

Restated Health, Safety and Environment Data 2007

	Novartis Group ¹		Pharmaceuticals		Novartis Research ²		Sandoz		Consumer Health ¹		Vaccines & Diagnostics	
	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006
Employees												
HSE Personnel [number of employees working at least 50% for HSE]	501	509	217	210	23	24	157	162	65	71	39	42
Health/safety												
Lost time accident rate [accidents per 200000 hours worked]	0.42	0.45	0.45	0.43	0.13	0.21	0.53	0.66	0.23	0.23	0.74	0.94
Production												
Total production [1000 t = metric tons]	171	169	27	23	0	0	94	99	49	47	0.3	0.4
Resources												
Water use [million m3]	83.6	84.6	21.8	19.6	1.1	1.2	57.0	60.5	2.6	2.4	1.1	0.9
Energy use [million GJ]	16.7	16.4	5.6	5.2	1.0	1.0	7.4	7.5	1.5	1.4	1.2	1.2
Emission into water												
Effluent discharge [million m3]	15.5	14.6	4.2	3.8	0.4	0.4	8.0	8.5	1.8	1.5	1.1	0.4
Chemical oxygen demand COD [1000 t]	4.00	3.80	1.05	0.75	0	0	2.77	2.78	0.18	0.27	0	0
Emission into Air												
Sulfur dioxide, SO2 [t]	56	130	6	10	0	0	48	118	1	2	0	0
Nitrogen oxide NO2 [t]	327	334	149	135	9	8	130	139	22	31	17	21
Volatile organic compounds (VOC) halogenated [t]	168	170	15	6	0	0	153	163	0	0	0	0
Volatile organic compounds (VOC) non-halogenated [t]	1724	1852	468	430	1	1	1182	1355	66	55	6	10
Emission CO2 / GHG												
Scope 1, Combustion and process [1000 t]	402	404	157	146	11	11	183	193	23	24	27	30
Scope 1, Vehicles [1000 t]	184	176	134	129	0	0	28	24	17	17	1	1
Scope 2, From purchased energy [1000 t]	883	884	215	220	70	64	372	384	152	143	73	73
Waste												
Non-hazardous operational waste [1000 t]	71	69	18.0	21.5	2.6	2.4	19.3	17.9	10.9	10.2	19.6	16.8
Hazardous operational waste [1000 t]	166	137	104.4	83.2	1.0	0.8	58.0	49.6	2.3	2.4	0.8	0.9
Debris, non-hazardous [1000 t]	114	119	90	93	0.3	1.8	20.6	20.0	0.6	0.3	2.3	4.5
Debris, hazardous [1000 t]	24.2	17.0	24.1	16.7	0	0	0.02	0.12	0	0	0.01	0.11
Hazardous operational waste landfilled [1000 t]	0.10	0.58	0.01	0	0	0	0.07	0.52	0	0	0.02	0.05

¹ HSE data for Novartis Group and Consumer Health reflect continuing operations in 2006 and 2007 (excluding Medical Nutrition and Gerber, which were divested during 2007)

² Research data includes NIBR and Corporate Research

The Reporting Process

The HSE Data Management System and data collection process are key elements of Corporate Citizenship Management at Novartis. The data describes our major material flows across company boundaries and environmental impacts originating from our own operations (Scope 1), as well as greenhouse gas emissions (GHG) from the generation of purchased energy (Scope 2). We do not monitor environmental impacts from the manufacture and delivery of purchased goods and services, nor the use of resources and other related emissions for activities outside company boundaries (Scope 3), such as GHG emissions from transportation by third parties.

HSE data is collected and reviewed on a quarterly basis. The 2007 environmental and resource data published in the Annual Report and on our website are actual data for the period from January through September and best estimates for the period October through December. This data has been updated with the actual figures for all twelve months of 2007 and is presented in the data table above. Deviations are reported on our website and will be included in the next Annual Report