

Sustainable Development

Indicators 2009

Complementary document to the
Solvay Annual Report 2009



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INTRODUCTION

Complementary document to Solvay Annual Report 2009

This document provides indicators for an extensive set of 55 sustainability parameters (The next 2010 update will supply indicators for additional parameters). In the Annual Report 2009 -published in March 2010- indicators for a selection of 12 of these sustainability parameters were presented.

These indicators are used to assess performance, to report about overall sustainability management and to follow up on the 107 sustainability objectives, to be achieved by 2012 and by 2020, described in the report "Towards Sustainable Development - Assessment and prospects 2008-2012".

Solvay's overall sustainability reporting is devised according to the following materiality criteria:

- Relevance to Solvay's activities,
- Connection with the expectations of our stakeholders,
- Link with the management and the objectives of the company.

The parameters in this document are presented along the five key groups of stakeholders underlying our strategic sustainability framework (5x5 matrix) and along the GRI framework.

An overview of our overall sustainability reporting in connection with the GRI (Global Reporting Initiative) can be found in the GRI index presented in "Towards Sustainable Development - Assessment and prospects 2008-2012" on page 86-87. This document is available via our website, see www.solvaysustainable.com.

Reporting boundaries

Solvay has 107 fully owned manufacturing and key administrative sites (December 31, 2009). The 50/50 joint ventures PipeLife (plastics pipes and fittings) and Inergy Automotive Systems (plastic fuel systems) represent an additional 60 manufacturing sites.

- The quantitative 2009 data for environmental performance cover the 68 sites having significant environmental emissions and excluding the sites operated by the joint ventures PipeLife and Inergy.
- The quantitative 2009 data relating to safety performance cover the fully owned manufacturing and key administrative sites as well as the sites of the joint ventures PipeLife and Inergy Automotive Systems.
- The quantitative 2009 data relating to human resource management cover all activities, including the joint ventures, where Solvay has a majority shareholding. For some parameters, countries not currently managed within our global HR Information Systems (Eastern Europe, Africa, Asia) are excluded.

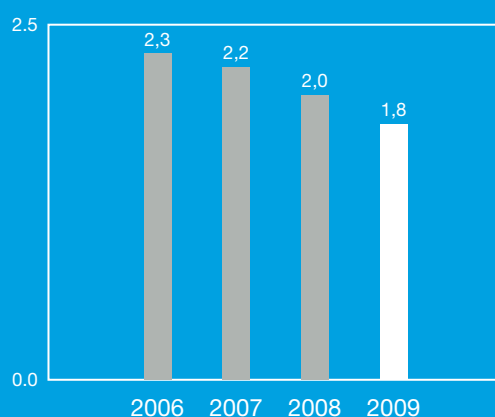
Remark : the scope of previous years' data correspond to Solvay's activities.

1. Stakeholder: Local communities

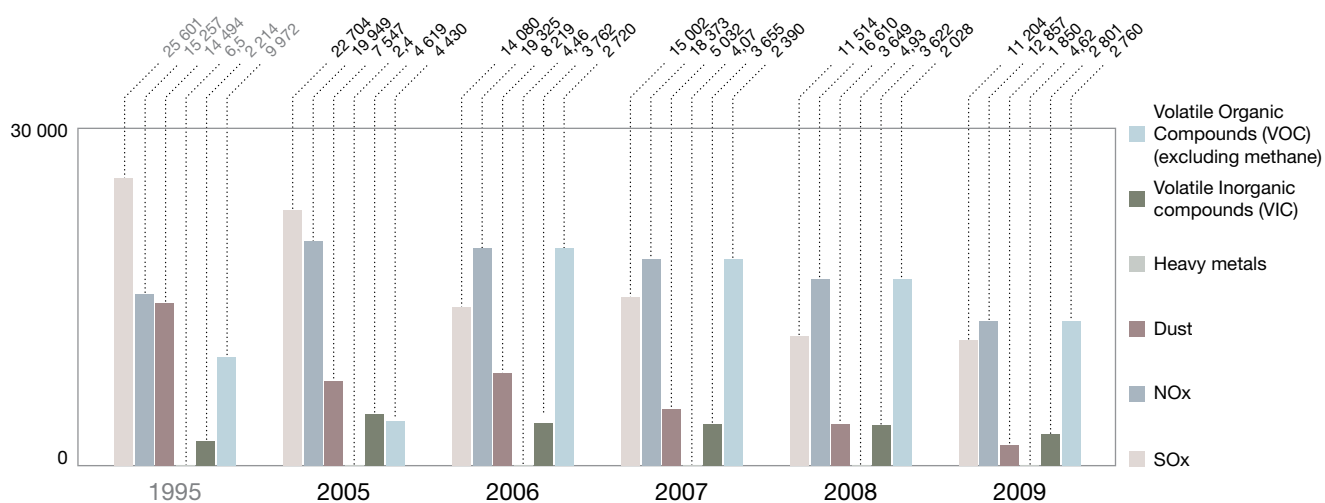
1.1 Environmental performance

Emissions to air

Global Air Emission Index - GRI EN20
Kilotonnes equivalent

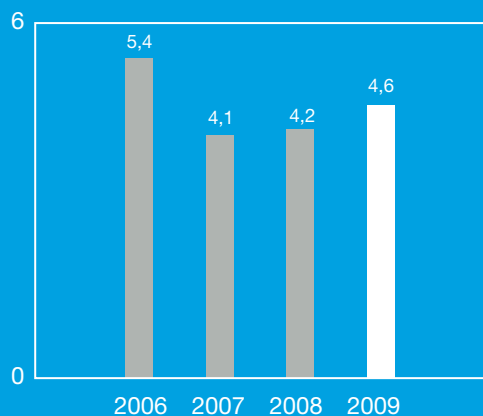


Sulfur oxides, nitrogen oxides, dust, heavy metals, volatile inorganic compounds, volatile organic compounds
GRI EN20 - Tonnes

