Iskra Avtoelektrika d.d.

Engineering and Investment Department
Environmental Management

Environmental report 2007

"ECO innovativeness"

June 2008

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1. Introduction

In Iskra Avtoelektrika we are aware of the responsibilities in implementing global development initiatives, which follow the principles of sustainable and harmonious development, as we believe that the performance is not important only for ourselves, but also for the entire national economy and society as a whole.

We are aware that in the increasingly stiff competition, we can succeed only with appropriate approach to the issues regarding environment, and health and safety at work, which are becoming more complex and demanding with every year. Strengthening of the competitive edge can be achieved by reduced business risks resulting from the unsuitable relation to the issues regarding environment protection and health and safety of the employees.

It is in fact not easy to balance all three dimensions of the sustainable development, what is proved also by the every day practice. One of the reasons for the economic dimension to still prevail over the other two, especially over the environmental, is also the fact that we often do not implement the values that would help us to achieve our goals, but only talk about them.

In Iskra Avtoelektrika we have realized that in order to achieve the ambitious goals that we have set for ourselves, we will have to revaluate the values, change our way of thinking and acting, and most of all, try to achieve the goals by constant innovations.

2. Environmental Management

2.1 Vision

In Iskra Avtoelektrika d.d. we are aware of the responsibilities in realizing the global development initiatives that respect the principles of environmentally friendly and compliant development, which is the general principle of the new, competitive, dynamic, and knowledge-based economy in the Europe of the third millennium. We want to be a company that will in addition to financial reliability operate in accordance with the social expectations and constantly reduce the negative impacts on the environment throughout the entire life cycle of its products. We are aware that only balanced economic, social and environmental policies enable long-term prosperity also for the coming generations. We wish to develop a high environmental culture of the company that will be present in all its activities, and to establish environmentally efficient business operations that will give the next generations an opportunity to have at least as good quality of life, if not better, as the one we have today.

2.2 Strategy

By proactive, preventive and systematic approach – by implementation of innovative techniques in the field of process optimisation and new BAT technologies, by designing cleaner products – Eco design, and by recycling products we improve the process efficiency, increase the efficient use of natural resources, reduce the amount of waste and emissions at the origin, create clean, healthy and safe working environment, and in this way improve the well-being, health and safety of the employees, achieve savings and increase the reputation and competitive advantages of our company.

2.3 Goals

Strategic goals that we have set for ourselves in the field of environmental management are:

Prevent and reduce burdening of the environment at the origin and the resulting costs
Maintain and improve the environmental quality
Dispense and substitute the hazardous substances
Create clean, healthy and safe working environment
Sustainable use of energy, water and raw materials
Reduce amount of waste and emissions
Respect, meet and exceed the norms of environmental protection to the level that is realisable in technological and economic sense.

2.4 Environmental policy

Knowing the environmental impacts of products and technologies and taking into account the environmental objectives and targets, we implement continual improvements, respect the principles of sustainable development, and are ready for the market demands requiring environment friendly products.
Due to the impacts on the environment, we continuously reduce risks and we cooperate and forward the requirements for environment protection to all that work for or on behalf of the Iskra Avtoelektrika Group.
In all our activities we follow the legal environmental and other legitimate requirements to which our customers and we ourselves are bound.
As employees we are responsible for continual environment-friendly activities in the design, purchase, production and sales of our products and we wish our customers to trust in our environmental endeavours.

2.5 Voluntary approaches – Clean production, ISO 14001, OHSAS 18001

In Iskra Avtoelektrika we are aware that only systematic approach enables us to control the possible threats to the environment and risks for a man, continuously improve and adjust to new legal and other requirements. In 2001 Iskra Avtoelektrika was one of the first 13 Slovenian companies that took part in the project Clean Production. Clean Production Methodology or in other words management of material flows was in the years 2001 and 2002 successfully implemented. Based on it, we easier and faster met the requirements of the standard ISO 14001, and at the beginning of 2003 we also gained a certificate of the mentioned standard. A considerable recognition and additional stimulation for our work in the field of environment protection denoting that we are on the right way was also the award "Environment Friendly Company", which we received in 2005. Our strategy in the field of environment protection is a proactive and preventive approach, meaning that we act at the beginning of or during a process and not based on the consequences.

