

### ENVIRONMENTAL REPORT 2011





#### **Dear Readers,**

The efficient use of the resources of the surrounding environment combined with maintaining sustainable relationships with all interested parties, primarily with the local community, plays a crucial role in modern economy.

ANWIL aims in this area of activity are included in the Company's mission statement which weds the increase in value with the principles of sustainable development. Therefore, we constantly strive to include the local communities' aspirations within the spectrum of our business activities.

Our ecological awareness has been evolving and, for a number of years, the activities concerning the natural environment protection have constituted an integral and business-wise justified element of the Company's strategy, frequently reaching way beyond the standards established by the existing applicable regulations of law. Being a chemical Company we draw upon natural resources, and therefore, we have drafted, implemented and are living the strategy of minimizing the environmental impact of our activities through adjusting our production technology to the highest standards.

Much as it is crucial, ecology is not the only element of our policy of the socially responsible business activity. One of the most vital elements is providing safe working conditions along with care for safety of all persons staying in the Company premises. We are introducing modern technical and organizational solutions, yet we are also paying special attention to our employees' education in the realm of organizing safe working conditions. This approach springs from our general rule that eliminating the root causes of accidents is the best way to improve the levels of safety. A similar philosophy guides our perception of the issue of healthcare provided to our employees. Along with regular medical check-ups we run numerous preventive programmes in co-operation and help from the medical personnel.

For many years we have been consistently executing projects resting within the realm of a widely understood socially responsible business. Our activities are by no means limited to environmental investment schemes as we also aim at fostering active social behaviours within the area of the natural environment protection. We take an active part in educational programmes encouraging the ecological awareness especially in the young, and we support local social initiatives in the field of sport, culture and charity.

You are holding the 2011 Environmental Report. Since our ecological and social policy has an open character we wish to share our experience and achievements in this area with all our Partners.

Remigiusz Paszkiewicz President of the Executive Board





## About US

ANWIL S.A. is one of the biggest companies in Kujawy-Pomerania region and the country's leading one in the area of Great Chemical Synthesis. This is the only Polish producer of suspension polyvinyl chloride widely renowned and one of the most significant in Central-Eastern Europe as well as one of the major producers of nitrogenous fertilizers (ammonium nitrate and calcium ammonium nitrate) on a nationwide scale.

Combined with a Czech company SPOLANA a.s., ANWIL S.A. makes up the chemical segment of PKN ORLEN S.A. Capital Group, which is the largest, cutting-edge industrial group in Poland.

It is the quality of ANWIL S.A. products that has won the Company's reputation and its strong position both on domestic and foreign markets. The primary objective governing our quality assurance policy is to cater for all needs and requirements of our customers as far as the product quality is concerned. This policy is supported by the implementation of the quality management system consistent with PN- EN ISO 9001.

The implementation of the PN-EN ISO 14001 Environmental Management System has had a positive effect on the natural environment. The Company is actively involved in an international environment protection programme: "Responsible Care" winning the title of the executor of "Responsible Care" programme in 1999. The Company is also a member of the Federation of European Chlor-Alkali Producers "EuroChlor" and of the European Fertilizer Manufacturers Association "Fertilizers Europe".

One of the key assets of the Company are its employees. The human resources policy applied in ANWIL S.A. ensures appropriate personnel

selection training and motivating schemes, thus, facilitating the process of meeting the Company's strategic objectives.

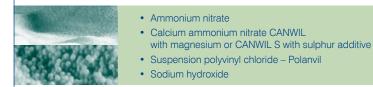
All activities by ANWIL S.A. are undertaken according to guidelines included in the Code of Ethics. Apart from stating the key values of the Company, the document lays out ethical norms and standards relating to all areas of the Company's activity.

The course of the Company's development and activities undertaken in ANWIL S.A. have won wide recognition supported by numerous awards and honours of which the most prestigious are:

- · Golden Statuette of Polish Business Leader by BCC;
- Ten Diamonds to the Golden Statuette of Polish Business Leader;
- Laureate title in the category "Technology Worth Recommending" in the "Environment Friendly" competition;
- European Medals for polyvinyl chloride Polanvil, calcium ammonium nitrate - CANWIL and PVC sheets Anwipor Light and Anwidur;
- Golden ORBITAL the prize for the "Efficient Environment Protection Activity";
- Title of "The One Who Changes Polish Industry" awarded by Polish Association of Entrepreneurship Supporting;
- Title "The Pillar of Polish Economy";
- Title "A Great Pearl of Polish Economy";
- Title: "Environmentally Friendly Company 2008".



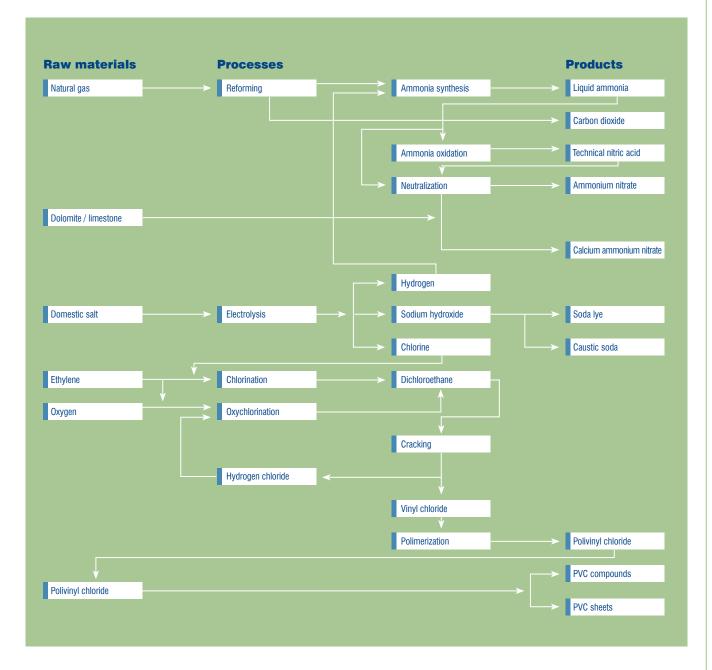
### The main products



- PVC compounds
- PVC sheets
- Ammonia
- Other chemicals



### **Basic processes**





## ANWIL S.A.

## as a socially responsible company

ANWIL S.A. commitment to socially responsible business activity has been embedded in the Company's mission statement – guidelines stipulating the need to observe the concept of sustainable development for the benefit of current and future generations, to cherish the corporate culture based on trust and just evaluation and to build positive relations with the surroundings.

