

Abridged Environmental Statement 2016

*Including the Environmental Program until 2017
For the organizations Fraport AG (Fraport parent company),
N*ICE, FCS und Energy Air at Frankfurt Airport*

Update of the Environmental Statement 2014



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Environmental Management at Frankfurt Airport

Since 1999, Fraport AG at Frankfurt Airport has been regularly validated by government accredited and inspected environmental auditors. The basis for this audit is the European regulation "Eco-Management and Audit Scheme" (EMAS). Since 2002, the verification has also been carried out in accordance with the international standard ISO 14001. These audits in conformity with EMAS and ISO 14001 also included Fraport Cargo Services GmbH (FCS) since 2008, N*ICE Aircraft Services & Support GmbH (N*ICE) since 2009 and Energy Air GmbH since

2014. Energy Air GmbH is also validated in accordance with the international ISO 50001 standard.

Fraport AG is updating the information from the Environmental Statement 2014 in the Abridged Environmental Statement 2015. The reporting includes indicators, and environmental targets and measures from Fraport AG, Energy Air GmbH, Frankfurt Cargo Services GmbH (FCS) and N*ICE Aircraft Services & Support GmbH (N*ICE).

Additional Environmental Figures

Since 2011, the environmental figures have been presented in the Environmental Statement in accordance with the Global Reporting Initiative (GRI) performance Indicators "Environment (EN)", supplemented by some specific indicators for the

airport. The present Environmental Statement also includes indicators in accordance with the expanded GRI performance indicators for airports, "Airport Operators Sector Supplement (AOSS)".

Environmental Figures

Frankfurt Airport, Fraport parent company, Frankfurt Cargo Services GmbH, N*ICE Aircraft Services & Support GmbH

Aspects in accordance with the Global Reporting Initiative (GRI) performance indicators "Environment (EN)" and "Airport Operators Sector Supplement (AOSS)", subset "environment".

Values partially rounded; minor deviations may occur.

Traffic volume	Unit	Comment	2012	2013	2014	2015
Frankfurt Airport (FRA)						
Traffic unit (without transit)	TU	1, 2	77,945,418	78,847,384	80,756,063	81,682,024
Aircraft movements (landing + takeoff)	Number of movements		482,242	472,692	469,026	468,153
Therein at night	Number of movements	3	36,852	32,349	31,247	31,013
Passengers	Number of passengers		57,527,251	58,052,554	59,571,802	61,040,613
Cargo weight	mt		2,100,747	2,127,893	2,164,660	2,114,579
Airfreight	mt		2,020,367	2,048,729	2,083,495	2,030,861
Airmail	mt		80,380	79,165	81,165	83,718
Therein FCS						
Cargo weight						
Airfreight	mt		453,689	443,536	453,155	525,528
Traffic units	TU	1	4,536,890	4,435,360	4,531,550	5,255,280
Therein N*ICE						
Deiced aircraft	Number	4	6,376	9,281	2,541	4,047

¹ TU = A traffic unit is equivalent to one passenger with baggage or 100 kg of airfreight or airmail.

² Commercial and non-commercial traffic.

³ Nighttime: 10 p.m. to 6 a.m.

⁴ Annual values are weather-dependent; the winter 2013/14 was very mild.

Employees	Unit	Comment	2012	2013	2014	2015
Fraport parent company	Number	1	12,134	11,985	11,694	11,401
FCS	Number	1	346	345	368	411
N*ICE	Number	1	41	42	43	41

¹ Employees = Permanent employees + temporary staff (school kids, students, interns, marginally employed and trainees) + apprentices, exempted employees, status December of every year.

Aspect: Energy						
EN3 Direct energy consumption (core indicator)	Unit	Comment	2012	2013	2014	2015
Frankfurt Airport						
		1, 2, 3				
Purchased direct non-renewable energy sources	TJ	6	812.30	820.80	757.90	796.80
Purchased direct non-renewable energy sources	TJ per million	4	10.4	10.4	9.4	9.8
Natural gas	TJ		81.24	77.44	68.77	83.99
Natural gas	million kWh	3	22.57	21.51	19.10	23.33
Liquefied petroleum gas (LPG)	TJ		9.15	6.83	9.26	8.40
Liquefied petroleum gas (LPG)	m ³	3	385	287	389	353
Biogas	TJ		0.0	0.0	0.0	0.0
Biogas	m ³		0.0	0.0	0.0	0.0
Heating oil	TJ		90.5	94.0	78.4	93.6
Heating oil	million liters	3	2.507	2.604	2.171	2.592
Diesel	TJ		589.2	597.4	552.5	556.4
Diesel	million liters		16.550	16.781	15.520	15.630
Gasoline	TJ		38.1	41.7	45.7	49.9
Gasoline	million liters		1.176	1.287	1.409	1.540
Kerosene (Jet A1)	TJ	8	4.08	3.41	3.33	4.54
Kerosene (Jet A1)	million liters	8	0.117	0.098	0.096	0.131
Therein Fraport parent company						
Purchased direct non-renewable energy sources	TJ	2, 6	501.03	502.50	468.30	483.10
Purchased direct non-renewable energy sources	TJ per million	4	6.4	6.4	5.8	5.91
Natural gas	TJ		7.5	7.6	5.1	5.76
Natural gas	million kWh		2.09	2.12	1.41	1.60
Liquefied petroleum gas (LPG)	TJ		9.15	6.80	9.26	8.40
Liquefied petroleum gas (LPG)	m ³		385	287	389	353
Biogas	TJ		0.0	0.0	0.0	0.0
Biogas	m ³		0.0	0.0	0.0	0.0
Heating oil	TJ		84.2	87.4	73.4	87.5
Heating oil	million liters		2.332	2.420	2.032	2.424
Diesel	TJ		376.2	374.9	350.1	346.7
Diesel	million liters	5	10.567	10.532	9.834	9.740
Gasoline	TJ		21.3	23.2	28.3	32.6
Gasoline	million liters	5	0.659	0.716	0.872	1.005
Kerosene (Jet A1)	TJ		2.64	2.60	2.26	2.14
Kerosene (Jet A1)	million liters		0.076	0.074	0.065	0.062
Total energy consumption						
Renewable energy sources	%		<1	<1	<1	<1
Non-renewable energy sources	%		100	100	100	100

¹ All companies on the composite owned land of Frankfurt Airport (Fraport parent company, subsidiaries of Fraport AG, more than 500 third parties) to the extent data are available.

² All data including technical losses, as far as known.

³ Consumption of natural gas by third parties based on information that cannot be verified.

⁴ TU = A traffic unit is equivalent to one passenger with baggage or 100 kg of airfreight or airmail.

⁵ The fuel consumption for private use of company cars is not taken into account.

⁶ Increase in 2011/2012 mainly due to new infrastructure: 1 full year of operations Runway Northwest, building 181, A-Plus pier start, expansion of apron south, building 178. The reduction in consumption during 2014 is mainly due to the very mild winter 2013/14.