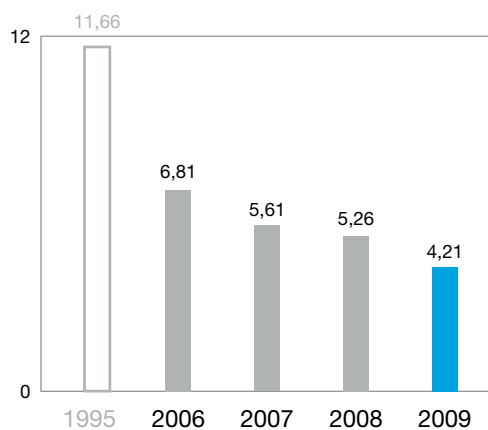


Emissions to water

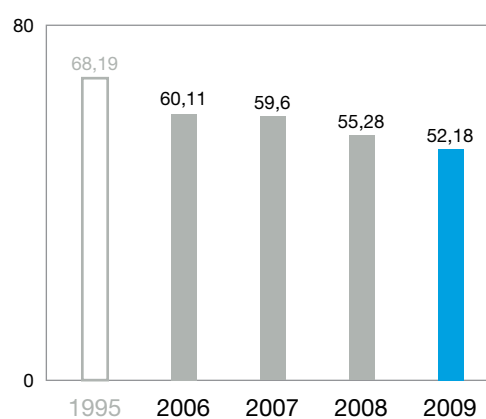
Global Water Emission Index - Kilotonnes equivalent - GRI EN20



Chemical Oxygen Demand (COD) - Kilotonnes - GRI EN21

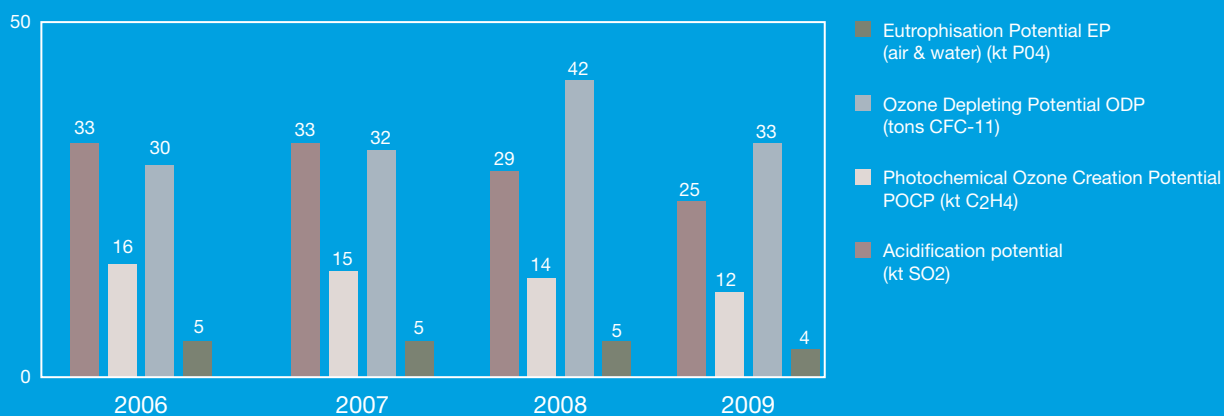


Heavy metals - Tonnes - GRI EN21



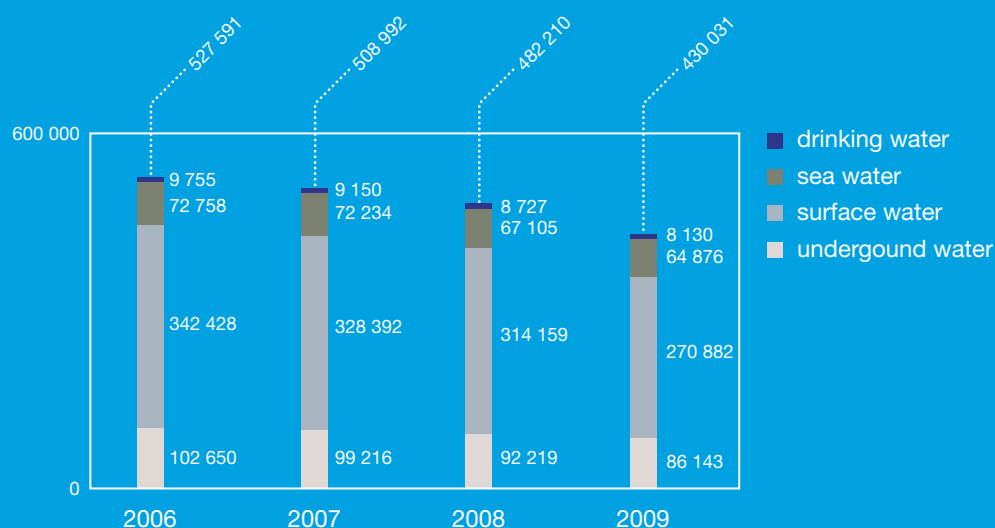
Environmental impact indicators

Acidification, POCP, Ozone Depletion, Eutrophication - Kilotonnes or tons of reference substances - EN19