Having analysed its surrounding environment along with its pending needs, at the same time considering its own business conditioning, ANWIL S.A. has identified the framework of CSR-affected areas:

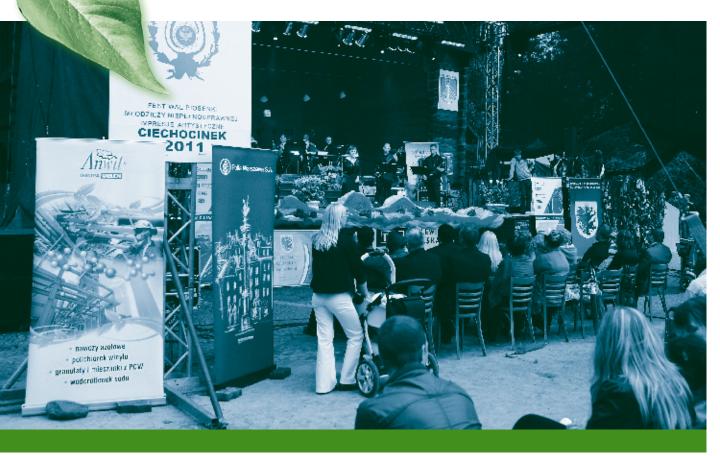
- The external environment: the local community and the natural environment;
- · The internal environment: the working environment.

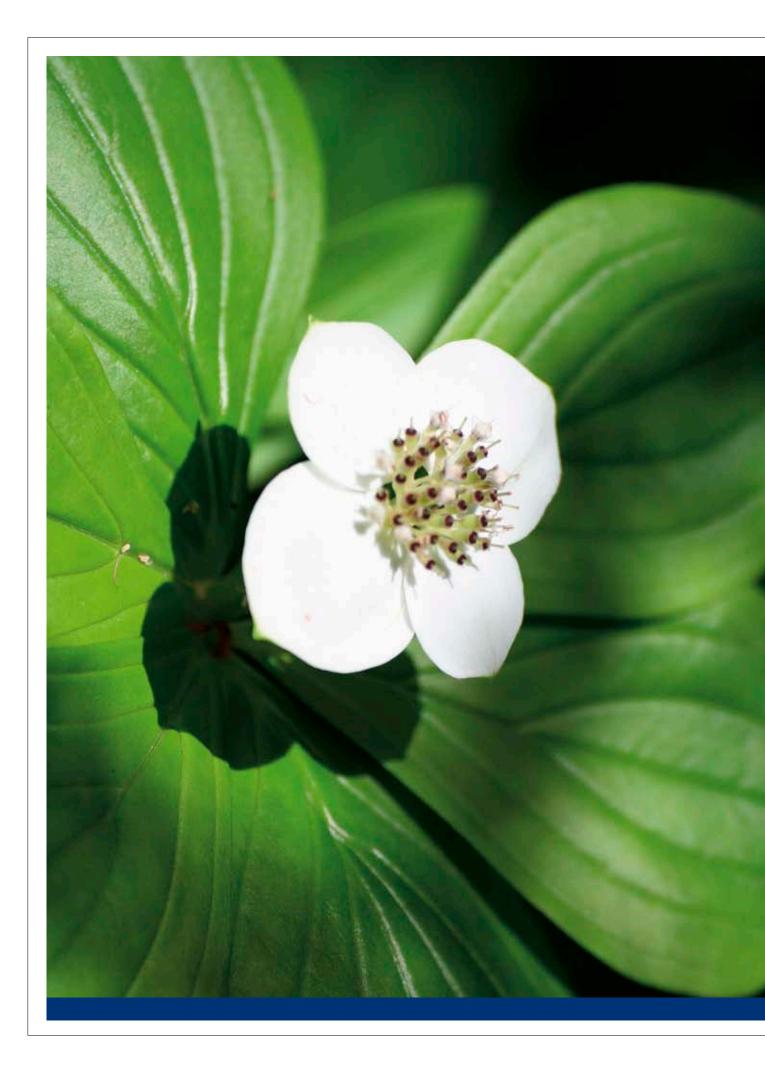
The message: being a responsible neighbour ANWIL S.A. determines the scope of **activities for the sake of the local community**, which encompass: support for local initiatives, ecological education of the young generation, charitable activities, building relations and openness via participation in recreational events, " Open Doors" action, etc..

The Company is fully aware of its functioning in a strictly defined milieu. At the same time, it eagerly accepts the responsibility for this environment's development. ANWIL S.A. is a renowned supporter of sports and cultural events. Our sponsoring activity (Extra League male basketball team ANWIL Wtocławek, ballooning sport, sailing, support for the regional Museum of Kujawy and Dobrzyn Land, classical music concerts, support for the City Library, street theatres etc.) is a tool used for building bonds with the community of the city and of the whole region. It is also a manifestation of our understanding of the residents' needs, as well as a clear indication of our concern for spiritual and physical development of the young generation. It needs to be pointed out, however, that the Company's commitment to supporting local activities and initiatives is not a shear manifestation of the organization's PR-related image enhancement endeavours, but it is rather an indication of our profound understanding of the reality in which these activities would not develop so dynamically without our active participation.

ANWIL S.A. is an active supporter of programmes promoting the environmental education with the young. We understand how much the awareness of the responsibility for the environment in which the young live means. It is them who will be setting the standards of life in the region in the future, so it is of vital importance to include young people in the mainstream of social-development activities. What we do to achieve this, then, is: support competitions of chemical and ecological knowledge, organize ecological symposia and meetings with the teachers from local schools, hold ecology-themed art competitions, and finally, carry out the major organizational undertaking – "A Tree for a Bottle" action. 2011 sees the 9th edition of this nationwide PET bottles collecting competition initiated by the Secretariat of Responsible Care Programme.

Our charitable activity is another crucial means of strengthening the Company's bonds with the environment. As a rule the beneficiaries are







non-for-profit organizations and institutions dealing directly with charity, but individuals are not excluded either. The Company possesses a **Charitable Policy** on which basis it performs its charitable activities mostly via co-operation with ORLEN Gift-of-the-Heart Foundation, but it is also involved in a number of independent aid schemes. Our philanthropic activity is chiefly meant to support charitable foundations, associations and organizations dealing with financing the purchase of for example medical or rehabilitation equipment. We have also been donating the Polish Red Cross. One of the beneficiaries of our financial support has been the Włocławek branch of the Polish Association of Palliative Care. The Company takes great interest in its former employees – pensioners, who, in some justified cases, receive financial support for the purchase of expensive medicaments or covering the

costs of surgeries or medical tests. We eagerly support primary and second-

ary schools, as well as youth sports organizations and children's homes.

A socially responsible organization builds its relations with the environment in which it exists on the basis of openness and transparency in mutual contacts. This objective is achieved in ANWIL S.A. through organization of events of recreational character, and above all, through the "Open Doors" action when local school and university students are offered a chance to visit the Company.

The environment protection activity nestles in the principle of **protection of the present and future generations**. The activities in this area comprise the diminishing of the negative impact which the technological processes exert on the environment, saving energy and managing wastes ecologically.

Being a chemical company, ANWIL S.A. naturally exploits natural resources necessary for its business operation. Nevertheless, through the implementation of the sustained development scheme, the Company has drafted in introduced a strategy providing maximum safety both for the natural environment and the workers as the top-standard technologies and production processes have been engaged. Consistent ecological investments made for years are systematically supported by the execution of international environment protection programmes and the PN-EN ISO 14001 environmental management system.