⁸ Kerosene consumption of air start units.

TJ = Terajoule

Aspect: Energy						
EN3 Direct energy consumption	Unit	Comment	2012	2013	2014	2015
(core indicator) (continuation)						
Therein FCS						
Purchased direct non-renewable energy sources	TJ		5.6	5.7	5.3	5.7
Diesel	TJ		5.2	5.1	4.9	5.2
Diesel	millions liters		0.145	0.143	0.138	0.146
Gasoline	TJ		0.4	0.6	0.4	0.47
Gasoline	millions liters		0.013	0.017	0.013	0.014
Total energy consumption						
Renewable energy sources	%		0	0	0	0
Non-renewable energy sources	%		100	100	100	100
Therein N*ICE						
Purchased direct non-renewable energy sources	TJ		12.7	19.8	7.9	14.9
Diesel	TJ		12.6	18.6	7.8	14.9
Diesel	millions liters	7	0.355	0.523	0.220	0.418
Gasoline	TJ		0.1	1.2	0.04	0.06
Gasoline	millions liters		0.002	0.037	0.001	0.002
Total energy consumption						
Renewable energy sources	%		0	0	0	0
Non-renewable energy sources	%		100	100	100	100

⁷ The level of consumption depends on the number of deicing operations (see indicator "Number of deiced aircraft" in the category traffic volume)

TJ = Terajoule

Aspect: Energy						
EN3 Indirect energy consumption (core indicator)	Unit	Comment	2012	2013	2014	2015
Frankfurt Airport						
		1, 2				
Purchased energy	TJ		4,191.61	4,356.23	4,034.40	4,093.8
Purchased energy	TJ per million	3	53.8	55.2	50.0	50.1
Electricity	TJ		2,239.52	2,292.48	2,214.62	2,202.10
Electricity	million kWh		622.09	636.80	615.17	611.69
District heating	TJ		1,490.06	1,567.37	1,300.58	1,377.20
District heating	million kWh		413.91	435.38	361.27	382.55
District cooling	TJ		462.03	496.38	519.21	514.49
District cooling	million kWh		128.34	137.88	144.22	142.91
Indirect energy consumption						
Renewable energy sources	%		23.6	24.3	29.4	32.9
Non-renewable energy sources	%		76.4	75.7	70.6	67.1
Therein Fraport parent company						
Purchased energy	TJ		2,400.6	2,528.8	2,269.5	2,240.0
Purchased energy	TJ per million	3, 5	30.8	32.1	28.1	27.42
Electricity	TJ		1,256.5	1,293.3	1,223.4	1,181.7
Electricity	million kWh		349.017	359.244	339.829	328.236
District heating	TJ		737.2	795.5	618.5	634.4
District heating	million kWh		204.764	220.965	171.818	176.209
District cooling	TJ		407.0	440.0	427.6	424.0
District cooling	million kWh		113.061	122.229	118.768	117.768
Indirect energy consumption						
Renewable energy sources	%		23.6	24.3	29.4	32.5
Non-renewable energy sources	%	4	76.4	75.7	70.6	67.5
Therein FCS						
Purchased energy	TJ		36.4	35.8	28.2	28.75
Electricity	TJ		14.3	14.4	11.7	11.4
Electricity	million kWh		3.977	3.987	3.244	3.178
District heating	TJ		22.1	21.4	16.5	17.3
District heating	million kWh		6.135	5.949	4.594	4.808
Indirect energy consumption						
Renewable energy sources	%		23.6	24.3	29.4	32.5
Non-renewable energy sources	%		76.4	75.7	70.6	67.5
Therein N*ICE						
Purchased energy	TJ		3.39	2.69	2.05	3.56
Electricity	TJ		3.04	2.2	1.9	3.26
Electricity	million kWh		0.845	0.601	0.514	0.905
District heating	TJ		0.35	0.58	0.20	0.30
District heating	million kWh		0.098	0.141	0.055	0.083
Indirect energy consumption						
Renewable energy sources	%		23.6	24.3	29.4	32.5
Non-renewable energy sources	%		76.4	75.7	70.6	67.5

¹ All companies on the continuous owned land of Frankfurt Airport: Fraport parent company, subsidiaries of Fraport AG, more than 500 third parties.

² All data including technical losses, as far as known.

³ TU = A traffic unit is equivalent to one passenger with baggage or 100 kg of airfreight or airmail.

⁴ Until 2012, RECS certificates ("Renewable Energy Certificates System") from hydropower were purchased for the appropriate quantity of CO₂ emissions.

⁵ Increase in 2011/2012 mainly due to new infrastructure: 1 full year of operations Runway Northwest, building 181, A-Plus pier start, expansion of apron south.

Without these effects fuel consumption and emissions would be similar to last year.

TJ = Terajoule

Aspect: Energy						
EN6 Energy saved due to conservation and efficiency improvements (core indicator)	Unit	Comment	2012	2013	2014	2015
Fraport parent company	million kWh	1, 2, 3	14.93	15.45	24.17	30.07

¹ Based on the year 2008, accumulated effects from the year 2008, to the extent effective in subsequent years.

² Calculation of energy which could be saved for reasons of improved procedures, replacement and upgrading of systems and equipment, and modified employee behavior.

³ Includes calculated savings from calculated completed projects.

Aspect: Water						
EN8 Total water consumption (core indicator)	Unit	Comment	2012	2013	2014	2015
Frankfurt Airport		1				
Total water consumption	million m ³		1.815	1.837	1.970	1.774
Total water consumption	liters per TU	2	23.3	23.3	24.4	21.7
Drinking water	million m ³	4	1.521	1.482	1.624	1.431
Service water	million m ³	3, 5	0.294	0.355	0.346	0.343
Therein Fraport parent company						
Total water consumption	million m ³	7	1.181	1.151	1.166	1.088
Total water consumption	liters per TU	2	15.2	14.6	14.4	13.3
Drinking water	million m ³	4	0.951	0.864	0.891	0.819
Service water	million m ³	5	0.230	0.287	0.275	0.269
Therein FCS						
Total water consumption	million m ³		0.008	0.007	0.009	0.009
Drinking water	million m ³	4	0.006	0.016	0.006	0.009
Service water	m ³		–	–	–	–
Therein N*ICE						
Total water consumption	million m ³	6	0.006	0.016	0.006	0.009
Drinking water	million m ³	4, 6	0.006	0.012	0.0052	0.006
Service water	million m ³	5	–	0.004	0.0005	0.003

¹ All companies on the composite owned land of Frankfurt Airport: Fraport parent company, subsidiaries of Fraport AG, more than 500 third parties.

² TU = A traffic unit is equivalent to one passenger with baggage or 100 kg of airfreight or airmail.

³ Less share of drinking water at service water treatment in Terminal 2.

