

# KEY FIGURES ENVIRONMENT

## ENVIRONMENTAL IMPACT

Environmental impact	2016 UBP	2017 UBP	Deviation %
Electricity	101,708	101,507	-0.2
Combustibles	113,793	104,971	-7.8
Fuels	15,771	15,580	-1.2
Disposal	3,430	4,156	21.2
Solvents	1,460	1,288	-11.8
Water and waste water	2,631	2,521	-4.2
<b>Total environmental impact</b>	<b>238,793</b>	<b>230,023</b>	<b>-3.7</b>

UBP = Ecopoints in million UBP in accordance with the Swiss Ecological Scarcity Method (version 2013)

## MATERIAL USAGE

Material usage	2016 Metric tons	2017 Metric tons	Deviation %
Raw material plastics	66,612	72,776	9.3
Raw material metal	60,154	62,816	4.4
Raw material mineral	175,372	182,047	3.8
Other raw materials	501	3,918	682.0
Semi-finished products	41,372	46,140	11.5
Finished products	46,410	46,940	1.1
<b>Total material usage</b>	<b>390,421</b>	<b>414,637</b>	<b>6.2</b>

## ENERGY CONSUMPTION

Energy consumption	Unit	2016	2017	Deviation %
<b>Electricity</b>	GWh	224.6	227.4	1.2
<b>District heating</b>	GWh	14.1	13.2	-7.0
<b>Combustibles</b>				
Natural gas	m <sup>3</sup>	47,340,113	45,589,538	-3.7
Biogas	m <sup>3</sup>	874,135	869,343	-0.5
Liquified petroleum gas (LPG)	Metric tons	6,167.4	6,209.0	0.7
Diesel for electricity generation	l	142,586	49,993	-64.9
Heating oil extra light	Metric tons	39.0	16.1	-58.7
Solid fuels	Metric tons	5,962.7	1,958.7	-67.2
<b>Fuels</b>				
Gasoline	l	199,556	169,288	-15.2
Diesel	l	2,476,475	2,454,316	-0.9
Liquified petroleum gas (LPG)	kg	171,675	160,568	-6.5
Natural gas (CNG)	kg	0	8,005	-

	2016 TJ	2017 TJ	Deviation %
<b>Energy consumption</b>			
<b>Electricity</b>	808.5	818.6	1.2
<b>District heating</b>	50.9	47.3	-7.0
<b>Combustibles</b>	2,150.2	2,015.3	-6.3
Natural gas	1,723.2	1,659.5	-3.7
Biogas	31.8	31.6	-0.5
Liquified petroleum gas (LPG)	285.6	287.5	0.7
Diesel for electricity generation	5.1	1.8	-64.9
Heating oil extra light	1.7	0.7	-58.7
Solid fuels	102.8	34.2	-66.7
<b>Fuels (gasoline, diesel, LPG, CNG)</b>	103.2	101.4	-1.8
<b>Total energy consumption</b>	<b>3,112.8</b>	<b>2,982.6</b>	<b>-4.2</b>

## ELECTRICITY MIX

Electricity mix 2017	GWh	Renewable %	Fossil %	Nuclear %	Others %
Europe	166.0	23.8	54.7	20.2	1.3
USA	6.7	9.7	70.2	19.4	0.7
China	5.9	19.1	78.8	2.1	0.0
India	1.7	16.4	81.8	1.8	0.0
Green electricity	47.1	100.0	0.0	0.0	0.0
<b>Total electricity mix</b>	<b>227.4</b>	<b>39.0</b>	<b>44.6</b>	<b>15.4</b>	<b>1.0</b>

Electricity mix 2016	GWh	Renewable %	Fossil %	Nuclear %	Others %
Europe	166.8	23.2	53.7	21.8	1.3
USA	6.8	9.7	70.2	19.4	0.7
China	5.6	19.1	78.8	2.1	0.0
India	1.4	16.4	81.8	1.8	0.0
Green electricity	44.0	100.0	0.0	0.0	0.0
<b>Total electricity mix</b>	<b>224.6</b>	<b>37.7</b>	<b>44.4</b>	<b>16.9</b>	<b>1.0</b>

## WATER AND WASTE WATER

Water	2016 m <sup>3</sup>	2017 m <sup>3</sup>	Deviation %
Drinking water	292,681	313,114	7.0
Well water	533,850	539,477	1.1
River and lake water	299,466	267,948	-10.5
Rain water	7,949	9,354	17.7
<b>Total water</b>	<b>1,133,946</b>	<b>1,129,893</b>	<b>-0.4</b>

Waste water	2016 m <sup>3</sup>	2017 m <sup>3</sup>	Deviation %
Domestic waste water	224,110	201,903	-9.9
Process water ceramic	602,124	585,566	-2.8
Other waste water	20,764	24,300	17.0
<b>Total waste water</b>	<b>846,998</b>	<b>811,769</b>	<b>-4.2</b>