The fact that the Company has voluntarily included the environment protection issues in its overall strategy is a clear indication of its concern about the water quality (lower content of harmful impurities in sewage), the air quality (the amount of emitted dusts) and the soil quality (waste

management). We are fully aware of the necessity of including this problem in the market activity strategy. The Company has been committed to promoting environmental issues in its strategy with the use of a variety of tools: a www site, the annual report, the ecological report. The local community is also thoroughly informed about the Company's ecological activities during the Open Doors action and Ecological Academy of Skills, during meetings held in the Company (students and teachers), via "a Tree for a Bottle" action or seminars and competitions attended by ANWIL S.A. representatives, or even coorganized by the Company.

ANWIL S.A. as a responsible employer. This is a central idea for ANWIL S.A. activities undertaken for the sake of the working environment and the employees and including: safety at work, employees' health protection, trainings and employees' education, building good relations between the employer and the personnel by means of social integrating meetings and proper information policy with use of the internal media system.







## Environmental policy of ANWIL S.A.

Being fully aware that in our business activity we draw upon the natural resources of the surrounding environment we feel obliged to make endeavours to protect it, thus, ensuring its natural harmony and sustainability.

Striving to eliminate pollution and potential threats to the environment and aiming at curbing the negative impact that our plant may have on the environment we have implemented a constantly perfected environmental management system consistent with PN-EN ISO 14001 standard.

The factors ensuring an efficient performance of our environmental policy include:

- Identification of factors that have or may have an impact on the environment and monitoring the activities associated with them
- Profound monitoring of the plant's impact on the surrounding environment
- Performance of systematic assessment of the consistency of procedures with the applicable regulations of law and other environmental equirements
- Reasonable use of the natural resources especially through sustainable use of materials, water and energy
- · Limiting the potential impact on the environment at its source
- Implementing pro-environmental activities, especially introducing modern technologies
- Encouraging the environmental awareness and knowledge in our employees and the local community
- Engagement of all employees in ecological activities
- Co-operation with entities working on behalf of ANWIL S.A. and with other interested parties.

ANWIL S.A. image of a socially responsible, reliable and firm company is sustained by living the requirements of the "Responsible Care" programme.

The following policy is known, understood and observed by each of our employees. Its wording is publically available and should be read as a commitment towards all interested parties.

Maciej Trojnarski Managing Director

Włocławek, May 2010



## Pro-ecological policy

The Company's activities require taking advantage of environmental resources. For that reason much more care is attached to reduce environmental impact as well as to its protection. We concentrate on working out such strategy that could assure the constant improvements in the sphere of safety, health care and environmental protection. To reach such conditions it is necessary to adjust technologies and production processes to the highest standards.

ANWIL S.A. treats balanced development not only in the categories of the ecology but much more broader. The Company considers that it requires to reconcile different aims. That's why the pro-ecological strategies are based on the following pillars:

- economic effectiveness directed towards the profits for the community and considering social and environmental costs;
- care for the environment –beside protection of natural resources also regular minimizing of impact on the environment supported by the programmes "Responsible Care" and "Cleaner Production" and environmental management system (ISO 14001);
- social balance activities aiming in rising of the local society life quality as well as participation in cultural, educational and sport life of the region.

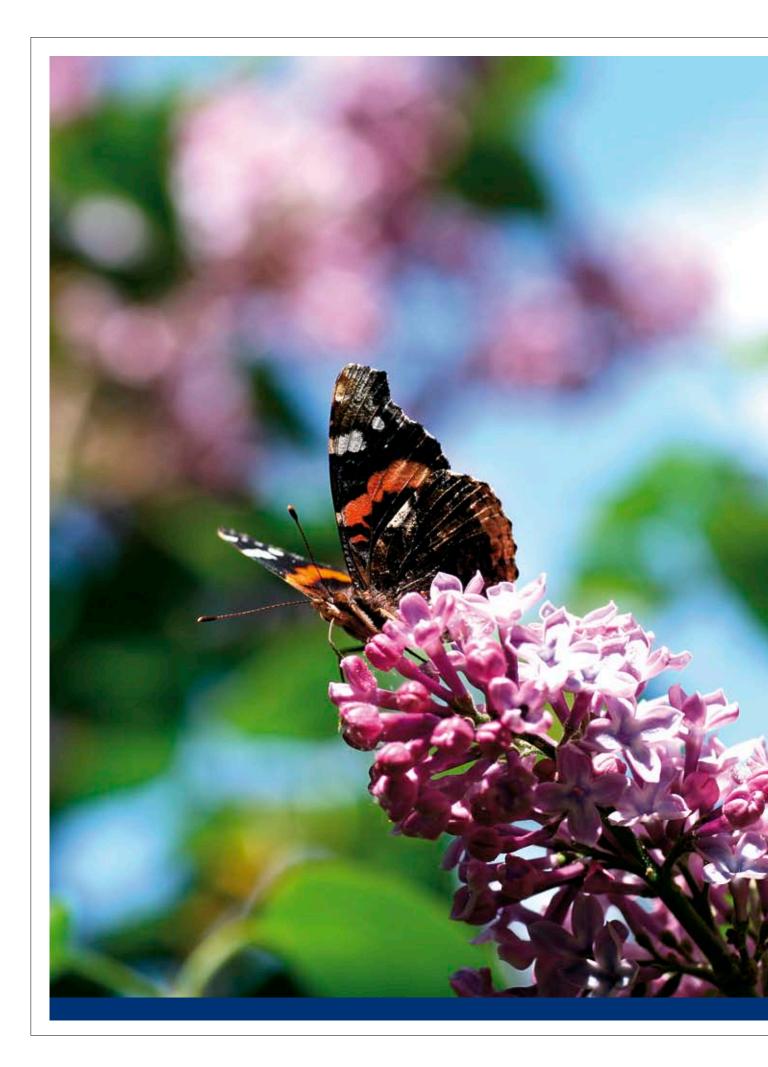
Pro-ecological investment activities, consequently carried out by the Company, have been supported for many years by an international program referring to environmental protection as well as by environmental management system according with EN-PN ISO 14001.

Since 1995, ANWIL S.A. has voluntarily participated in the program "Responsible Care" recommended by the Chemical Industry European Council. The main object of the program is a permanent improvement in environmental care, health care and safety at work. For its efforts under this program, ANWIL S.A. in 1999 was awarded with the Certificate of the "Responsible Care" Program Performer, by the Chapter of the Program at Polish Chamber of Chemical Industry. Under the programme, ANWIL S.A. participated in April 2011 in the eleventh edition of the contest called "A tree for the bottle". The event is organized on the occasion of World Earth Day by the Office of Responsible Care Program.

Environmental Policy in ANWIL S.A. assumes running production processes in full awareness of their influence on the environment. The Environmental Management System conformed to PN-EN ISO 14001 standard makes it possible to control the Company's environmental activities. Under the system, periodical targets and tasks are laid down and their execution mostly arises from the legal regulations concerning the environmental protection.