⁴ From the local authority water supply.

⁵ The service water is treated from surface water, rainwater and ground water. Contains subsets, which are estimated.

⁶ Water is used to dilute the aircraft deicing agents. In cold and snowy winters larger amounts are needed for deicing. The water consumption therefore rises accordingly. The period from January to March 2013 was snowy, the winter 2013/14 was conversely exceptionally mild.

⁷ Total consumption for the airport minus consumption by third parties at the Frankfurt Airport site.

Aspect: Water						
A04 Quality of precipitation water (core indicator)	Unit	Comment	2012	2013	2014	2015
Frankfurt Airport						
Hydrocarbons	mg/l	1	0.0	0.1	0.1	0.1
Materials capable of being deposited	ml/l	1, 2	0.8	0.4	3.8	0.3

¹ A 2 h mixed sample is collected each month from the precipitation water channel at a sampling test station located shortly before the discharge point into the River Main. The value for hydrocarbons was calculated from twelve individual samples, the value for "substances capable of being deposited" from eleven individual samples.

² The increase in 2014 compared with previous years is due to a high value in July. This was preceded by days with very high levels of precipitation, which caused deposits in the drains to be washed out.

Aspect: Biodiversity						
Land use	Unit	Comment	2012	2013	2014	2015
Frankfurt Airport						
Owned land by Fraport AG	ha	1	2,244.73	2,296.88	2,296.47	2,283.54
of which paved area	ha		1,027.96	1,064.88	1,064.88	1,084.61

¹ Continuous owned land.

Aspect: Emissions, wastewater and waste						
EN15 Greenhouse gas emissions (core indicator)	Unit	Comment	2012	2013	2014	2015
Fraport parent company (Scope 1 and 2 GHG)						
CO ₂ emissions	1,000 t CO ₂	1, 2, 6	239.7	243.1	238.2	218.3
Direct CO ₂ emissions	1,000 t CO ₂	1	36.9	37.0	34.5	35.5
Indirect CO ₂ emissions	1,000 t CO ₂	2, 6	202.8	206.0	203.7	182.8
Climate intensity of traffic performance	kg CO ₂ per VE	1, 2, 3	3.08	3.08	2.95	2.68
Direct CO ₂ emissions	kg CO ₂ per VE	1, 3	0.47	0.47	0.43	0.44
Indirect CO ₂ emissions	kg CO ₂ per VE	2, 3	2.60	2.61	2.52	2.24
Compensated CO ₂ emissions (certificates)	1,000 t CO ₂	4	154.4	0	0	0
Other relevant greenhouse gas emissions	t CO ₂ equivalent	5	<2	<2	<2	<2
FCS (Scope 1 and 2 GHG)						
CO ₂ emissions	1,000 t CO ₂		3.2	3.2	2.7	2.6
Direct CO ₂ emissions	1,000 t CO ₂	1	0.4	0.4	0.4	0.4
Indirect CO ₂ emissions	1,000 t CO ₂	2	2.8	2.8	2.3	2.2
FCS (Scope 1 and 2 GHG)						
CO ₂ emissions	1,000 t CO ₂		1.3	1.8	0.8	1.5
Direct CO ₂ emissions	1,000 t CO ₂	1	0.9	1.5	0.6	1.1
Indirect CO ₂ emissions	1,000 t CO ₂	2	0.4	0.3	0.3	0.4

¹ Direct emission in conformity with Scope 1 GHG Protocol Standard: fuels, fuels for combustion plants, here heating oil, natural gas, propane gas.

² Indirect emissions in conformity with Scope 2 GHG Protocol Standard: purchasing of electricity (Fraport Group), district heating, district cooling (Fraport at the Frankfurt site).

³ TU = A traffic unit is equivalent to one passenger with baggage or 100 kg of airfreight or airmail.

⁴ Until 2012 compensation for emissions resulting from electricity production through RECS certificates (www.recs.org).

⁵ Only negligible amounts of additional greenhouse gases (such as CH₄, N₂O) are under the influence of Fraport parent company.

⁶ Increase in 2011/2012 mainly due to new infrastructure: First full year of operations Runway Northwest, building 181, A-Plus pier start, expansion of apron south. Less the effects would be caused thereby fuel consumption and emissions similar to last year.

Aspect: Emissions, wastewater and waste						
EN17 Other greenhouse gas emissions (core indicator)	Unit	Comment	2012	2013	2014	2015
Fraport parent company (Scope 3 in conformity with GHG)						
Air traffic	1,000 t CO ₂	1, 7	961.4	919.4	936.5	952.2
Employee traffic at Fraport parent company and third parties at Frankfurt Airport	1,000 t CO ₂	2	118.8	118.9	113.7	112.8
Passenger traffic (passengers originated here)	1,000 t CO ₂	3	245.7	259.0	231.3	201.3
Business trips of employees at Fraport parent company	1,000 t CO ₂	4	0.75	0.86	0.75	0.70
Energy consumption of third parties (infrastructure and vehicles)	1,000 t CO ₂	5	189.0	187.2	186.5	180.8
Other relevant greenhouse gas emissions	t CO ₂ equivalent	6	<2	<2	<2	<2

¹ Air traffic up to 914 m (LTO cycle) of all aircraft landing and taking off at Frankfurt Airport, use of APU.

² Travel by employees to and from the workplace.

³ Travel to and from the airport by passengers, travel in private vehicles and public transport.

⁴ Includes car, rail and air travel.

⁵ Electricity, heat, cooling, fuels.

⁶ According to investigations carried out in 2005, the emissions of other greenhouse gases at the airport were negligible.

⁷ From 2013 calculation without increased reverse thrust (compared with idle) with APU according to ICAO Doc. 9889.

Aspect: Emissions, wastewater and waste						
EN21 NO _x , SO _x and other air pollutants (core indicator)	Unit	Comment	2012	2013	2014	2015
Air traffic at Frankfurt Airport						
		1				
NO _x	t	2, 3	2,551	2,438	2,443	2,513
HC	t	2, 3	610	423	414	410
PM10	t	2, 3	12.3	23.0	23.0	23
SO ₂	t	2, 3	175	166	165	168
NO _x	g per TU	2, 4	32.73	30.92	30.25	30.76
HC	g per TU	2, 4	7.83	5.36	5.13	5.02
PM10	g per TU	2, 4	0.16	0.29	0.28	0.28
SO ₂	g per TU	2, 4	2.25	2.11	2.04	2.06

¹ Caused by 110 to 114 different airlines depending on timetable (summer, winter), only indirectly influenced by Fraport.

² Air traffic: emissions in tons per calendar year up to an altitude of 300 meter (taxiing, starting, climb, descent incl. rollout, engine ignition, APU).
Up to an altitude of 300 meters the emissions have a regional effect.

