

BREAKDOWN OF TRANSPORT WORK (TONNES KM) WITHIN THE ROTTNEROS GROUP

	Road	Rail	Sea	Proportion of total transport work, %
2016				
Pulp wood, %	56	4	40	18
Chemicals, %	100	0	0	1
Pulp, %	15	15	70	81
Proportion of total transport work, %	23	13	64	100
2015				
Pulp wood, %	55	5	40	19
Chemicals, %	100	0	0	1
Pulp, %	20	19	61	80
Proportion of total transport work, %	29	16	55	100

ENERGY CONSUMPTION

	GWh	Rottneros	Vallvik	Total Group
2016				
Biofuels, incl. black liquor		54	1,573	1,628
Fossil fuels		58	23	80
Total energy consumption excl. electricity		112	1,596	1,708
– Proportion of biofuels (%)		49	99	95
Electricity generated at mills		–	125	125
– of which green electricity		–	123	123
Electricity purchased		241	53	294
Total electricity consumption		241	178	419
– Proportion produced at mills (%)		–	70	30
2015				
Biofuels, incl. black liquor		54	1,595	1,649
Fossil fuels		56	19	75
Total energy consumption excl. electricity		110	1,614	1,724
– Proportion of biofuels (%)		49	99	96
Electricity generated at mills		–	140	140
– of which green electricity		–	139	139
Electricity purchased		241	37	278
Total electricity consumption		241	177	418
– Proportion produced at mills (%)		–	79	33

EMISSION ALLOWANCES FOR CARBON DIOXIDE

	Allocation/year 2013–2020	Emissions 2016	Emissions 2015
2016			
Rottneros	19,668*	15,748	15,432
Vallvik	11,355*	6,276	5,291
Total	31,023*	22,024	20,723

* The allocation will gradually be reduced during the period so that it is 12% lower in 2020.

EMISSIONS TO WATER AND AIR

	Rottneros	Vallvik	
2016			
Production (tonnes)	156,600	217,500	
S (tonnes per year)	12	149	
Permit	–	80 tonnes + 0.3 kg/tonne	
NOx	43 tonnes/year	1.5 kg/tonne	324 tonnes/year
Permit	–	1.5 kg/tonne	420 tonnes/year
Suspended substances	314 tonnes/year	2.49 tonnes/day	
Permit	325 tonnes/year	2.5 tonnes/day	
		ECF	UKP
COD	3,112 tonnes/year	13.2 tonnes/day	5.9 tonnes/day
Permit	4,000 tonnes/year	35 tonnes/day	18 tonnes/day
BOD7, tonnes/day	2.1	2.5	
Permit	–	–	
AOX, kg/tonne	–	0.10	
Permit	–	0.25	
Phosphorus	1.4 tonnes/year	18.9 kg/day	
Permit	1.5 tonnes/year	25 kg/day	
Chlorate (tonnes per day) ECF	–	0.45	
Permit, kg/tonne	–	0.6	
2015			
Production (tonnes)	154,704	218,682	
S (tonnes per year)	12	78	
Permit	–	135	
NOx	32 tonnes/year	1.5 kg/tonne	328 tonnes/year
Permit	–	1.5 kg/tonne	
Suspended substances	220 tonnes/year	0.6 tonnes/day	
Permit	325 tonnes/year	2.0 tonnes/day	
		ECF	UKP
COD	3,095 tonnes/year	12 tonnes/day	5.2 tonnes/day
Permit	4,000 tonnes/year	35 tonnes/day	18 tonnes/day
BOD7, tonnes/day	1.7	2.3	1.4
Permit	–	–	
AOX, kg/tonne	–	0.12	
Permit	–	0.8	
Phosphorus	0.7 tonnes/year	25 kg/day	
Permit	1.5 tonnes/year	–	
Chlorate (tonnes per day) ECF	–	0.27	
Permit	–	1.5	

CARBON DIOXIDE EMISSIONS (TONNES PER YEAR)

	Rottneros	Vallvik	Total
2016			
Fossil fuels	15,748	6,276	22,024
Biofuels	37,492	603,689	641,181
% biofuels	70%	99%	97%
2015			
Fossil fuels	15,432	5,291	20,723
Biofuels	33,001	613,278	646,279
% biofuels	68%	99%	97%