As a result of ANWIL S.A. efforts towards environmental protection, the Company has been honoured with various awards, including: "Złoty Orbital" (Golden Orbital) in 2002, in category: "An effective activity in favour of environmental protection", the plant for the recovery of hydrogen chloride from chlorinated organic waste products won a "Technology Worthy of Recommendation" prize in the ecological contest "Environmental Friendly" organized under the auspices of the President of Poland. The Company was also honoured with the reward of "Panteon Polskiej Ekologii" (Pantheon of Polish Ecology) by the Ministry of Environment and Director of Polish Centre of Research and Certification. In this way they expressed their honour to those enterprises that defined and implemented the environmental management system conformed to PN-EN ISO 14001 standard. In 2002 the efforts undertaken by the Company aimed at minimizing of effect on the environment, were approved by deletion of ANWIL S.A. off the list of so--called "Hot spots", i.e. places that threaten the environment of the Baltic Sea. The decision was taken by the HELCOM LAND and HELCOM PIFT Groups engaged in the environmental protection of the Baltic Sea basin. In 2008 European Forum of Ecological Responsibility awarded to ANWIL S.A. the title "Firma Bliska Środowisku 2008" ("The Company Environmentally Friendly") in nationwide ecological contest under the auspices of the Ministry of the Environment.







### Effect on the environment

## Eco-development

### is a social-economic development in which obeying of environmental protection rules generates economic profits while society life quality is constantly improved.

The relation between ANWIL S.A. and the natural environment in which it operates is formally and legally regulated. The Company is in the possession of 7 basic administrative decisions including 4 integrated permits (for the operation of the installations in the plastics production area, for the operation of the fuel combustion installations in the CHP in the infrastructure area, for the operation of the installations in the fertilizers production area and for the operation of the installation - a landfill for waste other than hazardous and neutral with separate cells for hazardous waste). Owing to the Company's persistent commitment to the environmentally friendly policy, the growing output does not result in an intensified impact of the technological processes on the natural environment.

#### **Environmental charges**

As an effect of ANWIL impact on the environment, the Company is obliged to pay environmental charges, which in 2010 decreased by 0,57%. In the individual components of the environment has been:

· reduction of charges for wastewater discharged into the receiver -Ośla river by 5,3%:

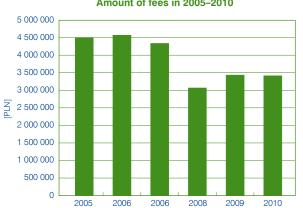
Reducing the size of charges was resulted from the reduction of discharged ChZT (about 55%).

• reduction of charges for the water by 5,2%:

Reducing of charges occurred because of lower use of surface water (by 6,7%) and maintain at the same level use of groundwater, that despite the increase in charges contributed to a reduction of use of this environment component.

- increase of charges for emissions to the air by 5,1%: The most important effect for increasing charges was for releasing gases and dust into the air and increasing the production of ammonium nitrate and calcium ammonium nitrate.
- reduction of fees for waste storage non-hazardous and indifferent, with separated waste for hazardous by 44,81%: Decrease in charges was due to downtime chlorine and soda lye plant. For this reason waste at the landfill were deposited by 47.78% less comparing with 2009.
- reduction recycling fee by 30,5%: Decrease of recycling fee was due to reduced sales of finished products for the domestic market.

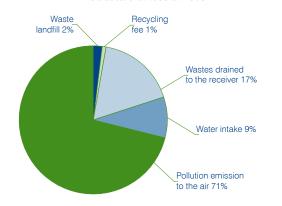
In structure of fees, just like in last years, the dominant element in the use of environment is the induction of gas and dust into the air. Greatest impact on the size of the emission was executed by fertilizers production area just like in 2009. In this structure share in the total size of the fee for the emission decreased from 56% in 2009 to 54% in 2010.



Amount of fees in 2005-2010



Structure of fees in 2010



#### **Administrative fines**

Administrative fine in protecting the environment is the way of administrative responsibility for the unlawful behavior leading or likely to lead to environmental degradation.

In 2010, Kujawsko - Pomorski environmental inspector during the audit found no violations by ANWIL S.A. requirements for use the environment, which could result in the imposition of fines.

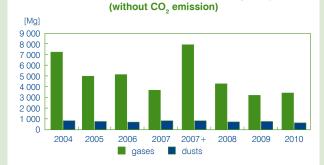
#### **Emission of air pollutants**

Emissions of air pollutants from production plants belonging to ANWIL S.A. carried out by the 278 emitters, of which 1 is located in the infrastructure area, 75 in the fertilizers production area and 202 in the plastics production area.

The volume of emissions from individual emitters is controlled primarily as a periodic measurement. In case of Recovery of hydrogen chloride from chlorinated organic waste plant, CHP and Nitric acid production plant (in terms of emissions of nitrous oxide and ammonia), measurements of concentrations and pollutants emissions were carried out using continuous measurement system.

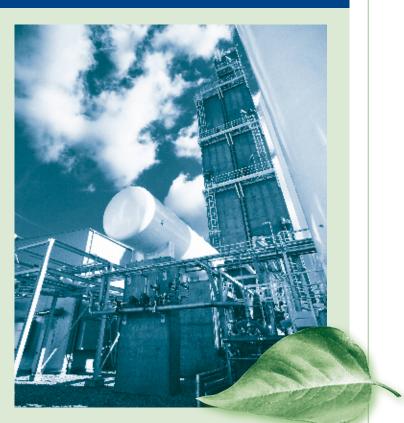
Dust emissions in 2010 compared to 2009 decreased by approximately 21%. In the same comparative period, carbon dioxide emissions decreased by about 6,5%, while the other gaseous emissions grew by about 7%.

Global emission of pollution to the air during last years

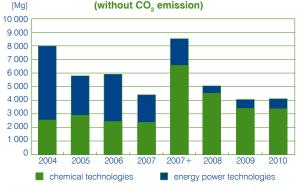


. 2007 - annual emission excluding the nitrous oxide and waste gases from the ammo-2007 - until 2010 - annual emission excluding the micross oxide and waste gases from the ammo-ria production plant. (2007+) untill 2010 - annual emission including the nitrous oxide and waste gases from the ammonia production plant.

In 2010 dust emission decreased by about 33,8 Mg compared to 2009 (by approximately 57%). Emission of carbon monoxide increased by 2,3 Mg (approximately 29%). Significant reduction in dust emission over the years 2009 and 2010 was resulted as in the case of sulfur dioxide with increased the share of natural gas in the total amount of fuel used - at the expense of heavy fuel oil.