³ From 2013, calculation without including increased reverse thrust (as compared to 'idle') and adjustments to ICAO Doc. 9889 for APU, engine ignition (HC) and particulate emissions. Under the old method (until 2012), the emissions of NO_x = 2462 t, HC = 597 t, PM10 = 12.1 t, SO₂ = 270 t.

⁴ TU = A traffic unit is equivalent to a passenger with baggage or 100 kg of airfreight or airmail.

Aspect: Emissions, wastewater and waste						
EN21 NO ₂ , SO ₂ and other air pollutants (core indicator)	Unit	Comment	2012	2013	2014	2015
Fraport parent company						
NO _x	t	1	–	–	–	–
Benzene	t	1	–	–	–	–
PM10 (Fine dust < 10 µm)	t	1	–	–	–	–

¹ Fraport parent company emits per year approximately 264 t NO_x, 0.4 t benzene and 9.3 t PM10. These data are derived from the zoning plan documents.
An annual update is not yet possible because determining the data is very complex. In future, the data are to be calculated on a continuous basis, the necessary processes are currently being prepared.

Aspect: Emissions, wastewater and waste						
EN22 Total wastewater discharge (core indicator)	Unit	Comment	2012	2013	2014	2015
Frankfurt Airport						
Sewage water	million m ³	1, 2	1.897	2.253	1.535	1.986
Sewage water	Liters per TU	3	24.3	28.6	19.01	24.3

¹ Wastewater from Fraport parent company and more than 500 other companies at Frankfurt Airport. The disposal of sewage water from Frankfurt Airport is carried out by Fraport AG, allocation to individual companies is not possible.

² Wastewater is treated in the fully biological water-treatment plant at the Fraport parent company, as well as at fully biological water-treatment plants in Frankfurt Niederrad and Frankfurt Sindlingen. Since 2013, the separation of the precipitation water contaminated with deicing agents has brought about an increased dependence of the amount of sewage water on the nature of the weather conditions in the relevant winter. The mild winter 2013/14 led to a significant decline in the volume of sewage water.

³ TU = A traffic unit is equivalent to one passenger with baggage or 100 kg of airfreight or airmail.

Aspect: Emissions, wastewater and waste						
EN23 Waste by type and disposal method (core indicator)	Unit	Comment	2012	2013	2014	2015
Fraport parent company						
Amount of waste	1,000 t	1, 2, 6	24.63	26.54	23.41	21.49
Amount of waste	kg per TU	3, 6	0.32	0.34	0.29	0.26
Hazardous waste	1,000 t	1, 2	1.36	2.73	1.59	1.60
Non-hazardous waste	1,000 t	1, 2	23.27	23.81	21.82	19.88
Total recoverability	1,000 t	1, 2	20.90	22.19	20.30	19.15
Total disposal	1,000 t	1, 2	3.73	4.35	2.17	2.34
Total recoverability rate	%	1, 2, 4	84.9	83.6	90.3	89.1
Waste from international flights	1,000 t		6.04	5.93	5.77	5.00
FCS						
Amount of waste	1,000 t	1	0.973	0.900	0.945	0.946
Hazardous waste	t	1	0.307	0.240	0.000	0.000
Non-hazardous waste	1,000 t	1	0.973	0.900	0.945	0.000
Total recoverability	1,000 t	1	0.937	0.862	0.907	0.906
Total disposal	t	1	37.0	38.5	0.04	0.04
Total recoverability rate	%	1, 4	96.2	95.7	96.0	95.8
N*ICE						
Amount of waste	1,000 t	1, 7	0.11	0.16	0.09	0.13
Hazardous waste	1,000 t	1	0	0	0	0
Non-hazardous waste	1,000 t	1, 7	0.11	0.16	0.09	0.13
Total recoverability	1,000 t	1, 5	0.11	0.16	0.09	0.13
Total disposal	1,000 t	1	0	0	0	0
Total recoverability rate	%	1, 4	100	100	100	100

¹ Without soil and building rubble.

² Including waste from third parties, primarily residual waste out of aircraft (no catering waste) and without soil and building rubble.

³ TU = A traffic unit is equivalent to a passenger with baggage or 100 kg of airfreight or airmail.

⁴ Change in definition on account of the new German Product Recycling Act (KrWG) coming into force in June 2012.

⁵ Aircraft deicing agents.

⁶ In 2012, addition of approximately 2,000 tons of organic sludge from nitrate treatment plant, because the Fraport parent company took over operation of this plant.

⁷ The total amount is a mixture of water and Type I/Type IV fluids. The value for 2013 is increased due to heavy snowfall and cold weather conditions in that year (hence, significantly increased samplings, liquids exchange and workshop tests). The value for 2014 declined again due to the milder weather conditions prevailing in that winter.

Aspect: Emissions, wastewater and waste						
EN24 Significant spills (core indicator)	Unit	Comment	2012	2013	2014	2015
Fraport parent company						
Total number and volume of significant spills						
Number of spills	Number		674	637	649	735
Volume of spills	m ³		12.28	12.37	8.52	8.00
Frequency of spills	Number per 1,000 aircraft movements		1.40	1.35	1.38	1.57
Effects		2	none	none	none	none

¹ Spills primarily by third parties.

² No environmental hazard because releases are generally on surfaced areas with comprehensive safety installations implemented downstream. Spills on not surfaced areas are very rare exceptions, and are cleared up immediately.

Aspect: Emissions, wastewater and waste						
Groundwater improvement	Unit	Comment	2012	2013	2014	2015
Frankfurt Airport						
Nitrate content at reference measuring station well FB5						
	mg/l	1	44	37	31	29

¹ Yearly average value.

Aspect: Emissions, wastewater and waste

AO5 Air quality (core indicator)	Unit	Comment	2012	2013	2014	2015
Frankfurt Airport						
		1, 2				
NO ₂	µg/m ³	3	46	47	46	46
SO ₂	µg/m ³	4	4	2	2	2
PM10 (fine dust < 10 µm)	µg/m ³	5	19	20	19	18
Benzene	µg/m ³	6	0.8	0.8	0.7	0.7

¹ Annual average of the measured values at the SOMMI1 Station. These values presented the aggregated result of all emissions from different source groups, i.e. apart from pollutants contributed by the airport they also include emissions from third parties (road traffic, trade and industry, house fires, large-scale background pollution). The proportion of the airport depends on the location, and model calculations indicate that the proportion here is between approx. 10% and 30%.

² Limit values/annual average (not applicable at the airport, since no whole-year exposure).

³ NO₂ assessment value according to EU Directive 2008/50/EC, 39. Federal Emission Control Act (BlmSchV): 40 µg/m³.

⁴ SO₂ assessment according to Technical Instructions on Air Quality Control (TA Luft) 2002 (otherwise no annual average defined): 50 µg/m³.

⁵ Fine dust, PM10 in accordance with EU Directive 2008/50/EC, 39. Federal Emission Control Act (BlmSchV): 40 µg/m³.