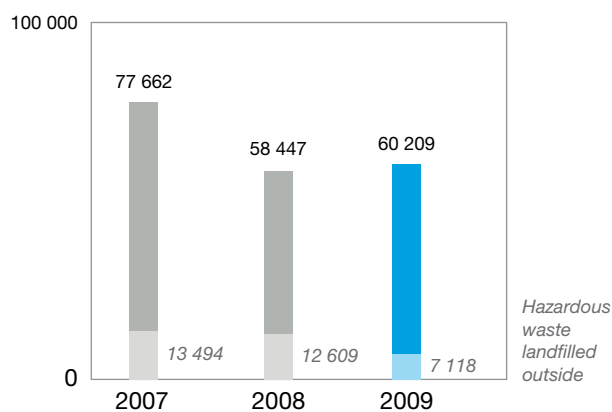
Water use

Use of water by source : underground, surface, sea, potable - 1000 m³ - GRI EN8

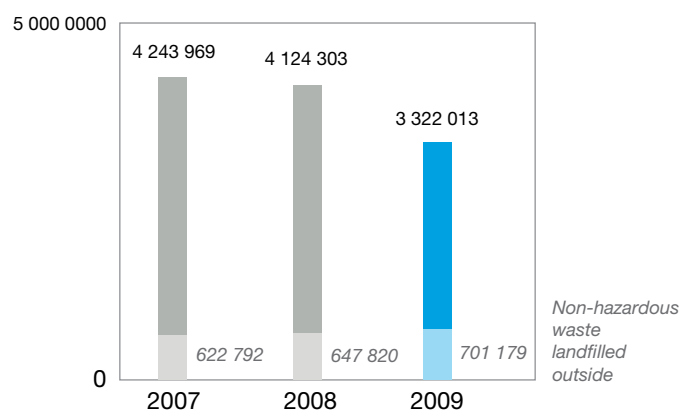


Waste

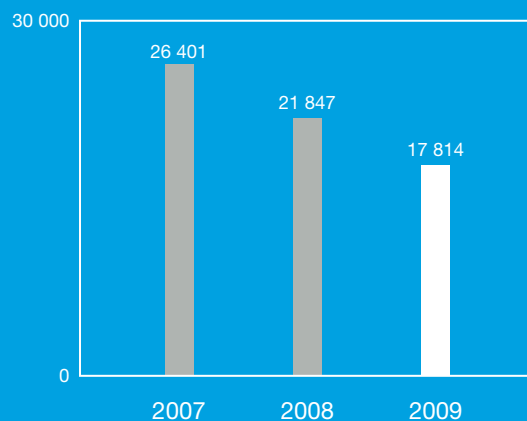
Hazardous waste - Tonnes - GRI EN22



Non hazardous waste - Tonnes - GRI EN22



Global waste index - Tonnes equivalent - GRI EN22



1.2 Environmental management

Environmental management systems

Number of sites, 2009	Number of sites	% of concerned sites
System in place: ISO 14001, EMAS, Responsible Care or equivalent	63	69%
Externally certified	45	49%

Improvement of environmental performance - GRI EN18

% of sites with an improvement plan	2009
Improvement plans in place	81%
Sites with targets for significant emission reduction within the next 3 years	8%

1.3 Safety management

Risk engineering audits of sites

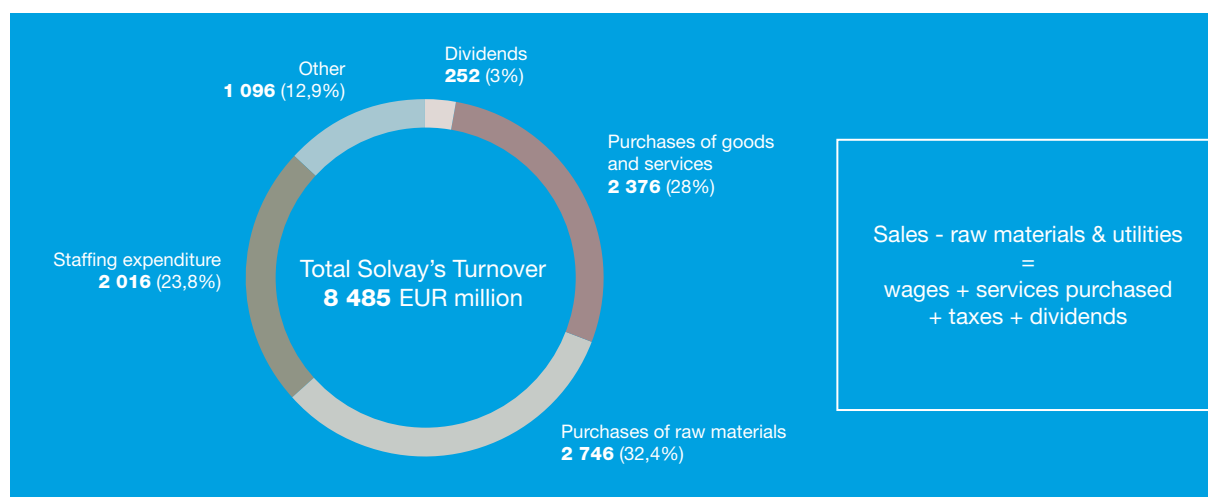
Risk engineering audits of sites	2009
Sites complying with the Group risk engineering audit program	100%