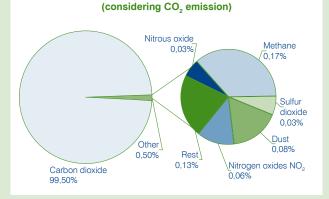


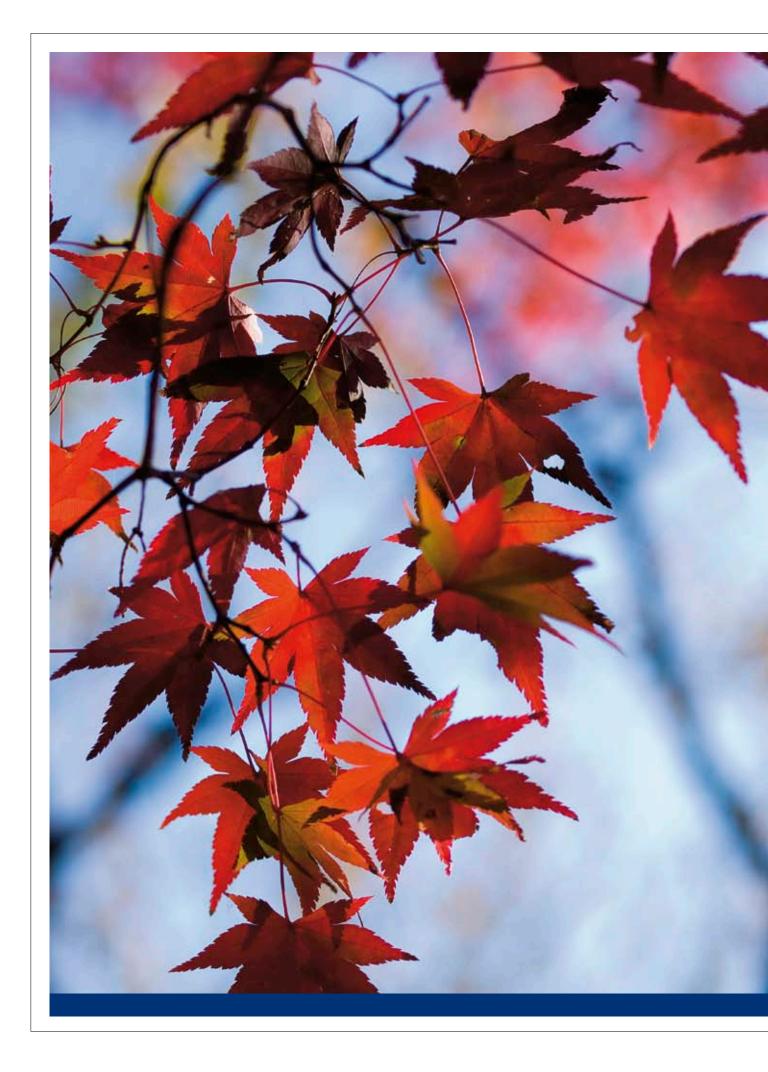
Pollution emission in respect to their sources (without CO<sub>2</sub> emission)



2007 - annual emission excluding the nitrous oxide and waste gases from the ammonia production plant. (2007+) untill 2010 – annual emission including the nitrous oxide and waste gases from the ammonia production plant.

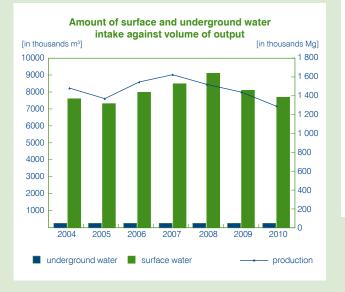
Structure of pollution emission in 2010





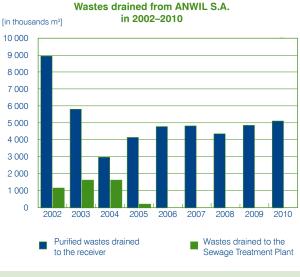
#### Water and wastewater management

In 2010, reducing the consumption of surface water was reported compared to 2009 by approximately 6,7% and maintaining a similar level of groundwater consumption.



In relation to wastewater management, 2010 was characterized by primarily:

- prevailing weather conditions in ANWIL S.A. (I and IV quarter) had the greatest impact on increasing the amount of discharged sewage (by about 8,6%), affecting on the amount of water flowing into ANWIL S.A. objects with the Ośla river (from an area located above the plant);
- in the range of pollutants discharged into the Ośla river by W-1 and WD outlet:



- impact on the reduction of COD and ammonia nitrogen discharged which was resulted by stable work of biological treatment node of industrial wastewater treatment plant and greater stability processes which are the primary source of pollution;
- increase the load of nitrate nitrogen, what was also derived from the efficient work conducted in the process of nitrification and an influx of pollution from agricultural sources of water carried along the Ośla river;
- lesser charge of sulfates; the greatest impact was the production situation which prevails in the plastics production area;
- a greater load of chlorides; it was associated with the need to recycle a saline water from landfills for non hazardous and inert quarters with separated lodgings for hazardous waste.

Sort of effect	Unit	2005	2006	2007	2008	2009	2010
COD		190,9	335,3	458,0	327,3	331,4	149,5
Nitrate nitrogen		33,0	50,7	23,3	9,5	43,6	77,5
Ammonia nitrogen		37,7	27,6	67,2	34,4	30,0	17,6
Total nitrogen		80,4	93,0	89,9	55,1	76,4	92,8
Chlorides	Mg	4 514,3	5 496,5	4 789,7	4 429,1	5 776,4	5 215,5
Sulphates		1 347,0	1 331,5	856,1	698,2	947,9	681,6
Total suspension		52,1	34,1	33,6	40,9	22,4	19,6
Metals*		0,19	0,15	0,11	0,98	1,02	1,8
Chlororganic compounds**		0,39	0,28	0,62	0,81	0,40	0,51

#### Basic impurities in the wastes drained in 2005-2010 to the Ośla river

\* chrome, zinc, cadmium, copper, nickel, lead, vanadium.

\*\* tetrachloromethane, hexachlorobenzene, hexachlorobutadiene, trichloromethane, 1.2-dichchloroetan, trichlorethylene, tetrachloroethylene.



#### Waste management

Amount of Waste deposited in 2003-2010									
Type of interaction		Unit	2005	2006	2007	2008	2009	2010	
Landfill for non-hazardous and invert with separated quarters on hazardous waste	998.2/2		897,1	787,2	6,00	89,46	4,98	5,28	
	997.2	Mg	1 553,6	2 356,2	2 930,4	4 705,7	4 203,82	2 462,28	
	997.11 <sup>1)</sup>		545,1	171,0	0,0	—	—	—	

Amount of waste deposited in 2005-2010

<sup>1)</sup> rehabilitated and excluded from use quarter

Reducing the amount deposited in the quarters of waste 997.2 was due to downtime installation of chlorine and caustic soda. Therefore deposited in the landfill by 47,78% less brine waste than in 2009.

Amount of waste deposited in 2010 in the quarters 998.2/2 increased slightly (6,0%) compared to 2009.

