

## Abridged Environmental Statement 2004

With this abridged version, Fraport AG provides an update on the information contained in the Environmental Statement 2002 and shows the progress being achieved by its environmental goals and measures. The next full-length edition of the Environmental Statement is due to be released in 2005.

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# Environmental Indicators

Key figures	2002	2003	Δ02/03	Remarks
<b>Transportation</b>				
Passengers (arriving + departing + transit)	48,459,594	48,359,320	- 0.2%	
Air cargo (arriving + departing + transit) [tons]	1,514,845	1,548,014	+ 2.2%	
Airmail (arriving + departing + transit) [tons]	140,957	126,726	-10.1%	
Traffic units excluding through passengers in transit	64,489,051	64,421,319	+ 0.2%	
Aircraft movements including military flights (arriving + departing)	465,661	472,437	+ 1.5%	
Aircraft movements excluding military flights (arriving + departing)	458,359	458,865	+ 0.1%	
Night aircraft movements including military flights	46,595	47,425	+ 1.8%	
Night aircraft movements excluding military flights	44,281	42,115	- 4.9%	
<b>Aircraft noise</b>				
Equivalent continuous sound level Leq(4) [dB(A)] based on German Aircraft Noise Act and DIN 45643				
Monitoring point 01: Offenbach-Lauterborn	61	61	None	Noise levels recorded by devices monitoring takeoff and landing paths of dual runway system may vary slightly from year to year, depending on direction of aircraft movements. Two main factors determining whether flights operate in a westerly or easterly direction are weather conditions and wind direction. Nudging up the noise indexes in 2003 was also higher amount of US military flights (to Iraq), which are often carried out with loud airplanes. Current plans call for U.S. Airbase to be returned to airport authorities by end of 2005. More details on noise issues can be obtained from the Aircraft Noise Report, which is released on a half-yearly basis.
Monitoring point 06: Raunheim	61	62	+ 1 dB(A)	
Monitoring point 08: Kelsterbach	54	54	None	
Monitoring point 51: Büttelborn-Worfelden	57	58	+ 1 dB(A)	
Monitoring point 57: Mörfelden-West	57	58	+ 1 dB(A)	
Monitoring point 09: Neu-Isenburg, Rathaus	57	58	+ 1 dB(A)	
Monitoring point 03: Zeppelinheim	51	52	+ 1 dB(A)	
<b>Air</b>				
Annual emissions at the airport [tons]				<sup>1)</sup> These numbers refer to year 2000 and were based on expert reports. Due to multiplicity of emission sources figures not yet released on a year to year pattern.
CO	1,348 <sup>1)</sup>	1,348 <sup>1)</sup>		Data includes apron traffic, vehicle traffic on the airport and its vicinity, stationary sources, aircraft up to 300 m.
NO <sub>x</sub>	2,489 <sup>1)</sup>	2,489 <sup>1)</sup>		
SO <sub>2</sub>	185 <sup>1)</sup>	185 <sup>1)</sup>		
HC	420 <sup>1)</sup>	420 <sup>1)</sup>		
CO <sub>2</sub> **	684,784 <sup>1)</sup>	684,784 <sup>1)</sup>		Data includes apron traffic, vehicle traffic on the airport and its vicinity, stationary sources, aircraft up to 600 m.
<b>Public transportation</b>				
Share of passengers using public transportation [%]	33	33	None	Traffic on the high-speed ICE boosted by 5%, reflecting increased options available on network. Conversely, traffic on light train system ("S-Bahn") and remaining long-distance sectors fell (partially because there was no more need to use Frankfurt Central Station as transfer point to high-speed services, most of which now depart directly from airport station).
Share of passengers using high-speed ICE [%]	9	14	+ 5% points	
Share of employees using public Transportation [%]	26.4 <sup>1)</sup>	26.4 <sup>1)</sup>	-	<sup>1)</sup> Figures refer to year 2000, as surveys not yet conducted on yearly basis. (since 2000)

\* A traffic unit (TU) is equivalent to one passenger with luggage (excluding through passengers in direct transit) or 100 kg of cargo or mail.

\*\*As a supplement to the Environmental Statement 2002.