1.4 Other parameters

Manufacturing plants with a communication plan with local residents - GRI 4.16

	2009
Yes	44%
No	66%

Distribution of the generated economical value - EUR million, 2009 - GRI EC1

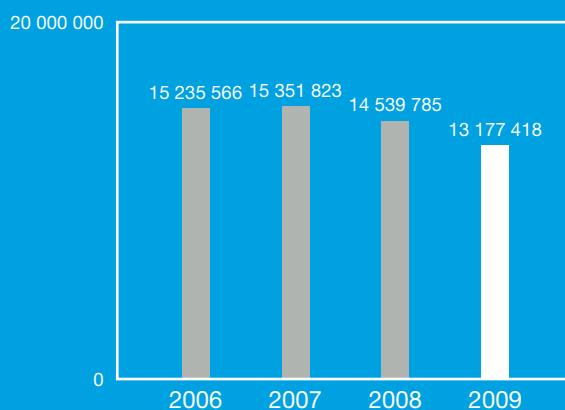


2. Stakeholder: Society

2.1 Climate change

Greenhouse gases emissions due to manufacturing activities

Direct and indirect emissions (Kyoto - Scope 1+2) - Tons CO₂e - GRI EN16



Global greenhouse gases indirect emissions (Kyoto - Scope 2) - GRI EN3

	2006	2007	2008	2009
Tons CO ₂ e	4 669 572	4 780 345	4 569 887	4 324 672(**)

(*) Indirect CO₂ emissions

(**) • 60% due to electricity purchased for a total of 8.10 TWh

• 40% due to steam purchased for a total of 9.55 Mtons of steam

Global direct emissions (Kyoto - Scope 1) by greenhouse gas type - GRI EN3

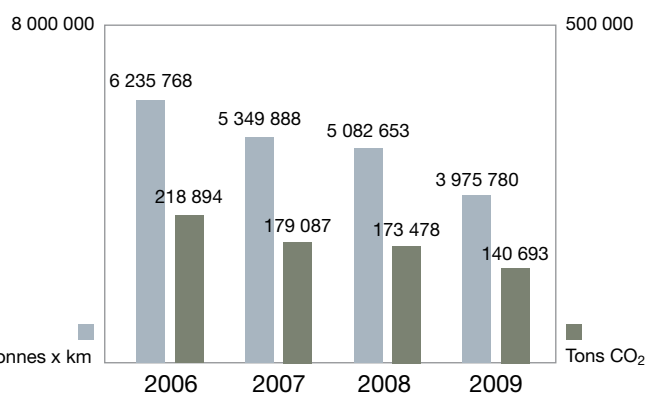
	2006	2007	2008	2009
CO ₂	7 213 602	7 246 272	7 199 724	6 005 802
CH ₄	454 530	641 575	650 620	871 585
N ₂ O	6 721	12 542	13 398	3 815
SF ₆	228 000	117 032	108 938	79 253
HFC	818 523	738 887	517 739	929 661
PFC	1 844 618	1 815 169	1 479 478	962 629

Fuel Consumption (MWh)

	2006	2007	2008	2009
Coal	11 157 551	11 015 573	11 279 511	9 283 205
Coke	1 573 160	1 627 260	1 663 702	1 356 091
Anthracite	3 003 832	2 928 092	2 743 029	1 907 808
Pet coke	131 004	255 237	142 361	464 768
Fuel oil	203 234	96 816	76 252	99 585
Natural gas	7 800 309	8 092 564	7 908 212	6 797 076
Total	23 869 090	24 015 541	23 813 068	19 908 534

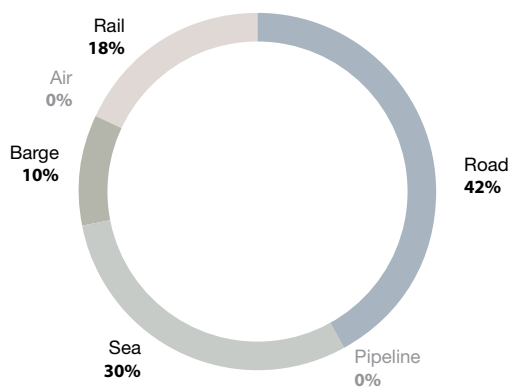
Volumes transported and CO₂ emissions due to transport