### The amount of packaging placed on the market in the years 2005–2010 for which, ANWIL S.A. suffered recycling fees of the various components assortment

Assortment	Unit	2005	2006	2007	2008	2009	2010
Plastic packaging		408,62	477,32	581,29	500,05	409,68	357,33
Packaging made of natural materials (wood and textiles)	Mg	0,00	0,00	0,00	271,38	901,05	804,99
Paper and paperboard		120,78	116,28	117,09	119,21	74,13	99,95

### The amount of packaging placed on in the years 2006–2010 for the domestic market, for which ANWIL S.A. incurred a fee for recovery

Assortment	Unit	2006	2007	2008	2009	2010
Wooden pallets	Mg	1 050,2	1198,63	904,60	1 261,48	965,99
Other components (plastics, paper and paperboard, etc.)		455,5	592,28	507,46	509,08	360,47
Total		1 500,7	1 790,91	1 412,06	1770,56	1326,46

Decrease in the number of wooden containers (25,1%) placed on the domestic market, primarily due to reduced sales of products for the domestic market and production downtime (chlorine and caustic soda).



## Pro-ecological tasks realization

ANWIL S.A. has adopted a responsible business mission wedding its economic aspirations with uncompromised responsibility for the natural environment.

ANWIL S.A. ecological strategy was drafted several years ago and from that point on has served as an efficient instrument facilitating organizational changes, modernisation and investment schemes.

A document prepared in the early 1990s titled "A Complex Evaluation of the Environmental Impact of Zaklady Azotowe Włocławek" was a milestone on the way to define the areas and directions of necessary changes in drive to minimize the Company's negative impact on the environment. The conclusions put forward in this document lay foundations for the elaboration in the later "Schedule of Ecological Activities Aimed at Limiting the Negative Impact of ANWIL S.A. on the Environment". The programme presupposed a step-by-step execution of an investment scheme targeted at each individual element of the environment giving priority to activities on those installations which inflicted the most harm on the environment.

By joining an ecological programme called Responsible Care in 1995, ANWIL S.A. voluntarily undertook to execute activities leading to major improvements in the areas of environmental protection, process security and workers' health protection. What is more, the programme concerned also required full transparency of business activity complying with social needs in its entirety.

The programme is a unique initiative uniting the whole chemical branch by means of promoting mutual help and co-operation among the participants. The primary objective of the initiative is development of good management practice resulting in improved business operation, social communication and responsibility for the goods produced. Perseverance in seeing undertakings through supported by activities relevant procedures derived from the Environment Management System compliant with PN-EN ISO 14001 standard offer a chance to meet the principles of sustainable development including shaping the ecological awareness and co-responsibility for the natural environment among the personnel.

The major ecological investment activities executed by ANWIL S.A. in 2009–2010 include:

- Modernization of TC-1701B the task includes the replacement of the compressor rotor, steering wheels, valves and the insert of the intercooler; the obtained effect: increased compressor and system efficiency in drive to boost the energy-effectiveness of the ammonia production process along with lower CO<sub>2</sub>, NO<sub>2</sub> and CO emission;
- Execution and installation of a silencer on the deaerator of the steam area of II<sup>o</sup> rotavap of ammonium nitrate on line B of the

**plant;** thanks to this investment the lower noise level on the deaerator of the steam area was obtained;

- Modernization of chemical resistant flooring, which effect of water and soil protection against leakages from KPO, KPNK and KPNS drains;
- Closing of water sealing of gasometer T-728 with floating plastic rings; effect obtained: limited vinyl chloride emission from the source under under constant surveillance;
- Installation and connection of self-regenerating filters to raw material bunkers. The obtained effect - lower losses on raw material draftage in the exhaust ventilation system on the masterbatch by selfregeneration of filters. In effect, the raw material waste arising in the production process will be eliminated;
- Replacement of batteries with airtight devices on GPZ2. The obtained effect - elimination of acid vapours and acid sewage in the working place;
- Construction of the installation of the 1.6 MPa medium-pressure steam boiler on A ammonia plant. Increasing the energy efficiency of the ammonia production process as a result of the improved efficiency of the use of process gas energy and improving the ammonia production process continuity, which will lower CO<sub>2</sub>, NO<sub>2</sub> and CO emission into the atmosphere;
- Construction of a stainless steel tank for the ammonium nitrate plant sewage neutralization. The preventive action is meant to stop a potential leakage of sewage into the ground and underground water;
- Modernization of two installations on the water demineralization plant. The investment resulted in lowering the use of hydrochloric acid, soda lye and electric energy in the process of demineralization of decarbonised water, as well as limiting the amount of resulting sewage;
- Modernization of the continuous fumes emission monitoring system in the plant CHP. A highly-efficient system complying with all legal requirements and stipulations from the Voivodship Inspectorate for Environmental Protection concerning the emission monitoring in CHP.





#### SAFETY POLICY

The Executive Board of ANWIL S.A. situated in Wtoctawek being aware of real threats which result from chemical dangerous materials processing and storing that could be disadvantageous to the natural environment, employees' health, local community as well as to production possessions, declares the following:

- Safety ensuring of production processes as well as processing and auxiliary plants services in such a way to prevent break-downs, accidents, occupational diseases and any other undesirable incidents within the production processes;
- 2. Regard safety problems, health and environmental protection integrally while doing business judging them to be an essential source of reducing production costs by preventing losses arising;
- Meeting demands of law in force as well as technical standards with reference to every problem regarding projects, utilization and service of processing and auxiliary plants;
- Full engagement of the highest level management and the whole Company's workmen in favour of processing, technical and ecological safety as well as industrial safety.