2.6 Environmental planning

Proactive, preventive and systematic approach in the field of environment management can, in addition to the implementation of innovative techniques in process optimization and introduction of BAT technologies, be seen especially in the field of designing cleaner products. The basic purpose of environmental planning (ECO design) is to reduce the negative impacts on the environment through the entire life cycle by improved planning. A great example are electric power-assisted steering systems (EPS), which enable better fuel efficiency, as they operate independently of the vehicle engine and are more than by half lighter than the classical steering systems.
Due to the requirements from the automotive industry, we had to, even before the Slovenian legislation came into force, eliminate four heavy metals (Pb, Cr(VI), Cd, Hg) from our products, as our customers required. In this way our products became more competitive, we relieved the environment from burdening and undoubtedly reduced the risk of occupational illnesses, as we eliminated the carcinogenic elements such as Pb and Cr(VI) from the business processes.

3. Environmental performance

The results of the eco innovations can bee seen in the environment-efficient operations, which indicate implementation of the principles of sustainable development and widely used concept, as they enable the company a review of business and environmental objectives attainment. Environmental performance is an instrument that transforms the requirements regarding durability into concrete working objectives and can be seen especially in eliminating hazardous substances dangerous for the man and the environment, reducing the amount of consumed water, energy, raw materials, waste and emissions, and in increasing environmental awareness and establishing high environmental culture of the company. Environmental performance consequently increases the motivation of the employees, as it is connected with reducing the risk of occupational illnesses and injuries.

3.1 Environmental accounting

Environmental accounting is a frame for quantitative evaluation of environmental operations of the company and at the same time a method for increasing the environmental performance comprising the means intended for preventive and remedial measures for environmental protection. We are aware of the necessity of the environmental costs transparency if we wish to improve the environmental management process, integrate the cost of pollution to the price of our products, and find the reserves to make savings. We set the foundations of environmental accounting, which we try to upgrade every year. Encompassing of costs that have a direct impact on our operations, i.e. internal environmental costs (expenditure on water, energy, waste, investments…) is quite simple, while a substantial part of costs is indirect, hidden, and difficult to be indicated in numbers. Especially when establishing a system for recording and evaluating these expenditures, a large scale of innovativeness and cooperation of various experts will be required.

Expenditure on	2003	2004	2005	2006	2007
	%	%	%	%	%
Water	0.25	0.19	0.11	0.09	0.08
Energy	0.83	0.83	0.80	0.81	0.92
Waste	0.10	0.08	0.09	0.07	0.06
Environmental investments	0.63	0.42	0.25	0.02	0.10
Taxes	0.04	0.03	0.01	0.01	0.01
Monitoring and analysis costs	/	0.02	0.01	0.02	0.04