Key figures	2002	2003	Δ02/03	Remarks
<b>Energy</b>				
Total energy consumption [mil. kWh]	1045.2	1084.6	+ 3.8%	All energy sources combined. Data without US Air Base. Rise in consumption stems from hooking up new facilities in CargoCity South precinct, particularly for freight forwarders, and from general construction activity. And by courtesy of last year's extremely hot summer demand for air conditioning experienced solid jump.
Relative energy consumption [kWh/TU*]	16.2	16.8	+ 3.7%	Data without U.S. Air Base.
Electricity [mil. kWh]	575	579	+ 0.7%	Data includes US Air Base.
Heating [mil. kWh]	388	406	+ 4.6%	District heating plus self generated thermo heating from local heating, gas and heating oil sources. Data without US Air Base. New facilities for freight forwarders in CargoCity South precinct connected to network.
Cooling [mil. kWh]	104	121	+ 16.3%	Cooling solely from external district cooling source. Data without U.S. Air Base. Lift in consumption was result of last year's enduring summer heat.
<b>Potable and non-potable water</b>				
Potable water [mil. m <sup>3</sup> ]	1.619	1.591	- 1.7%	Data without U.S. Air Base.
Relative potable water consumption [l/TU *]	25.1	24.6	- 2.0%	
Non-potable water [mil. m <sup>3</sup> ]	0.144	0.110	- 23.6%	The scarce amount of precipitation in 2003 made much less rain water available for conversion to non-potable water (quantity had been higher in 2002).
Share of non-potable water in total water consumption [%]	8.2	6.5	- 20.7%	Consumption of non-potable water as a share of total water consumption slashed owing to last year's very dry conditions.
<b>Wastewater</b>				
Sewage [mil. m <sup>3</sup> ]	1.628	1.582	- 2.8%	Data includes US Air Base.
Relative sewage [l/TU *]	25.2	24.5	- 2.8%	
<b>Groundwater</b>				
Nitrate content at measurement station 45 [mg/l]	208	152	- 26.9%	Impact of extensive nitrate clean-up efforts led to healthy reduction in percentage of concentration.
<b>Dangerous Goods</b>				
Dangerous goods delivered for handling (without fuels) [tons]	605	636	+5.1%	
Propane gas consumption [tons]	161	161	None	Operation of fire extinguishing training facility with gas.
<b>Waste</b>				
Recycling per year (without soil and construction rubble) [tons]	18,646	18,500	- 0.8%	
Disposal per year (without soil and construction rubble) [tons]	2,293	1,725	- 24.8%	
Recycling rate [%]	89.1	91.5	+ 2.4%-points	
Excavated earth / construction rubble [tons]	10,476	14,857	+ 41.8%	Due to irregular construction activities, amounts posted may fluctuate considerably from year to year.

\* A traffic unit (TU) is equivalent to one passenger with luggage (excluding through passengers in direct transit) or 100 kg of cargo or mail.