#### To meet our obligations we intend to:

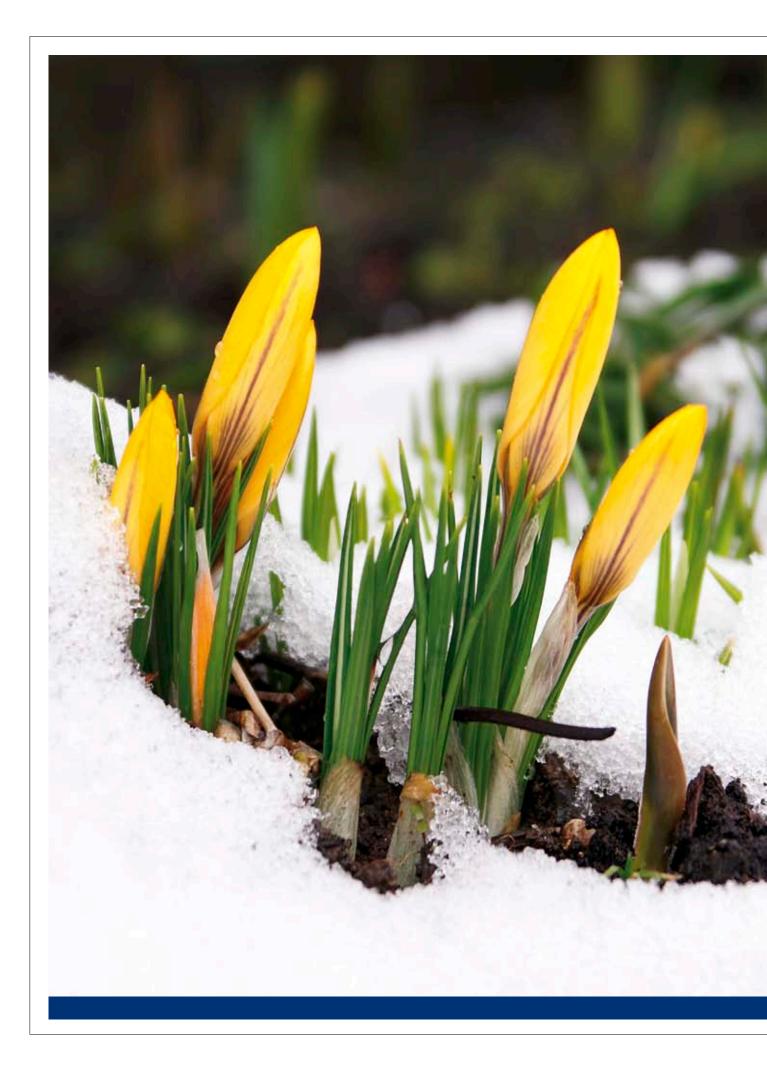
- Manage safety, health and environmental protection comprehensively which presents an integral part of the whole management system;
- Assign obligations, entitlements and responsibilities within the problem of safety ensuring to all employees according to their position;
- Inspire co-operation of the management with all the workers with reference to obeying of safety rules, notifying of accidents and damages and incidents almost accidental as well as to their proposals regarding safety condition improvements;
- Employ the best available, energy-saving, ergonomic techniques to prevent losses which occur as result of damages, fire, occupational accidents and diseases;
- Equip the employees with proper personal protection means, specific rescue and medical instruments and devices;
- Train and equip the industrial Fire Brigade with specific rescue and medical instruments;
- Monitor regularly, audit and inspect safety condition to make control the tasks realization and, in case of need, make correction and carry out preventive activities;
- Improve permanently professionalism of the workers regarding the safety and environmental protection by means of a proper selection system, trainings and educational opportunities;
- Improve permanently activities concerning safety management;
- Keep an open information policy with respect to threats and employed measures of safety and protection for the employees, partners, local community and administration.

The legal base of the policy are legal demands placed in the Work Code, in the Act – Environmental Protection Law as well as in other legal acts. The policy of safety ensuring has been defined in the ANWIL S.A. Safety Book.

10th September, 2007

Chief Executive Officer

Benedyld Kichewi 2\_ Benedykt Michewicz



## Processing safety

In ANWIL S.A., questions regarding processing safety are regarded as much seriously as those economic ones.

All activities towards ensuring safety in the Company are based on the Safety Policy which was adopted in 2002 and is updated regularly.

The Company aims at achieving best results in the way that production processes would not create any threats for employees, possessions, people living in Company's surrounding as well as natural environment.

The basis of work safety, fire and technical safety is employing technology and technical solutions of highest standards according to BAT system. Technical means and organizational procedures constitute the Company's safety system which is launched during damages or improved at trainings.

Requirements connected with formal-legal regulated conditions are realized by ANWIL S.A. with special care and in due time. It has been implemented the "Program preventing from damages", as well as "Internal operation-rescue plan" and "Safety report".

Estimation has been carried out, regarding the least possible demands in relation to employees work safety at workplaces where explosive atmosphere can occur. Simultaneously, estimation regarding the work safety in relation to machines utilization by employees has been carried out as well.

In the Company, organizational units, both formal and supernumerary ones, have been appointed. Their activity is submitted to the following priorities:

- · identification of potential threats and damage situations;
- prevention from break-downs and readiness of all services in case of damages occurrence;
- procedures in case damages, fire or other threats should happen.

The threats identification includes:

- periodic opinion of work conditions;
- opinion on plants technical condition;

- > opinion on professional risk for work-places;
- analysis of damages and accidents cases in other works of chemical branch.

In the range of damages prevention the main activities are the following: analysis of technical-technological protection systems;

- guarantee of fire alarms systems efficiency, performance of fire equipment and stable access to water and other fire agents;
- > assurance of chemical rescue brigades full efficiency.

All Company activities are turn towards still improvement of existing Safety System throughout:

- Safety Policy execution;
- safety conditions systematic estimation;
- · current co-operation with employees and/or their representatives;
- · prevention and correction activities.

The industrial Fire Brigade in the safety system is of great importance. It is provided with a high rescue-fire equipment as well as with a training base where the members of chemical rescue brigade are trained. In 2010 it was provided with two modern fire trucks.

The safety system employed in the Company, the participation in the system of hazardous materials transport assistance (SPOT) as well as obeying international safety regulations in road and rail-way transport (ADR and RID) provide the highest level of safety to employees, other companies working on the territory of ANWIL S.A. as well as to people living in Company's surrounding and natural environment.

The Company is also in the process of implementation of the REACH Regulation, which aims to control the maximum risk associated with the activity, allowing for systematic improvement of human health protection (with particular emphasis on workers exposed to chemicals) and the level of protection of the environment in which business is placed.





# Safety

Safety at work is constantly at the centre of attention of the Company's management. As a result, an increase in the technical safety and improved working conditions have been systematically observed.

In 2009–2010 no fatal or group work-related accidents were noted. The number of accidents throughout the past seven years has been the following: 2004 - 12; 2005 - 14; 2006 - 15; 2007 - 15; 2008 - 10; 2009 - 16; 2010 - 8.

All ANWIL employees benefit from preventive and traditional medical care provided by doctors employed in "PROF-MED" healthcare unit. In 2009–2010 a number of preventive healthcare programmes were run by PROF-MED. Moreover, an awareness enhancement project concerning healthy dieting and work hygiene was launched. The preventive programmes included:

- Early diagnosis of circulatory diseases both female and male population aged 35-55 were examined for circulatory diseases;
- Early diagnosis of cervical cancer examinations included women aged 30–59;
- Vaccinations against viral hepatitis and in autumn-winter season against influenza;
- Nationwide programme "Let's Change Diabetes Together" for all patients suffering from this disease;
- Free-of-charge mammographic examination for all women aged 25–59;
- Fighting the smoking habit programme: "Quit Smoking with Us" strengthening antismoking therapy.

Within the framework of the National Heart Protection Programme, extra blood tests are performed (the level of sugar and cholesterol) for persons over 40years old.

The evaluation of the general level of health condition was performed on the basis of annual medical check-up results, active medical counselling and spontaneous visits at the doctors' surgeries. A systematic preventive policy results in early diagnosis of diseases, thus allowing appropriate action aimed at improving the overall level of health of the Company's employees.

The results of tests and measurements of the concentration of harmful and hazardous factors in workstations performed by means of individual dosimetry indicate that they are maintained below the occupational exposure limits. The only excessive value noted on some installations was the level of noise remaining above the occupational exposure limits. In those cases, the code of action is consistent with the drafted programmes of organizational-technical activities aimed at minimising the exposure of workers to noise. These activities include: application of noise barriers, soundproof cabins, marking of noise pollution zones, application of appropriate hearing protectors, hearing-protecting work system, medical check-ups and observing medical recommendations.