Table 1: Percentage of environmental costs in the sales

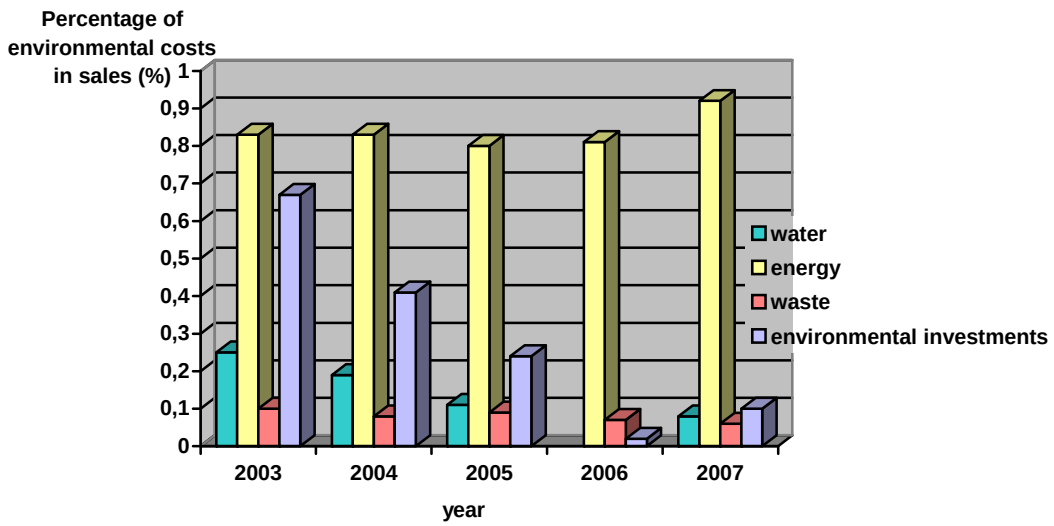

Diagram 1: Percentage of environmental costs in the sales

3.2 Environmental indicators

$$\text{Environmental indicator} = \frac{\text{Environmental aspect}}{\text{Sales value}}$$

3.2.1 Raw and accessory materials

Like economic growth, the use of natural sources and burdening of the environment is increasing. Therefore, we placed the consumption of raw and accessory materials per sales unit among the indicators. Their changing is, due to the positive trend of price increase in the last years, especially important. We wish to reduce the consumption of raw materials per sales mostly by developing new and state-of-the-art products with bigger efficiency and bigger specific powers (electronically commutated DC motor, reduction gear starters, double internal fan alternator etc), by collecting and renewing the already used products, by reject reduction with new technological procedures and total quality control by aluminium, copper, iron etc. recycling.

Raw and accessory materials	EM	2003	2004	2005	2006	2007
Ferrous metals	t	10323	11335	10733	13255	14978
	t/mil EUR	**92.25**	**91.04**	**80.7**	**81.9**	**80.1**
Non-ferrous metals	t	3085	3154	2560	3229	3706
	t/mil EUR	**27.57**	**25.33**	**19.2**	**19.9**	**19.8**
Oils	t	74. 9	72.1	53.4	63.6	42.4
	t/mil EUR	**0.67**	**0.58**	**0.40**	**0.39**	**0.23**
Emulsion oils	t	7.03	15.9	18.6	20.6	12.5
	t/mil EUR	**0.06**	**0.13**	**0.14**	**0.13**	**0.07**
Paint, varnish	t	15.4	14.7	12.9	15.2	15.0
	t/mil EUR	**0.14**	**0.12**	**0.10**	**0.09**	**0.08**
Impregnation resins	t	71.3	75.9	76.1	77.1	77.4
	t/mil EUR	**0.64**	**0.61**	**0.57**	**0.48**	**0.41**
Chlorinated solvents	t	11.9	7.0	6.6	9.3	6.6
	t/mil EUR	**0.11**	**0.06**	**0.05**	**0.06**	**0.04**
Other solvents and diluents	t	8.3	8.9	8.9	12.8	11.0
	t/mil EUR	**0.07**	**0.07**	**0.07**	**0.08**	**0.06**
Toxic chemicals	t	7.9	10.3	9.0	10.74	12.7
	t/mil EUR	**0.08**	**0.13**	**0.11**	**0.09**	**0.07**
Aqueous-based cleaning solutions	t	5.0	3.9	14.4	16.3	11.6
	t/mil EUR	**0.04**	**0.03**	**0.11**	**0.10**	**0.06**