Transport of finished products, Europe - GRI EN16

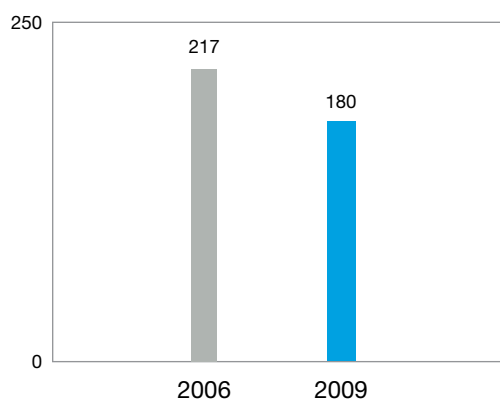


Modes of transportation

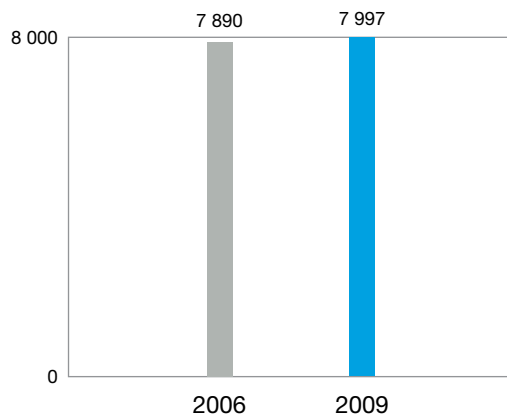
Transport of finished products, Europe, 2009 - GRI EN29



CO₂ emissions from car fleet - gCO₂/km



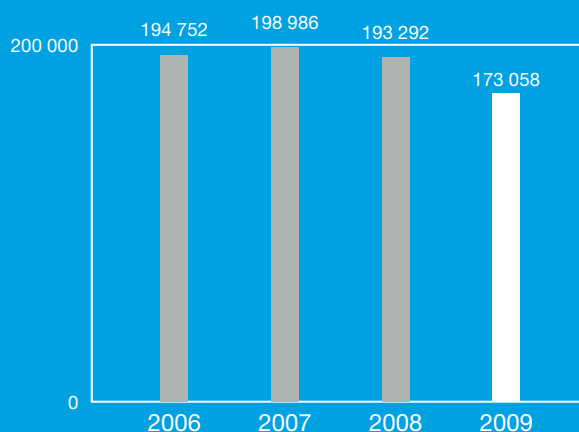
CO₂ emissions from car fleet - Tonnes



2.2 Energy

Energy consumption due to manufacturing activities

Primary fuels (coal, gas, fuel oil, ...) + energy purchased (steam, electricity) - EUR million - GRI EN3 - EN4



2.3 Activity portfolio

Sustainable Portfolio Management (SPM) - assessment

as % of total
sales 2009

as total value of sales
2009 - EUR million

Products/markets assessed according to the SPM tool

50%

2 870

Innovation Trophy projects contributing to saving natural resources

% of pre-selected projects, (total : 100 projects)

2009

Significant savings

24%

Of which very significant savings

12%

2.4 Other parameters

Advocacy

2009

Number of persons in advocacy

18

Compliance with the Code of Conduct - GRI 4.8

Non compliance as regards the Code of Conduct

2009

Cases requiring investigation by the corporate legal department

3

Philanthropy actions

EUR million

2009

Cost of main sponsoring and philanthropy towards society*

5.0

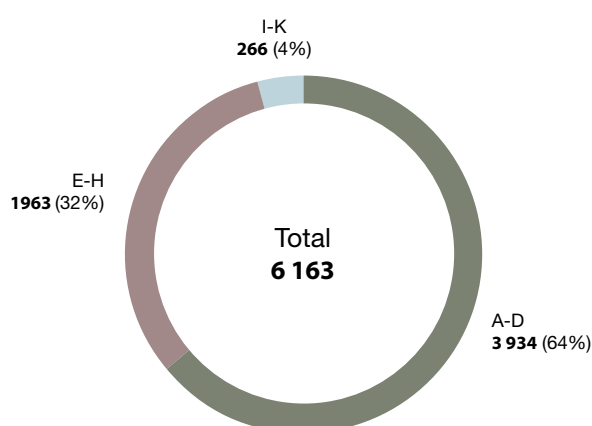
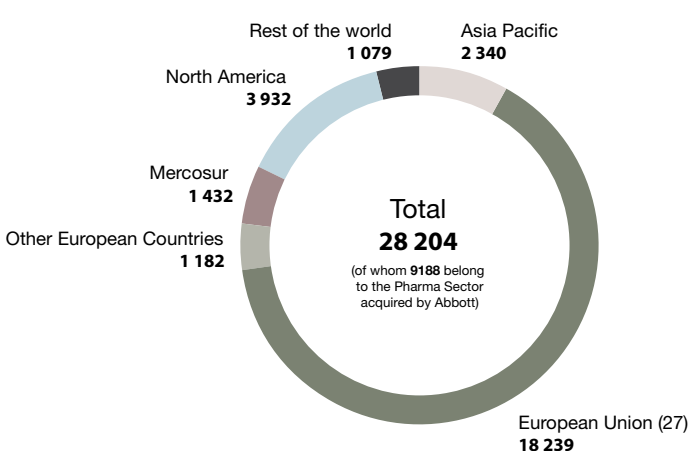
* Excluding the Pharmaceutical sector