In May 2011, **the First Edition of the Programme: "Safe ANWIL 2011"** was launched. The programme is aimed at enhancing the level of safety in the Company and is directed to all employees of ANWIL S.A. including the senior and middle-level management responsible for providing appropriate levels of Safety at Work and Fire Protection. The programme will comprise trainings and a promotional action aimed at boosting the awareness of all employees regarding the subject of safety. The relations with all subsidiaries and companies cooperating with ANWIL S.A. are to be improved as well.

A detailed analysis of health of the staff is performed during the analysis of the state of Health and Safety in the Company. The level of Health and Safety rests on high qualifications and skills of the specialised personnel and the harmonious co-operation of the Health&Safety services with the management, doctors responsible for preventive medical care provided to employees, Social Labour Inspection and the whole personnel of ANWIL S.A.



## Co-operation with partners

On the way to execute the Company's policy of minimizing the environmental impact of the technological processes, constant co-operation with institutions and organizations dealing with the problem of the natural environment protection is a crucial element.

For a number of years ANWIL S.A. has been efficiently co-operating with the following institutions:

- Polish Group of Chemical Safety at the Polish Chamber of Chemical Industry within the area of exchange of experience in realm of process safety;
- Wrocław Technical University in the area of Best Available Techniques;
- Institute of Environmental Protection in Warsaw exchange of experience:
- Łódź Technical University process safety;
- Industrial Chemistry Research Institute consultations;
- Polish Recycling System Recovery Organization in Warsaw in the realm of packaging waste recovery;
- The European Fertilizers Manufacturers Association "Fertilizers Europe"

   in the area of activities aimed at minimizing the impact of the technological processes and the ready products on the natural environment;
- Forum CO<sub>2</sub> an Organization established by the initiative of the Chamber of Industrial Energetics and Energy Customers. ANWIL S.A. is a member of COIEaEC and takes an active part in in the activities of the FORUM in the area of co-operation and coordination of activities undertaken by branch economic organizations aimed at reducing the emission of greenhouse gases and managing the emission allowances;
- ECVM (the European Council of Vinyl Manufacturers) for minimizing the impact on the natural environment (including the climate, people) of the production of VCM and PVC and for more efficient use of PVC in all its life cycle (e.g. looking for recovery methods). Exchange of knowledge concerning hazardous situations, accidents on production facilities and ways of controlling and measuring the level of impact on the environment. We co-operate for the sake of minimizing the impact of the PVC production industry of the natural environment;

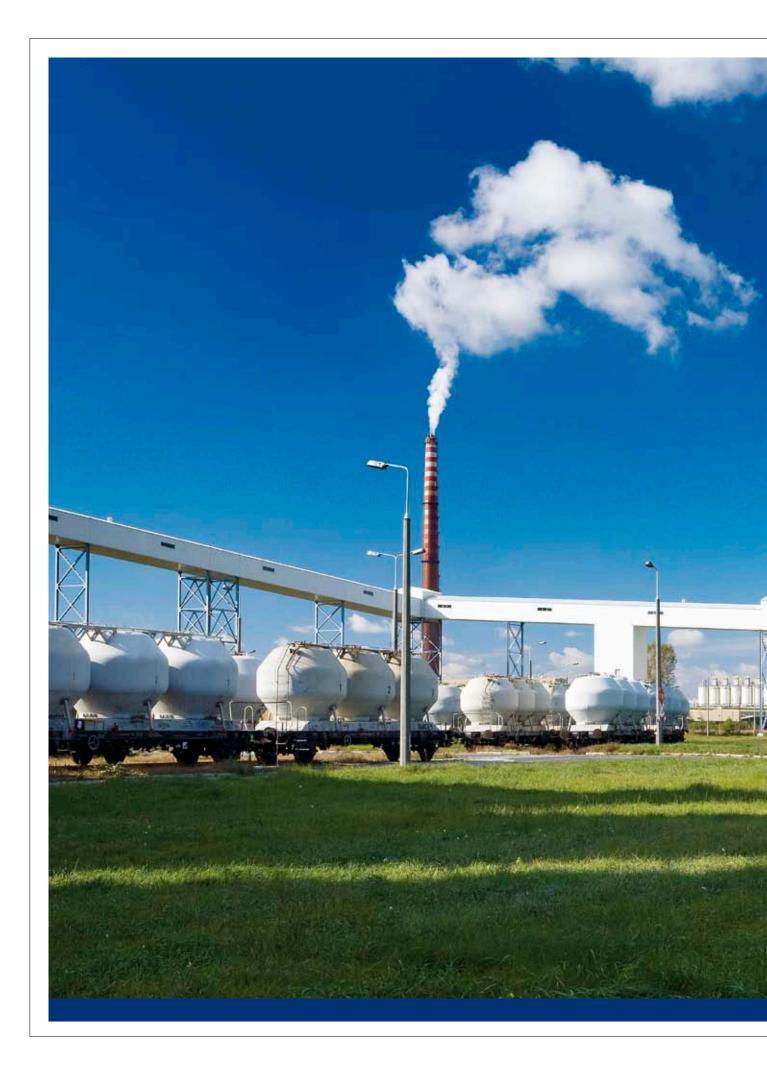
• Eurochlor – for limiting the level of energy consumption for the production processes of chlorine and soda lye, which results in lower  $CO_2$  emission into the atmosphere and preserving the natural resources.

ANWIL S.A. has been maintaining co-operation with CHEMEKO company which is responsible for controlling the impact of technological processes on the surrounding environment, analysing their potential results and imaging the trends of ecological requirements. The Company also runs the Secretariat of the Responsible Care Programme, being thus engaged in promoting ecological ideas in the local community as well as on a nationwide scale.

All ecological initiatives, both in the educational aspect and in the tangible activities are accepted and supported by the local authorities and the Włocławek Centre for Ecological Education. These initiatives include seminars, ecological sessions and competitions organized by local educational institutions and supported financially by ANWIL S.A. One of the most popular activities are those performed within the framework of the Ecological Academy of Skills attended by teachers from Włocławek schools. However, the largest initiative as far as the organizational scale is concerned, is the action named "a Tree for a Bottle", whose ninth edition was organized by ANWIL S.A. in April 2011. The competition is about collecting the largest number of PET bottles which are subsequently recycled. Each time, the schools taking part in the competition receive trees for the bottles collected, which are later planted in their vicinity. It is, however, the educational value of the competition that plays the main role above the prizes, diplomas or sightseeing trips. The ecological education of the young generation, embedding the idea of care for the immediate vicinity, social activating and responsibility for the natural environment are the values enshrined in the organized activities.

The open character of the environmental policy run by ANWIL S.A. is its most important feature. Within the framework of the "Open Days", organized since 1997, the students of Wlocławek schools, the residents of Wlocławek as well as university students are offered a chance to see the Company. Professional guides guarantee top-notch knowledge about the Company and its activities aimed at minimizing the impact of the technological processes on the natural environment.







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