⁶ Benzene assessment value in accordance with EU Directive 2008/50/EC, 39. Federal Emission Control Act (BlmSchV): 5 mg/m³.

Aspect: Emissions, wastewater and waste

AO6 Airfield surfaces and aircraft deicing agents (core indicator)	Unit	Comment	2012	2013	2014	2015
Fraport parent company						
Operating materials and supplies		1				
Airfield surfaces deicing agent:						
potassium format (fluid – approx. 50% agent), applied on the aircraft movement areas	m ³	2,3	2,233	2,452	1,064	924
Airfield surfaces deicing agent:						
sodium formate (granulate – approx. 100% agent)			–	241	88	246
N*ICE						
Aircraft deicing agent:						
propylene glycol (N*ICE)	m ³ active ingredient	4	1,519	2,901	712	1,082
Aircraft deicing agent:						
propylene glycol per deiced aircraft (N*ICE)	m ³ substance per aircraft	4	0.238	0.313	0.280	0.267

¹ Fraport as an airport operator is a service provider, the product is the "traffic unit", defined as one passenger with baggage or 100 kg of airfreight or air mail.

Other materials used are found under "Direct energy consumption" and "Water".

² The values are specified for the respective winter. The winters are assigned to a calendar year, e.g. 2010/2011 to the year 2011.

From 2012, the values are from Jan 1 to Dec 31 of each year indicated.

³ No dangerous goods.

⁴ Annual values 2012 and 2013 weather-dependent, the periods December 9–15, 2012 and the period January to March 2013 were very snowy.

Thus, increased deicing requirement. Decline in 2014 due to very mild winter 2013/14.

Aspect: Transport

EN30 Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce (core indicator)	Unit	Comment	2012	2013	2014	2015
Fraport parent company						
Employee traffic						
Travel to and from work by public transport	Share of employees in %	1, 2	41.2	34.2	33.4	32.1
Travel to and from work by carpooling	Share of employees in %	1	14.6	15.0	15.2	14.5
Passenger traffic at Frankfurt Airport (FRA)						
Travel of originating passengers to and from the airport by public transport	Share of passengers in %	1	41.6	40.8	36.9	35.4
therein arrival/departure by ICE (Intercity Express)	Share of passengers in %	1	19.7	19.3	16.1	14.5

¹ The values are based on a survey.

² Deviation between 2012 and 2013, because a random-sample survey was carried out mainly among non-operational employees, therefore deviation from other years in which full surveys were taken.

Aspect: Aircraft noise						
AO7 Number and percentage of people* residing in areas affected by noise (core indicator)	Unit	Comment	2012	2013	2014	2015
Frankfurt Airport						
Number of people residing in the contour Ldn = 60 dB(A)	Number	1,2,7	12,094	9,395	11,173	10,285
Relative change compared with the previous year	Percent		- 51	- 22	19	- 8
Number of people residing in the contour Leq, day = 60 dB(A) (criterion provided for in the Act for Protection against Aircraft Noise)	Number	1,3,7	3,920	2,722	3,307	3,000
Relative change compared with the previous year	Percent		- 44	- 31	21	- 9
Number of people residing in the contour Leq, day = 55 dB(A) (Criterion similar Act for Protection against Aircraft Noise)	Number	1,4,5,7	98,014	95,062	101,042	102,958
Relative change compared with the previous year	Percent		- 5	- 3	6	2
Number of people residing in the contour of the envelope from NAT, night = 6 x 68 dB(A) and Leq, night = 50 dB(A) (Criterion similar Act for Protection against Aircraft Noise)	Number	1,6,7	86,315	72,532	75,192	72,462
Relative change compared with the previous year	Percent		- 19	- 16	4	- 4

* Population database DDS. Survey status of these data for all evaluations 2008.

¹ The aircraft noise contours were calculated on the basis of two national regulations: "Introduction to Calculation of Noise Abatement Areas (AzB)" and "Introduction to data collection on Flight Operations (AzD, 2008)". All scenarios were standardized on the basis of the long-term average operating direction distribution for the ten years 2000 to 2009. The Sigma supplement developed for the projected protection zone calculation in accordance with the Noise Abatement Act and described in AzB and AzD was not applied.

² The evaluation quantity Ldn (Level day/night) is a 24h-equivalent continuous sound level in dB(A), where a supplement of 10 dB is applied for sound events occurring during night time. The Ldn permits impact changes from year to year to be documented on the basis of a single criterion.

³ The criterion Leq, day = 60 dB(A) is based on the definition of day protection zone 1 in accordance with the Aircraft Noise Abatement Act.

⁴ The criterion Leq, day = 55 dB(A) is based on the definition of day protection zone 2 in accordance with the Aircraft Noise Abatement Act.

⁵ The data on Leq, day = 55 dB(A) is the total number within this contour, the number specified under Leq, day = 60 dB(A) is therefore a sub-quantity.

⁶ The criterion envelope from NAT, night = 6 x 68 dB(A) and Leq, night = 50 dB(A) is based on the definition of night protection zone according to the Aircraft Noise Abatement Act.

⁷ In 2012, the year-on-year changes in the percentage of people affected by aircraft noise show a reduction in the number of people classified as "severely affected" (contours Ldn = 60 dB(A) and Leq, day = 60 dB(A)). This results from the fact that after the opening of the new Runway Northwest aircraft noise was spread on two approach paths (instead of previously only one). There are several reasons for the changes after 2012, including the development of traffic. – With the number of aircraft movement remaining largely unchanged, the rising number of passengers was handled on increasingly larger aircraft types. Insofar as these are included in the louder aircraft groups in accordance with the standard procedure for Calculation of Noise Abatement Areas (AzB) applicable in Germany, this leads to larger aircraft noise contours. The fact that new aircraft types generate less noise by comparison with older aircraft with comparable capacity is not taken into account by the procedure for Calculation of Noise Abatement Areas, which is only updated after extended time intervals. There are also annual fluctuations in the number of affected people as a result of variations in usages of rail and aircraft routes from one year to the next. The smaller contours Ldn = 60 dB(A) and Leq, day = 60 dB(A) are particularly sensitive in this respect because these only impinge marginally on the neighboring residential areas. Therefore, slight changes in the contour specificities result in large relative changes to the number of people affected.