3. Stakeholder: Employees

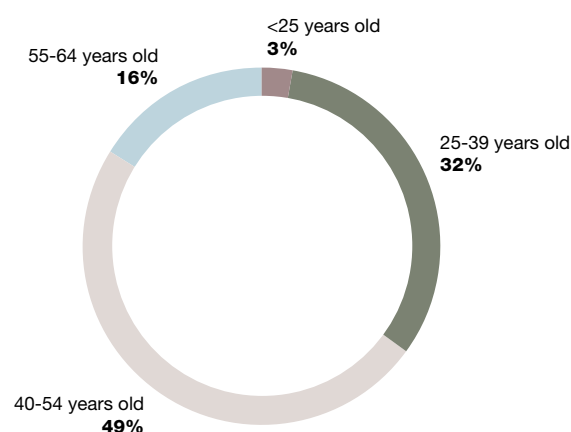
3.1 Personnel management

Distribution of employees by region
GRI LA13 - 2009

Distribution of personnel by hierarchy
GRI LA1 - % by Hay category, 2009



Distribution of personnel by age - GRI LA1 - 2009



Diversity of personnel : gender and nationality

2009

Women in personnel, including at management level	17%
Non national in management of a country	11%

Personnel appraisal - GRI LA12

% of personnel appraised yearly	Management	Non management
Europe	98%	65%
North America	98%	61%
Mercosur	97%	100%
Asia	83%	100%
Africa	100%	NC

Learning & Development - management

Trainings of managers	2009
Number of persons	19 483

Participation to the Solvay Corporate University programme

	2009
% of executives who participated in the Solvay Corporate University programmes	100%

Potential for personnel development and cross-training - perception

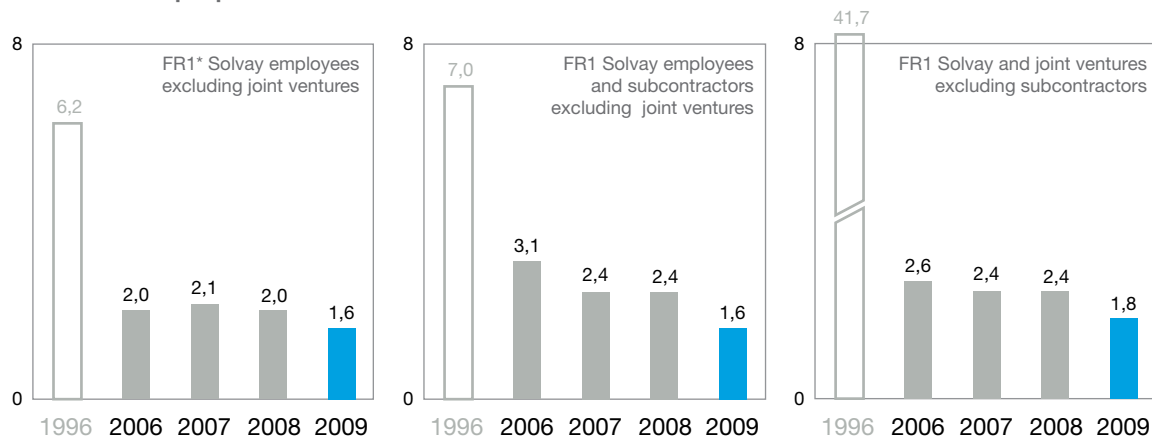
% of the personnel in latest Solvay People Survey, 2009 (covering 86% of the staff)

Overall perception of potential

	51% favorable	24% neutral	25% unfavorable
	favorable	neutral	unfavorable
Opportunity for personal development and growth in the company	58%	22%	20%
Sufficient opportunities to receive cross-training to learn other jobs	43%	27%	30%

