6 Verifying and publishing data on emissions into the environment

Strategy

- Monitoring emissions at all the sites and ensuring the accuracy of data reported to the authorities, in accordance with obligations to give public access to environmental data.
- Internally reporting on emissions into the environment from all the sites, consolidating the data using a single standardized system, and making inter-site comparisons.

Validation of published environmental data

100%

% of sites included in the SERF internal validation

http://eper.eea.europa.eu/eper/

Monitoring of emissions into the air and of releases into water is handled locally, generally looking at the concentration (in grams per liter of air and water) in the substances released into the environment. The limits specified by operating licenses vary, depending on the medium into which the release is made. The licenses also specify, for the relevant site, what analysis methods are to be used for assessing the quality of aqueous effluents or of emissions into the air, and the locations where sampling is to take place. In order to ensure that uniform and valid measurement methods are used, a major international comparative study is being undertaken in the Group, aimed at establishing the quality of the methods and upgrading to the level of the best.

This involves 112 sites, and their data on emissions into the environment are fed into the SERF (Solvay Environmental Releases File) information system, where they are consolidated for Group monitoring in terms of annual quantities (tonnes/year). This represents all the production plants, including those of joint ventures where there are significant emissions into the environment (the activities of PipeLife – the manufacture of pipes and fittings – are thus not included in SERF). SERF covers 250 parameters relating to emissions and releases, and to energy consumption.

In accordance with their licenses, each plant also has to make public its emission data to the relevant local authorities. In addition, the relevant sites in the United States and Europe (currently over 30), submit reports to public-access systems: the European Pollutant Release and Transfer Register (PRTR, ex EPER - data available on the site www.eper.cec.eu.int/ or visualized on www.cec.org/naatlas/prtr) in Europe, and the Toxic Release Inventory (TRI – www.epa.gov/triexplorer/statefactsheet.htm) in the USA.

Our environmental data are published in a variety of media, according with the spirit of the Aarhus Convention on public access to information on the environment (see table). In particular, detailed consolidated data for the 112 relevant sites, updated annually, can be accessed via the Internet (solvaysustainable.com)

Envoronmental data published in a variety of media

solvaysustainable.com : Data for all sites (112) according to CEFIC (*) classification types	air	Particulate matter; sulfur oxides; nitrogen oxides; volatile organic compounds; volatile inorganic compounds; metals
	water	Chemical oxygen demand; priority substances; metals
	waste products	Non-hazardous; hazardous
	impact indicators	Substances with ozone-depleting potential; substances with a potential greenhouse effect; CO_2
	natural resources	Consumption of water; consumption of energy
Local reports and public registers PRTR and TRI: (**) parameters specific to each production site		Over 30 sites included by the authorities in PRTR or TRI reporting for their emissions; data then accessible via the Internet. Most of our main sites publish local environmental reports.
Reports relating to the voluntary multi-firm: commitments parameters specific for those commitments	Euro Chlor (***)	Emissions of chlorine, chlorinated organic compounds and mercury. Production methods. Consumption of water and of energy. Consumption of hydrogen as a raw material; as a fuel. Transport of chlorine (quantities and methods); transport accidents. Accident frequency rates involving stopping work; accidents involving processes, and product losses.
	ECVM (****)	Emissions of vinyl chloride, 1,2-dichloroethane, hydrochloric acid, ethylene, dioxin-type compounds, and copper.

(*) CEFIC: European Chemical Industry Federation
(**) PRTR: Pollutant Release and Transfer Register. TRI: Toxic Release Inventory
(***) Euro Chlor: European Association of chlorine and caustic soda producers
(****) ECVM: European Council of Vinyl Manufacturers

Targets for 2012

- Making available by sites with potential significant environmental impacts, annual data on emissions and releases, along the criteria of public databases of PRTR or TRI-type (**), and in accordance with the Responsible Care® Global Charter.
- Progressively harmonizing methods for monitoring effluents.
- More systematically check the emissions as compared to the environment quality standards of the receiving medium.
- Developing – for our main product ranges - the use as management tools of specific emission indicators – emissions per tonne of output manufactured and environmental impact indicators.

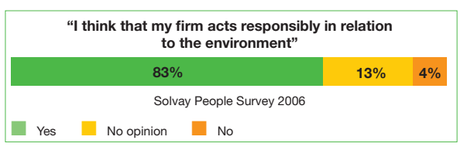
7 Dialogue with local communities, contributing to local life and prosperity

Strategy

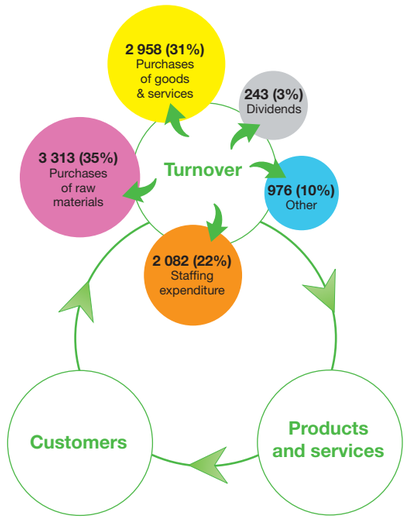
- Opening up the plants to people and organizations in the vicinity and maintaining a constant dialogue and long-term relationships with the neighboring communities.
- Monitoring the changing expectations of local residents.
- Taking part to the local economy and society, through appropriate contribution to their needs.

Percentage of sites with a formal plan for communication with the local residents

"I think that my firm acts responsibly in relation to the environment"



Distribution of the economical value of the Group's output
Turnover, in million euros



Solvay has always entered fully into the communities where it operates. In the 19th century, the company was already taking responsibility for local social and medical assistance and setting up schools, at a time when national governments had not yet fully taken charge of those functions. From that time onwards, corporate social responsibility has evolved, and now requires increased dialogue and networking with the local communities and responses to evolving concerns: changes in the local economy, employment, education, training of young people received on work-experience schemes, management of nuisances and risks, and work opportunities for disabled people, etc.

Forms of action initiated by our production sites vary tremendously. In 2006 for example, over 30,000 people living adjacent to our sites were welcomed at site "open days". These events provide special opportunities to establish links and identify new possibilities for communication and collaboration.

Proper integration of local subcontractors, together with the provision of training for them, assists the local economy, as does the inward movement of other firms, which settle an our sites and benefit from the use of shared infrastructure. There have recently been examples of this at our sites at Tavaux (France), Rosignano (Italy), and Jemeppe and Neder-over-Heembeek (Belgium). In certain cases also, safety teams from our sites provide support for local civil protection services.

The Group's new Youth Employment Scheme aims to offer young people living in the vicinity of our sites training and work experience that will enhance their skills and employability (see "Society" chapter, page 36)

Example of infrastructure sharing:
The young company Artelis has moved to Solvay's Research and Technology centre in Brussels, Belgium.
It specializes in new components for cell cultures, the focus being on disposable solutions, with a higher biological safety.

Targets for 2012

- Establishing projects at all sites that encourage employee participation in the life of the local community.
- Regularly conducting opinion surveys about our activities among the communities living in the vicinity of our large production sites.
- Increasing the consistency of Group initiatives relating to dialogue with the neighboring communities and reconciling them with our internal channels of communication, involving Strategic Business Units, Competence Centers, the Solvay regional structure and individual sites, etc.
- Extending the use of electronic means of communication: websites, blogs, text messaging, etc.
- Increasing local residents' preparedness for crisis situations in the case of sites classified as involving a major risk.