Aspect: Aircraft noise

EN30 Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce (core indicator)	Unit	Comment	2012	2013	2014	2015
Surrounding area of Frankfurt Airport						
Approach		1				
Monitoring station 01 Offenbach Lauterborn, day	Leq(3) in dB(A)	2, 3	58	58	58	57
Monitoring station 01 Offenbach Lauterborn, night	Leq(3) in dB(A)	2, 4	51	51	51	51
Monitoring station 06 Raunheim, day	Leq(3) in dB(A)	2, 3	60	61	61	61
Monitoring station 06 Raunheim, night	Leq(3) in dB(A)	2, 4	54	54	54	54
Take off		1				
Monitoring station 12 Bad Weilbach, day	Leq(3) in dB(A)	2, 3	57	55	55	55
Monitoring station 12 Bad Weilbach, night	Leq(3) in dB(A)	2, 4, 8	42	45	49	47
Monitoring station 51 Worfelden, day	Leq(3) in dB(A)	2, 3	58	58	58	57
Monitoring station 51 Worfelden, night	Leq(3) in dB(A)	2, 4	54	54	54	52

Frequency of the exceedance of the maximum level of 68 dB(A) per night

		1, 4				
Monitoring station 01 Offenbach Lauterborn	Number of exceedance cases	5	15.2	14.7	15.1	14.1
Monitoring station 06 Raunheim	Number of exceedance cases	5, 8	8.0	8.8	10.0	9.6
Monitoring station 12 Bad Weilbach	Number of exceedance cases	5, 8	1.3	2.8	6.4	4.7
Monitoring station 51 Worfelden	Number of exceedance cases	5, 8	17.0	16.4	18.4	14.8
Share of western operations day	Share in %	3, 6, 7	74.7	68.3	65.9	67.3
Share of western operations night	Share in %	4, 6, 7	76.1	68.5	69.6	69.6

¹ Selected representative noise-monitoring station from a monitoring network with 26 static stations. In September 2011 the monitoring network was expanded to 28.

The two new stations are located close to the approach baseline of the new Runway Northwest (for aircraft landings only), which was inaugurated on October 21, 2011.

Therefore the first analysis of the six busiest months p. a. will be carried out for the year 2012.

² Energy equivalent continuous sound level [Leq(3) in dB(A)] based on the German Aircraft Noise Act in conformity with DIN 45643. Leq(3) is calculated during the six busiest months from May until October in the years 2009, 2010 und 2012 based on the German Aircraft Noise Act, segmented in day and night. Exception was the year 2011, with the six busiest months of March, May, July and October. Changes to the monitoring stations on the approach and takeoff routes of the parallel runway system are mainly based on the fluctuations in the distribution of operations (easterly/westerly) from year to year caused by different weather conditions or wind directions. The website www.fraport.de provides detailed information.

³ Daytime: 6 a.m. until 10 p.m.

⁴ Nighttime: 10 p.m. until 6 a.m.

⁵ During the six busiest months (2012; 2013; 2014: May until October, 2011: May, July until October).

⁶ From the parallel runway system with takeoff toward the west, approach from the east.

⁷ Share of easterly operations: difference from share of westerly operations in % to 100%.

⁸ Increase in the level and the number of exceedances compared with the previous year on account of modified take-off procedures during the nighttime hours (see Noise Abatement Report summer schedule 2014; page 8).

Aspect: Health and safety of the customers

AO9 Total number of wildlife strikes per 10,000 movements	Unit	Comment	2012	2013	2014	2015
Frankfurt Airport	Number per 10,000 aircraft movements	1, 2	2.42	2.48	2.96	2.48

¹ Bird strike rate (number of bird strikes per 10,000 aircraft movements): All incidents with birds at Frankfurt Airport and in the adjacent surrounding environment for aircraft with German registrations. The bird strike rate is calculated in relation to total aircraft movements at Frankfurt Airport. The registration of a relevant bird strike is made by the pilot to the German Committee for Prevention of Bird Strikes in Air Traffic (DAVVL). The DAVVL forwards an annual list of all bird strikes to the relevant airport operator. On the basis of this list, the airport operator (in this case Fraport AG) calculates the bird strike rate.

² Tentatively scheduled for 2014, final data for 2014 submitted to the DAVVL eV in October 2015.

Compliance with statutory regulations

There are no breaches of statutory regulations which have been subject to fines or non-monetary sanctions imposed by the authorities, and no proceedings in relation to such breaches are pending.

Status of the Environmental Program 2014 to 2017

The 2014 Environmental Program describes the most important goals and measures that the Fraport parent company, N*ICE, FCS and Energy Air have defined for Frankfurt Airport in the period between 2014 and 2017 and beyond, relating to the issues of noise abatement, climate protection, intermodality, air quality, as well as nature conservation and protection of resources.

The measures of the Fraport parent company are not particularly marked.
The measures of Fraport Cargo Services GmbH are marked with FCS, those of N*ICE Aircraft Services & Support GmbH are marked with N*ICE and those of Energy Air GmbH are marked with Energy Air.

Noise abatement

Target	Measure	Deadline	Status July 2016
Achieving a lower number of people impacted by aircraft noise than specified in the expansion plan with 701,000 aircraft movements (night protection zone = 183,026 residents, day protection zone 1 = 28,980 residents)	Further development of selected runway and route usage (Dedicated Runway Operations, DROps) to provide noise respite periods for residents	End of the winter schedule 2015/16	<ul style="list-style-type: none"> – Measure for take-offs implemented (DROps early morning) since winter schedule 2014/15. – Seven-hour noise respite periods since 30 May 2016 in normal operation. <p>More information at: http://www.fraport.de/content/fraport/de/misc/binaer/nachhaltigkeit/Schallschutz_und_Fluglaerm/anlagen-schallschutz/laermphausen/jcr:content.file/aktiver-schallschutz-laermphausen_v1-1_cs_30042015.pdf</p>
	Raising the approach angle to 3.2° with ILS (Instrument Landing System) for regular operations also on the new Runway North-west	End of 2014	The procedure was brought into regular operations with the start of the winter schedule 2014/15.
	<ul style="list-style-type: none"> – Introduction of a system for satellite-based precision approach procedures (GBAS) – Development of GBAS-based noise-abatement approach procedures 	Mid-2014 March 2017	<ul style="list-style-type: none"> – Satellite-based precision approach procedures (GBAS) were introduced in September 2014. Test operation is currently taking place with ILS look-alike approach procedures (3.0°). – An approval procedure for the introduction of a GBAS 3.2° approach procedure on all runways is currently being prepared. – As a member of the SESAR sub-project, Fraport is committed to the definition and testing of new, GBAS-based approach procedures, and also supports research projects, e.g. SESAR AAL (Augmented Approaches to Land)
Improvement in the noise situation for the residents affected	Offers made to residents to purchase their residential property under the Casa2 Program in the transition zones I + II	2014 (application deadline for submission)	The application deadline expired in October 2014. All applications are then processed. This brought the program to a conclusion. <ul style="list-style-type: none"> – Purchased residential properties: 268 – Total compensation payments made (Raunheim and Flörsheim): 335
	Allocation of funds to implement passive noise abatement measures for private households and public institutions eligible under the Regional Fund	Dependent on the applicant implementing the construction measures	Funds provided by Fraport are fully available for use by the Regional Fund. The measures are essentially implemented by the Darmstadt Regional Council.
	Continuation of the dialog with stakeholders from the region in the "Airport and Region Forum" on development of further measures	Unlimited	<ul style="list-style-type: none"> – The cooperation in all relevant committees of the Airport and Region Forum (FFR) is being continued. – Current focuses are: monitoring of measures that have already been implemented, preparation of measures to define a 2nd package of measures
	Support for the noise impact study carried out by the Environmental and Neighborhood House	2015	The study was continuously supported by Fraport and it was published in October 2015. The results are scheduled for publication at national level in the second half of 2016.