3.2 Health, safety and well-being

Accidents of people at sites - GRI LA7



Gravity Rate**, FR0*** - Solvay employees

	1996	2006	2007	2008	2009
GR-TG	0,18	0,07	0,06	0,05	0,06
FR0	41,7	8,3	8,0	6,9	5,1

FR = Frequency Rate

FR1* = accidents involving stopping work per million hours worked

GR** = Number of days lost for lost time accidents per 1000 hours worked

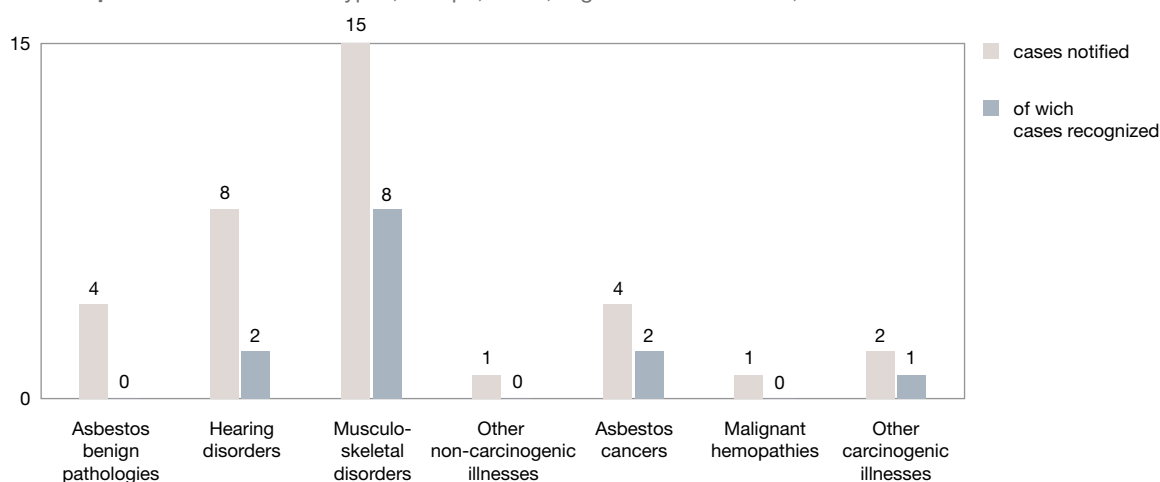
FR0*** = accidents (involving and not involving stopping work) per million hours worked

Joint ventures**** = PipeLife and Inergy

Fatal accidents

	2005	2006	2007	2008	2009
Employees and subcontractors					
Number of fatal accidents	1	3	0	3	0

Occupational illnesses - All types, Europe, Brazil, Argentina and Thailand, 2009 - GRI LA7



Personnel well-being and stress - perception

Aggregated index for overall perception, % of the personnel in latest Solvay People Survey (which covers 86% of staff)



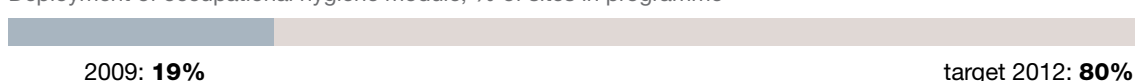
Protecting personnel against chemicals exposure at workplace - GRI LA8

Working units assessed for hygiene conditions using the standardized EATool, 2009	Production	R&D and maintenance
% of all units assessed	100%	20%
% of sites covered	100%	17%
Planned by the end of 2010	-	100%

Medical and hygiene follow-up - Medexis project

Deployment of programme% of production units - GRI LA8 - 2009

Deployment of occupational hygiene module, % of sites in programme



Deployment of health module, % of sites in programme



Safety for subcontractors - GRI LA8 - Deployment of structured safety programmes for subcontractors, 2009



Behavioural safety programme - Number of sites, 2009



Management systems for occupational health and safety - OHSAS or equivalent - Number of sites, 2009



3.3 Other parameters

Ethics and shared values - perception

Overall agreement about ethics and shared values



% of the personnel in latest Solvay People Survey, 2009 (covering 86% of the personnel)

	favorable	neutral	unfavorable
"My company behaves with honesty and integrity in its external dealings (e.g. with suppliers, customers, etc.)"	81%	14%	5%
"I am aware of what the Solvay Group values are"	87%	10%	4%
"I believe the Solvay Group values are lived"	62%	26%	12%
"In my company, the Code of Conduct of the Solvay Group is taken seriously"	73%	18%	9%

Satisfaction and engagement of personnel - perception

% of personnel in latest Solvay People Survey, 2009 (covering 86% of staff)

Overall engagement



	favorable	neutral	unfavorable
"I Feel proud to work for my Company"	79%	17%	4%
"Job makes good use of my skills and abilities"	75%	14%	11%
"Overall, satisfied with the Solvay Group as an employer"	78%	16%	6%
"Recommend my company to others as a good place to work"	75%	18%	7%

Internal forums on Sustainable development

Deployment of crosshierarchical forums since the launch of the European Group programme

