne	3 000 000	3 000 000	3 000 000	2 900 000	2 800 000
Minerals, tonne	2 500 000	2 700 000	2 600 000	2 400 000	2 600 000
Purchased power, GWh	12 000	13 000	14 000	13 000	14 000
Purchased fuels and heat, GWh	13 000	16 000	16 000	16 000	18 000
Emissions into water, t					
COD 1)	82 000	87 000	82 000	74 000	97 000
BOD7 1)	10 600	11 100	10 500	10 100	11 400
AOX	310	340	340	290	410
Emissions into air, t					
SO2	2 900	4 500	4 400	4 700	6 500
NOx	8 300	9 000	9 400	9 200	10 300
CO2(F)	3 000 000	3 700 000	3 800 000	3 600 000	3 800 000
Solid waste, t					
To landfills	147 000	166 000	224 000	171 000	150 000
Hazardous waste for special treatment	1 900	2 200	2 400	2 200	1 800

¹⁾ Information on waste water discharges also includes the waste water load from the Augsburg and Caledonian Paper mills to municipal treatment plants.

UPM Raflatac & RFID: production, most important raw materials, energy consumption and solid waste ¹⁾

	2008	2007	2006	2005	2004
Production					
Converted products, t	409 100	475 700	685 500	614 000	735 200
Raw materials, tonne					
Papers, kraftliners and board	337 900	383 400	618 600	488 100	641 700
Plastics	32 300	30 100	60 300	54 200	81 500
Adhesives	82 100	67 200	90 400	55 900	64 400
Emissions into air, tonne					
VOC	100	110	230 3)	150	970
Solid waste, tonne					
To landfills	11 500	11 800	14 300	16 500	31 100
Hazardous waste for special treatment 2)	1 580	770	720	540	1 570

¹⁾ Since 2005 without Loparex and since 2007 without Walki Wisa

²⁾ Washing water from Walki Wisa Changshu is included until 2006.

³⁾ From 2006 adhesive residual monomer VOC emissions are included.

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UPM Timber: production, most important raw materials, energy consumption, emissions and solid waste ¹⁾

	2008	2007	2006	2005	2004
Production, m³					
Sawn timber	2 005 000	2 404 000	2 199 000	1 941 000	1 894 000
Planed timber ²⁾	177 000	230 000	201 000	171 000	295 000
Raw materials and energy					
Wood consumption, m ³	4 283 000	5 036 000	4 616 000	4 193 000	4 106 000
Purchased power, GWh	150	160	170	160	160
Purchased fuels and heat, GWh	110	140	530	620	510
By-products, m³					
Bark, chips and sawdust	2 290 000	2 434 000	2 455 000	2 490 000	2 224 000
Emissions into air, tonne ³⁾					
SO ₂	20	30	30	20	20
NO _x	30	40	40	50	30
CO ₂ (F)	6 300	9 800	10 000	8 000	6 500
Particulates	70	80	90	50	30
Solid waste, tonne					
To landfills	5 100	5 200	2 000	2 900	1 300
Hazardous waste for special treatment	90	130	140	70	80

1) Data 2004 from Finnish sites only.

2) Made of own sawn good; therefore included in the sawn timber data.

3) Emissions for purchased heat and electricity not included; emissions are partly estimated.

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UPM Plywood: production, most important raw materials, energy consumption, emissions and solid waste ¹⁾

	2008	2007	2006	2005	2004
Production, m³					
Plywood and veneer	885 000	951 000	947 000	910 000	832 000
Processed plywood ²⁾	226 000	268 000	286 000	272 000	257 000
Raw materials and energy					
Wood consumption, m ³	2 122 000	2 472 000	2 510 000	2 362 000	2 200 000
Resin, tonne	25 000	28 000	28 000	28 000	24 000
Films, tonne	4 900	5 600	5 800	5 300	5 400
Purchased power, GWh	230	250	250	260	230
Purchased fuels and heat, GWh	960	840	910	970	800
By-products, m³					
Bark, chips and sawdust	1 304 000	1 592 000	1 626 000	1 111 000	675 000
Emissions into air, tonne ³⁾					
SO ₂	20	0	20	20	15
NO _x	60	60	70	100	70
CO ₂ (F)	25 300	23 500	21 000	6 900	6 800
Particulates	20	40	30	150	90
Solid waste, tonne					
To landfills	4 900	12 200	5 800	750	350
Hazardous waste for special treatment	450	610	410	760 ⁴⁾	340

1) Data 2004 from Finnish sites only.

2) Mainly made of own base plywood; therefore included in the plywood and veneer data.

3) Emissions for purchased heat and electricity not included; emissions are partly estimated.

4) Includes hazardous waste from demolition work at two closed plywood mills (190 t).