Climate protection

Target	Measure	Deadline	Status July 2016
Reduction of CO ₂ emissions per traffic unit (TU: one passenger with baggage or 100 kg of airfreight) by 30%, from 3.7 kg/TU in 2005 to 2.6 kg/TU in 2020 (Fraport parent company, Scopes 1 and 2 GHG Protocol)	Energy optimization in portfolio buildings operated by the Fraport parent company – In the terminals – In office and service buildings	2020	The absolute goal was achieved with 218,300 tons of CO ₂ in 2015. The relative target (kg CO ₂ /TU) continues to apply. – The potential achieved as a result of upgrading/optimizing ventilation control centers and through lighting control is: 4,700 t CO ₂ /a. – The potential achieved as a result of optimization for heating and airconditioning systems, installation of more efficient fans and pumps in service and administrative buildings is: 1,450 t CO ₂ /a.
Reduction of CO ₂ emissions by 238,00 tons in 2020 despite airport expansion (Fraport parent company, Scopes 1 and 2 GHG Protocol, compared with the baseline year of 2005)	Planning and construction of the new Terminal 3 with optimized energy efficiency	2022	In phase of implementation.
	Implementation of measures to achieve energy savings in the baggage conveyor system (projected reduction of 2,000 tons of CO ₂ emissions)	2020	The potential achieved as a result of switching some sections, modernizing drive units and by software upgrades in the baggage conveyor system is: 790 t CO ₂ /a.
	Use of alternative drive technologies	Deadline extended to 2020	The potential achieved as a result of electrification of the ground handling vehicles and the vehicle fleet is: 290 t CO ₂ /a.
	Integration of vehicles from Ground Services in a "Telemetry-data optimized maintenance control system (TWS)" for continuous remote enquiry of individual operating status ¹	2020	Up to now, approximately 480 vehicles have been equipped with TWS. The potential achieved as a result of avoiding unnecessary idle states is approximately 264 t CO ₂ /a.
	Use of LED lamps	2020	The potential achieved as a result of conversion to LED technology in different areas (taxiways, Runway Center, parking garage T2, street lighting T1, printing facility, driveway at workshop building): 940 t CO ₂ /a.
Reduction of CO ₂ emissions (Scope 2 GHG Protocol) in 2015 from 2,800 tons to 2,200 tons (based on the year 2013)	Equipping of freight-handling hall with LED lighting (FCS)	2014	The target was achieved with 2,200 tons of CO ₂ in 2015. Conversion of the hall lighting to LED lighting completed in September 2014.
Keeping the emission factor 15 percent below the national average (Energy Air)	Control of the purchasing portfolio of electricity, and – if required – optimization (Energy Air)	continuous	The target could again be achieved in 2014 and improved in 2015 after a setback in 2013 (currently –23.0 %).
	Raising the rate of purchased renewable electricity from 24.1 percent to 30 percent, if economically viable (Energy Air)	2020	The purchase and the promotion of renewable electricity are being taken forward.

¹ The telemetry-data optimized maintenance control system (TWS) enables messages and information from the telematics systems of devices to prevent or minimize damage and resulting failures. This also facilitates reduction of idle times and optimized usage of devices. The flight events will also be displayed with effect from the expansion of TWS in the summer.

Intermodality

Target	Measure	Deadline	Status July 2016
Improvement in intermodal services for passengers in order to increase the proportion of originating passengers travelling to and from the airport by public transport (bus, S-Bahn metropolitan trains, regional railway, ICE high-speed trains, other long-distance trains)	Expansion of ICE Rail & Fly and code-share links in cooperation with German Rail (DB) and the airlines	Continuous	The AiRail Service provided by German Rail (Deutsche Bahn) and Lufthansa was expanded by the routes to the cities of Karlsruhe, Dortmund and Mannheim (in addition to the destinations to Cologne, Stuttgart and Düsseldorf). The product was renamed "DLH Express Rail".
	New measure: "Control Center" project with HOLM, TU Dresden, German Rail (Deutsche Bahn), the RMV public transportation network (Rhein-Main-Verkehrsverbund) and Fraport	2018	Coordination of airline schedules and railway timetables in order to optimize the transport service and control of the transport options available; development of a central information platform.
	New measure: partnership in the EU sponsored project "DORA" (door to door passenger information)	2018	Phase 1, Development of a pilot.
	Linking the baggage conveyor system with the check-in counter at the AiRail terminal	2020	A feasibility study for the rede-sign of the AiRail Terminal is at the planning/agreement stage, with all partners being involved.
Growth in the originating-passenger market by increasing the catchment area for users of public transport	Improving and expanding scheduled long-distance bus connections from German regions which are not optimally connected to the rail network of German Rail (DB) to Frankfurt Airport	Continuous	First expansion stage of parking lot P36 (located close to Terminal 1) completed in April 2015 for creating a central long-distance bus station. Additional expansion stages are currently being planned; they will be implemented gradually to accommodate growing offer of bus services.
Improvement in the inter-modal travel packages available for airport staff	Reviewing improvements in rail and bus travel options, particularly with regard to marginal night-time periods for shift workers	Extended to 2022	<ul style="list-style-type: none"> – Implementation of the new Suburban Traffic Plan (NVP) Airport City by traffiQ, the RMV public transportation network (Rhein-Main-Verkehrsverbund) and other regional partners in order to optimize the regional bus transport options incl. Terminal 3 and CargoCity South, as well as introduction of new express buses to the airport. – Rail transport offerings such as the early ICE from Hamburg/Cologne (arrival in FRA at 4:35) and the 24-hour operation for the S-Bahn metropolitan service to the airport have been proven popular and will be maintained.
Expansion of Frankfurt Airport's competitive position as an intermodal hub in long-distance passenger rail travel	Initiatives with important joint-venture partners for expanding the integration of the airport in Germany's Federal Transport Infrastructure Plan	2015	<ul style="list-style-type: none"> – Measures for new construction and expansion of the rail and road network were included in the draft for Germany's new Federal Transport Infrastructure Plan up to 2030. These measures are intended to significantly improve the landside transport connections to Frankfurt Airport. The draft is scheduled for completion by the end of 2016. – The link from Terminal 3 to the S-Bahn metropolitan train (line S7) has now been adopted and included in the suburban transport plan of the RMV.
Improving bicycle traffic in the vicinity of the airport (new target)	Optimization of the overall bicycle traffic situation at Frankfurt Airport	2020	The regional authority (Regionalverband FrankfurtRhein-Main) and Fraport AG are working on plans for providing better external and internal conditions and connectivity for cyclists at Frankfurt Airport. Initial results are expected in 2015. In this connection, the partners are participating in projects sponsored by the German state and the European Union.