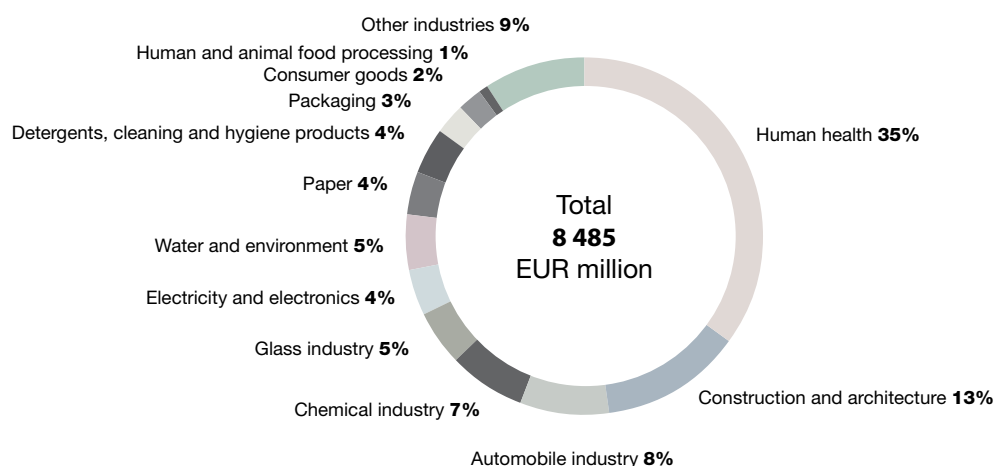
2009

Sites having held a forum	23%
Employees having taken part in a forum	14%

4. Stakeholder: Customers

4.1 Customer markets

Customer markets - GRI 2.7 - % of total Group sales, 2009

**Product information - Reach deployment**

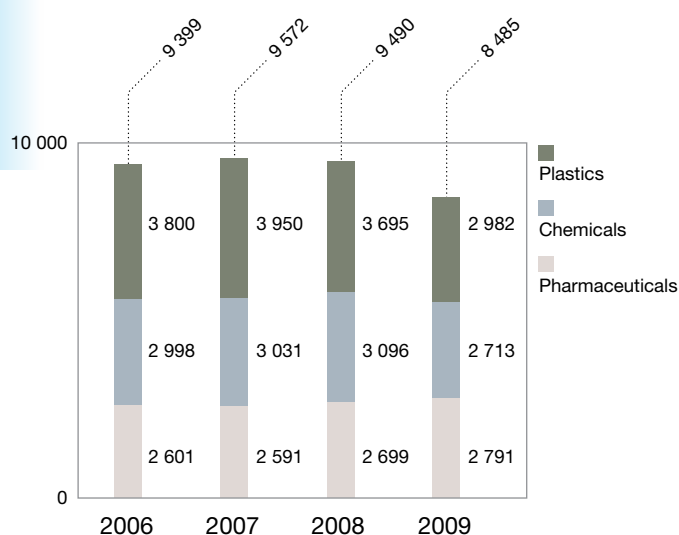
Key Figures

2009

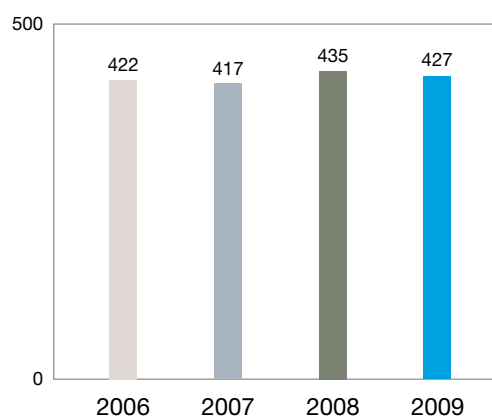
Number of substances "pre-registered" per business	466
Number of dossiers submitted to the European Chemicals Agency (ECHA)	679
Number of replies to stakeholders' questions	> 10 000

5. Stakeholder: Investors

Group sales - EUR million



Health, safety, environment provisions
GRI 1.2 - EUR million



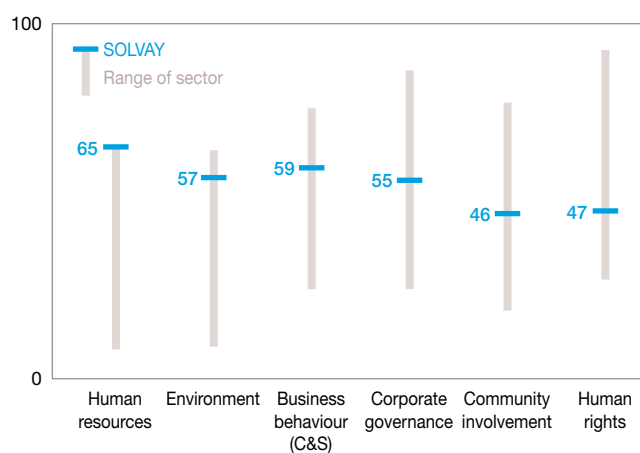
Dialogue with investors on sustainability - GRI 4.16 - 2009

Number of meetings with investors specifically focused on sustainability issues

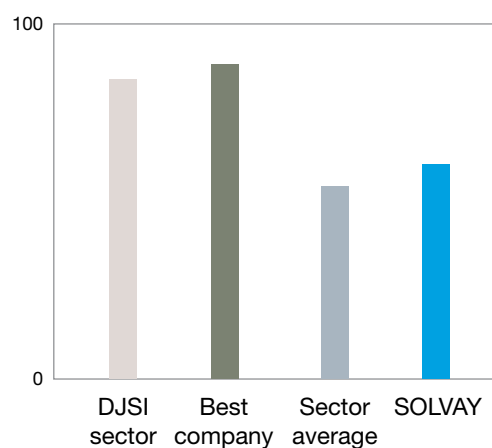
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Societal rating of Solvay

Vigeo rating, 2009



Dow Jones Sustainability Index rating, 2009



FTSE4Good Index Series, 2009

Solvay is a constituent company in the FTSE4Good Index Serie

Where to find Solvay sustainability performance

- This yearly **"complementary document"**, which complements the sustainability section of the Annual Report and presents 55 quantitative parameters
- **Solvay Annual Report** (for financial and governance data and a section on Risk management in particular)
- **The website on sustainability** www.solvaysustainable.com for key recent achievements
- **The European Pollutant Emission Register (Europe)** (<http://prtr.ec.europa.eu>) and the Toxic Release Inventory (USA) (<http://www.epa.gov/triexplorer/facility.htm>)
- **The document "Towards Sustainable Development - Assessment and prospects 2008-2012"**, describing the Solvay policy, strategy, objectives and sustainability management, published every 4 years



Towards sustainable development 2008-2012 – concise linguistic versions