## EMISSIONS

CO <sub>2</sub> emissions	2016 Metric tons	2017 Metric tons	Deviation %
from combustibles (Scope 1)	127,268	118,975	-6.5
from fuels (Scope 1)	7,613	7,466	-1.9
from process emissions (Scope 1)	455	542	19.1
from electricity (Scope 2)	114,705	115,752	0.9
from district heating (Scope 2)	67	61	-7.9
<b>Total CO<sub>2</sub> emissions</b>	<b>250,108</b>	<b>242,796</b>	<b>-2.9</b>

Calculation of CO<sub>2</sub> emissions according to IPCC 2013

Air emissions		2016 Kilogram	2017 Kilogram	Deviation %
NO <sub>x</sub>	direct	69,105	59,751	-13.5
	indirect	156,090	156,009	-0.1
	<b>Total NO<sub>x</sub></b>	<b>225,195</b>	<b>215,760</b>	<b>-4.2</b>
SO <sub>2</sub>	direct	1,880	1,549	-17.6
	indirect	302,009	302,954	0.3
	<b>Total SO<sub>2</sub></b>	<b>303,889</b>	<b>304,503</b>	<b>0.2</b>
NMVOC	direct	99,620	83,151	-16.5
	indirect	20,224	20,135	-0.4
	<b>Total NMVOC</b>	<b>119,844</b>	<b>103,286</b>	<b>-13.8</b>
Dust (PM10)	direct	6,342	2,142	-61.3
	indirect	32,226	32,685	-0.1
	<b>Total dust</b>	<b>38,568</b>	<b>34,827</b>	<b>-9.0</b>
CFC11 equivalents	direct	1.8	0.4	-77.9
	indirect	9.4	9.3	-0.5
	<b>Total CFC11 equivalents</b>	<b>11.2</b>	<b>9.7</b>	<b>-13.2</b>

Calculation based on Ecoinvent data version 3.1

## WASTE

Waste	2016 Metric tons	2017 Metric tons	Deviation %
to incineration	2,163	1,432	-33.8
to inert waste landfill	16,787	19,726	17.5
to mixed waste landfill	1,330	882	-33.7
to external recycling	58,558	58,418	-0.2
to hazardous waste incineration	417	896	114.7
to hazardous waste recycling	609	599	-1.6
<b>Total waste</b>	<b>79,864</b>	<b>81,953</b>	<b>2.6</b>

# KEY FIGURES EMPLOYEES AND SOCIETY

## WORKFORCE

Workforce as of December 31, 2017	2016	Share %	2017	Share %
Germany	3,282	28.3	3,329	28.4
Poland	1,515	13.1	1,603	13.7
Switzerland	1,336	11.5	1,362	11.6
Ukraine	627	5.4	638	5.4
China	637	5.5	565	4.8
Austria	532	4.6	551	4.7
France	691	6.0	539	4.6
Italy	434	3.7	509	4.3
Portugal	435	3.8	450	3.8
Others	2,103	18.1	2,163	18.7
<b>Total</b>	<b>11,592</b>	<b>100.0</b>	<b>11,709</b>	<b>100.0</b>
Production	7,157	61.7	7,291	62.3
Marketing and sales	2,837	24.5	2,844	24.3
Administration	950	8.2	936	8.0
Research and development	415	3.6	403	3.4
Apprentices	233	2.0	235	2.0
<b>Total</b>	<b>11,592</b>	<b>100.0</b>	<b>11,709</b>	<b>100.0</b>
Permanent	9,100	78.5	9,181	78.4
Temporary	2,492	21.5	2,528	21.6
<b>Total</b>	<b>11,592</b>	<b>100.0</b>	<b>11,709</b>	<b>100.0</b>
Full-time	11,192	96.6	11,146	95.2
Part-time	400	3.4	563	4.8
<b>Total</b>	<b>11,592</b>	<b>100.0</b>	<b>11,709</b>	<b>100.0</b>
Management	206	1.8	202	1.7
Employees	11,386	98.2	11,507	98.3
<b>Total</b>	<b>11,592</b>	<b>100.0</b>	<b>11,709</b>	<b>100.0</b>

Information in full-time equivalents

## DIVERSITY

Diversity as of December 31, 2017		Management %	Employees %	Total %
Proportion of female employees		8.4	24	23
Age structure	> 45 years	78.2	40	40
	30 - 45 years	21.3	42	42
	< 30 years	0.5	18	18

Diversity as of December 31, 2016		Management %	Employees %	Total %
Proportion of female employees		9.2	24	24
Age structure	> 45 years	75	40	40
	30 - 45 years	25	43	43
	< 30 years	0	17	17