# Environmental Goals and Measures

Sphere of activity	Goal	Measure	Deadline	Goal achievement	Status of measures
Noise	Mitigate noise levels for residents by ensuring that a maximum of 52 dB(A) is not regularly exceeded as perceived by persons sleeping in suitable bedrooms with closed windows.	Implement a static noise-abatement program for residents within the defined protection zone.	ongoing until April 2006	Still valid	Up to now, over 2,300 requests filed. Agreements for cost refunding inked for approximately 1,600 petitions, accounting for more than 3,000 housing units (as one application may consist of several single housing units). Reimbursements also awarded to one school, three aged care centers and seven kindergartens.
	Enhance transparency of the aircraft noise issue by <ul style="list-style-type: none"> <li>– improving aircraft noise monitoring and</li> <li>– providing better information sources for interested members of the public</li> </ul>	Set up a state-of-the-art aircraft noise monitoring system that also processes radar data from Deutsche Flugsicherung GmbH (German ATC).	Mid-2003	Still valid	Central processing unit is installed, radar data of Air Traffic Control are online and already six monitoring points fitted with new equipment, but system still running on previous technology. Upon successful completion of trial run, remaining measuring points to be upgraded, and only new technology to be used for aircraft noise monitoring from then on.
		<ul style="list-style-type: none"> <li>• Issue aircraft noise reports twice a year.</li> <li>• Publish key aircraft noise data on the Internet each month.</li> </ul>	ongoing from 2002	Achieved	Publication of aircraft noise reports on half-yearly basis since beginning of 2002  Free Aircraft Noise Report can be mailed on request (German version only is available). Write to: Fraport AG, APF-US, 60547 Frankfurt am Main.
			ongoing from the end of 2002	Achieved	Since Dec. 16, 2003 "Infoservice Fluglärm" (available in German only) can be visited at <a href="http://www.fraport.de/">http://www.fraport.de/</a>
Air	Upgrade air quality at the airport and in surrounding areas by trimming soot emission on the apron through yearly replacement of up to 10% of the 790 mobile work machines.	Replace the current stock of mobile work machines by purchasing a model that complies with the COM II (EU RL 97/68/EC) exhaust regulation.	ongoing from 2002	Still valid	Currently, 823 mobile work machines available. New purchases in compliance with COM II-standard: Year 2002: 32 mobile work machines. Year 2003: 48 mobile work machines. For 2004 replacement of another 68 mobile work machines planned, bringing replacement rate above the 8 % mark.
Energy	Lift the efficiency of energy use to 13 kWh/TU* (goal modified from 1999).	<ul style="list-style-type: none"> <li>• Broaden the organization and allocation of staff for energy management.</li> <li>• Optimize the energy efficiency of buildings.</li> </ul>	End of 2003	Modified	Remaining positions in department of energy management filled. Terminal 1 technical centers (heating, climate, ventilation) overhauled. Fraport's influence on goal only limited, as large portion of energy consumption emanates from other airport companies, which operate independently from Fraport AG. Hence, future goals to be adjusted so only Fraport's efforts for streamlining consumption are reflected.
Water	Drop water consumption to 22 l/TU* (goal from 1999 retained).	Supply non-potable water to more buildings.	End of 2004	Still valid	From June 2003 until May 2004 following buildings linked to non-potable water supply:  Buildings 561/563 – Dachser Co.; Buildings 573/574 – Danzas Co.; Building 571 Panalpina Co.
Transportation	Raise slice of passengers using public transportation to 37.5% by 2005 (goal from 1999 extended).	Provide backing to Lufthansa and German Railways for widening scope of services in the transportation chain (flight check-in at railway stations, transportation of airline passenger luggage in ICE trains, integrated ticketing, establishment of a 45-minute minimum connection time between trains and flights).	End of 2005	Still valid	Share of passengers using public transportation (long-distance and suburban rail, bus) hovering at 33 %.  Following initiatives accounted for the 14% boost in ICE services: <ul style="list-style-type: none"> <li>• AIRail Service Stuttgart since Mar. 1, 2001</li> <li>• AIRail Service Cologne since May 5, 2003</li> </ul> Opening Aug. 1, 2002 of high speed railway line from FRA to Cologne; journey time reduced to approx. 60 minutes. Since railway timetable update December 2002, 70% more long-distance trains serve airport long-distance station.  This also paved way for discontinuing a host of short haul flights due to direct high-speed link to airport. This to translate into yearly savings of approx. 4,260 tons of CO <sub>2</sub> .

## Operational Data

Fraport AG employees	13,006
Total airport workforce	>63,000
Companies/authorities at airport	>470
Airlines (scheduled flights - summer 2004)	112
Destinations (scheduled flights - summer 2004)	300

## Validation

Hereby we declare that Fraport's environmental management system, comprising environmental policy, related goals and programs, as well as the audit scheme and the company's environmental statement, is in full compliance with the (EC) No. 761/2001 directive.

All data contained in this environmental statement provide an appropriate and correct picture of the environmental activities carried out by the aforementioned entity at its property.

Frankfurt, June 16, 2004

The official German version of the Abridged Environmental Statement 2004 has been validated by:

Dr. Burkhard Kühnemann  
Certified Environmental Expert D-V-0103

### Expert Evaluation

The environmental consultancy agency of Dr. Kühnemann and Partner has been retained as independent experts.

Business address: Lange Laube 28, 30159 **Hannover**  
Certification number: D-V-0133

### Dateline

The next comprehensive environmental statement, scheduled for June 2005, will be subject to validation by an environmental expert before being released for publication.