Air quality

Target	Measure	Deadline	Status July 2016
Reduction of emissions and air pollutants from the operation of the airport	Introduction of electric ground-handling vehicles (see also under climate protection: use of alternative-drive technologies)	2020	(See also under climate protection: use of alternative drive technologies)
Monitoring and recording of emissions and air pollutants from the operation of the airport. In the medium term: evaluation of measures aimed at reducing emissions	Development of a methodological approach for calculating emissions or air pollutants caused by – Infrastructure – Aircraft handling – Option of subsequent expansion to land-side traffic	Deadline extended to 2017	The emissions model is currently in the conceptual phase. This includes a status analysis, the upgrading of existing operational data on infrastructure, research into current emission factors, and the testing of methodological approaches. Results for an interim version of the model for the year 2013 were integrated in the state-wide emission register in Hesse.

Nature conservation and resource protection

Target	Measure	Deadline	Status July 2016
Reduction in the use of drinking water and, instead, higher use of service water – in Terminal 1 (38% by 2016) – in the southern area (50% by 2020)	Expansion in the use of service water – in Terminal 1 – in the southern area*	2020	In Terminal 1: – 74% of the WC facilities (248) are now supplied with service water. In the southern area: – Status unchanged
Increase in biodiversity on an area of some 250 hectares	Launch of a two-year mowing cycle for the dry-grass habitats in the southern parallel runway system and at Runway 18 West Introduction of impoverishment mowing in selected areas of the parallel runway system to promote nutrient-poor grassland species	2015	– The “two-year mowing cycle” measure is being modified and replaced by strip mowing, recommended as more effective by nature-conservation specialists. This method should be used at the next opportunity depending on the vegetation. This measure has been applied since 2016. – The impoverishment mowing was carried out on 40 ha in the 2nd quarter of 2016. A decision will be taken on continuation after the results have been evaluated.
Ensuring sustainable use of forestry resources on grounds owned by the Fraport parent company	Certification of Fraport forestry resources	2015	The measure is not being pursued, since the areas of land owned by Fraport have been taken out of forestry use and certification would thus no longer make sense.
Reduction in the use of deicing agents	– Increase in remote deicing operations using a new Remote Deicing Pad (N*ICE) – Trialing of the forced-air deicing procedure (N*ICE) – New measure: introduction of a simulator training course (N*ICE)	Deadline extended to 2016	– A new Deicing Pad came into operation in the winter of 2015/2016. The driving patterns on the Deicing Pads were optimized with positive effects on the duration of deicing. – On the basis of the experience obtained in previous winters, continuation of the Forced Air project was cancelled. – In the summer of 2016, a simulator training course was introduced for the deicing personnel. The objective of the training included economical spraying.
Reduction of paper consumption	Conversion to paperless work orders and electronic invoicing (N*ICE)	2015	The conversion has largely been completed, acceptance is continuously increasing among the airlines.

* This refers to the area at the south of Runway 07R/25L. Cargo City South, the Development Area South for projects including the future Terminal 3, and maintenance facilities, for example Lufthansa, are located here.

Environmental Auditor's Declaration on Verification and Validation Activities

The Institut für Umwelttechnik Dr. Kühnemann und Partner GmbH

with registration number DE-V-0133,

represented by Dr. Burkhard Kühnemann with registration number DE-V-0103

and Ulrich Schmidt with registration number DE-V-0336,

accredited or licensed for the scope NACE 52.23,

declares to have verified whether the site or the whole organization as indicated in the updated

environmental statement of the organization Fraport AG

with registration number DE-125-00032

meets all requirements of Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organizations in a Community eco-management and audit scheme (EMAS).

By signing this declaration, I declare that:

- the verification and validation has been carried out in full compliance with the requirements of Regulation (EC) No 1221/2009,
- the outcome of the verification and validation confirms that there is no evidence of non-compliance with applicable legal requirements relating to the environment,
- the data and information of the updated environmental statement of the organization reflect a reliable, credible and correct image of all the site's activities, within the scope mentioned in the environmental statement.

This document is not equivalent to EMAS registration. EMAS registration can only be granted by a Competent Body under Regulation (EC) No 1221/2009. This document shall not be used as a stand-alone piece of public communication.

Carried out at Frankfurt on August 30, 2016



**Dr. Kühnemann Institut
und Partner für
Umwelt
technik**

Business address: Prinzenstraße 10a, 30159 Hannover

Registration number: DE-V-0133

Schedule

The next Environmental Statement, scheduled for July 2017, will be subject to validation by an environmental auditor before being released for publication.

Imprint

Fraport AG Frankfurt Airport Services Worldwide
Corporate Development, Environment and Sustainability
60547 Frankfurt am Main, Germany
Telephone: +49 180 6 3724636*
Or: 0800 2345679 Fraport-Infofon**
Internet: www.fraport.com
Concept and Editor-in-Chief: Dr. Patrick Neumann-Opitz (UEW-UM)
Editorial revision: Georg Kröning (UKM-PS)
English translation: Tristram Carrington-Windo, Anglo-German Translators, Oxford OX3 7SY,
United Kingdom and Fraport AG (UEW-UM)
Design: Layout Service Darmstadt GmbH, Haardtring 369, D-64295 Darmstadt
Photo: Fraport AG

Contact

Umweltmanagement@fraport.de

Dr. Wolfgang Scholze
Vice-President Environment Fraport AG
Telephone: +49 69 690-29209
Telefax: +49 69 690-49529209
E-mail: w.scholze@fraport.de

Dr. Patrick Neumann-Opitz
Environmental Management Coordinator Fraport AG
Telephone: +49 69 690-78783
Telefax: +49 69 690-49578783
E-mail: p.neumann-opitz@fraport.de

Klaus Döring
Environmental Management Coordinator Frankfurt Cargo Services GmbH
CargoCity Süd, Building 532
60549 Frankfurt am Main
Telephone: +49 69 690-29451
E-mail: k.doering@fraport-cargo.de

Stephan Röhrig
Environmental Management Coordinator N*ICE Aircraft Services & Support GmbH
Frankfurt Airport Center 1
CargoCity Süd, Geb. 640
60549 Frankfurt am Main
Telephone: +49 69 690-73193
E-mail: s.roehrig@nice-services.aero

Hans-Joachim Mayer
Energy- and Environmental Management Coordinator Energy Air GmbH
60547 Frankfurt am Main
Telephone: +49 69 690-78782
Telefax: +49 69 690-49578782
E-mail: hj.mayer@fraport.de

As of August 30, 2016

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