## FLUCTUATION

Fluctuation excl. natural departures		2015	Rate %	2016	Rate %	2017	Rate %
Age group	> 45 years	271	5.9	432	9.7	240	5.6
	30 - 45 years	332	7.8	504	12.5	379	9.8
	< 30 years	141	14.2	135	14.0	203	21.6
Gender	Male	503	6.8	670	9.4	631	9.1
	Female	241	9.7	401	17.4	191	8.8
Region	Germany	79	2.8	70	2.6	97	3.6
	Poland	19	2.9	100	14.6	183	25.5
	Switzerland	105	8.6	81	6.6	71	5.7
	Ukraine	220	18.8	512	57.9	160	26.2
	China	15	6.1	18	7.3	20	7.9
	Austria	28	5.6	35	6.9	48	9.5
	France	39	5.8	50	7.9	60	11.2
	Italy	42	9.5	12	2.9	13	3.0
	Portugal	3	1.2	11	4.5	10	4.0
	Others	194	10.2	182	9.7	160	8.5
<b>Total fluctuation excl. natural departures</b>		<b>744</b>	<b>7.5</b>	<b>1,071</b>	<b>11.3</b>	<b>822</b>	<b>9.0</b>

Fluctuation incl. natural departures		2015	Rate %	2016	Rate %	2017	Rate %
Age group	> 45 years	411	8.9	558	12.5	402	9.4
	30 - 45 years	336	7.8	507	12.5	380	9.8
	< 30 years	143	14.4	137	14.2	204	21.7
Gender	Male	610	8.2	758	10.6	757	10.9
	Female	280	11.3	444	19.2	231	10.7
Region	Germany	139	4.9	129	4.7	155	5.8
	Poland	25	3.8	103	15.0	195	27.2
	Switzerland	126	10.3	100	8.2	88	7.1
	Ukraine	221	18.9	515	58.2	160	26.2
	China	23	9.4	20	8.1	23	9.1
	Austria	29	5.8	37	7.3	51	10.1
	France	53	7.9	67	10.6	90	16.8
	Italy	46	10.4	14	3.4	14	3.3
	Portugal	7	2.9	14	5.7	13	5.2
	Others	221	11.6	203	10.8	199	10.5
<b>Total fluctuation incl. natural departures</b>		<b>890</b>	<b>9.0</b>	<b>1,202</b>	<b>12.7</b>	<b>988</b>	<b>10.9</b>

Information in headcounts  
Natural departures includes retirements

## TRAINING AND EDUCATION

Training and education	Hours per employee	2016	2017	Deviation %
Women		10.0	11.2	12.0
Men		9.9	11.1	12.1
Management		9.2	8.9	-3.3
Other employees		10.0	11.1	11.1
<b>Training and education group</b>		<b>10.0</b>	<b>11.1</b>	<b>11.1</b>

## PERSONNEL EXPENSES

Personnel expenses	2016 MCHF	2017 MCHF	Deviation %
Wages and salaries	525.1	537.2	2.3
Pension contributions	35.7	30.1	-15.7
Other social benefits	101.5	97.8	-3.6
Other personnel expenses	39.7	81.7	105.8
<b>Total personnel expenses</b>	<b>702.0</b>	<b>746.8</b>	<b>6.4</b>

## SOCIAL ENGAGEMENT

Social engagement	Unit	2016	2017	Deviation %
Donations and contributions	MCHF	3.7	3.3	-10.8
Orders to social institutions	MCHF	6.3	6.9	9.5
Charitable work	Hours	2,336	2,280	-2.4

## HEALTH AND SAFETY

Health and Safety	2016	2017	Deviation %
Number of occupational accidents	202	205	1.5
Accident frequency rate (AFR)	9.8	10.3	5.1
Lost days due to occupational accidents	4,305	4,065	-5.6
Accident severity rate (ASR)	209.4	203.8	-2.7

Accident frequency rate (AFR) = Number of occupational accidents per million working hours performed

Accident severity rate (ASR) = Number of lost working days due to accidents per million working hours performed

Absenteeism rate per region 2017	Illness %	Accident %	Total %
Europe	4.88	0.15	5.02
Asia	2.44	0.05	2.49
USA	2.26	0.08	2.34
Others	0.61	0.00	0.61
<b>Absenteeism rate group</b>	<b>4.62</b>	<b>0.14</b>	<b>4.76</b>

Absenteeism rate per region 2016	Illness %	Accident %	Total %
Europe	4.78	0.15	4.93
Asia	1.26	0.04	1.30
USA	3.05	0.02	3.07
Others	0.58	0.00	0.58
<b>Absenteeism rate group</b>	<b>4.46</b>	<b>0.14</b>	<b>4.60</b>

Absenteeism rate based on regular working hours