Table 2: Consumption of raw and accessory materials

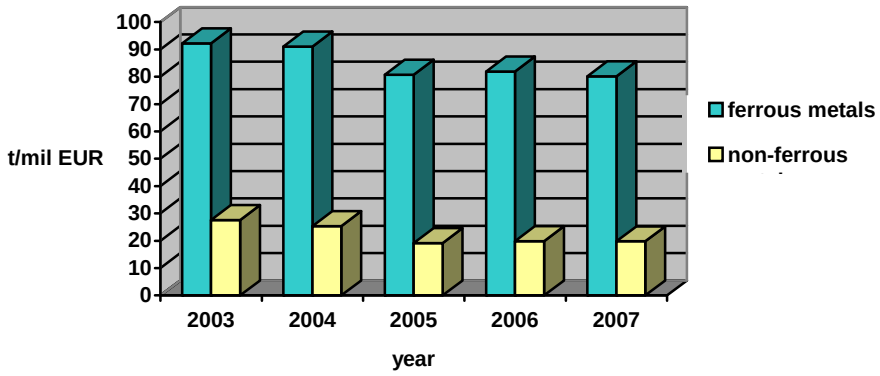

Diagram 2: Consumption of raw materials with regard to the sales

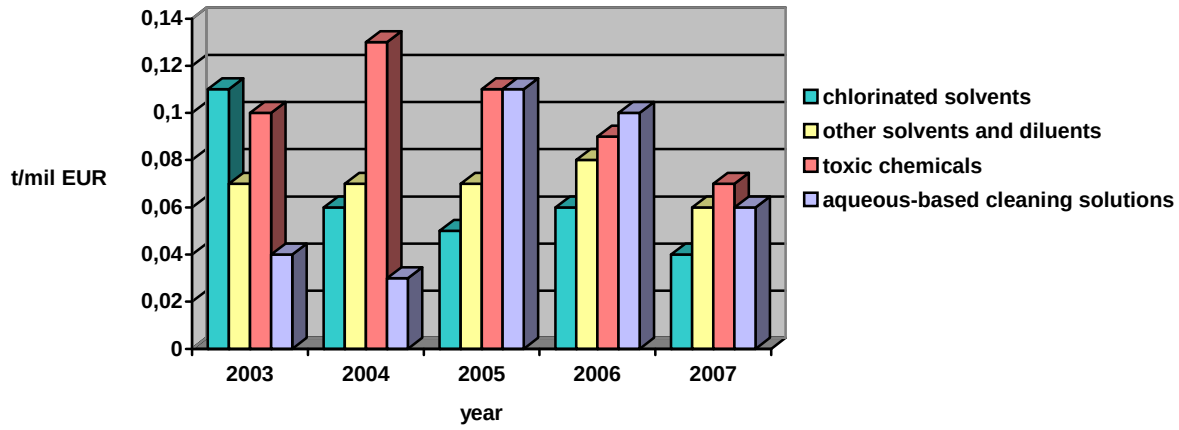

Diagram 3: Consumption of accessory materials with regard to the sales

Introduction of the state-of-the-art, which are also economically justified, brings tangible results and benefits.
By replacing the old impregnating machines using trickle impregnation method with the new ones, where impregnation is carried out by dipping the products into a small amount of varnish, we substantially reduced the consumption of impregnation resins. In addition to lower material costs, higher productivity and improved process efficiency, we considerably reduced emissions of high volatile substances to air, improved working conditions of the employees and reduced the risk of occupational illnesses.

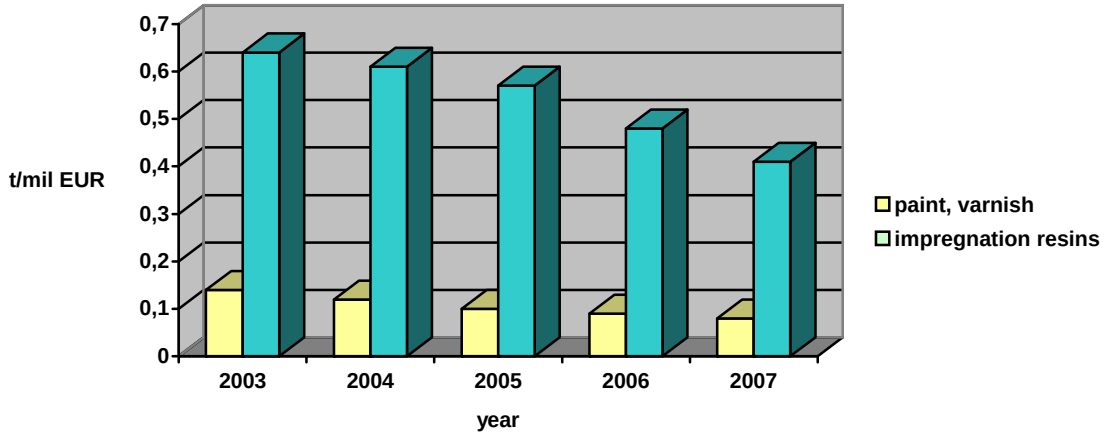

Diagram 4: Consumption of paint, varnish and impregnation resins with regard to the sales

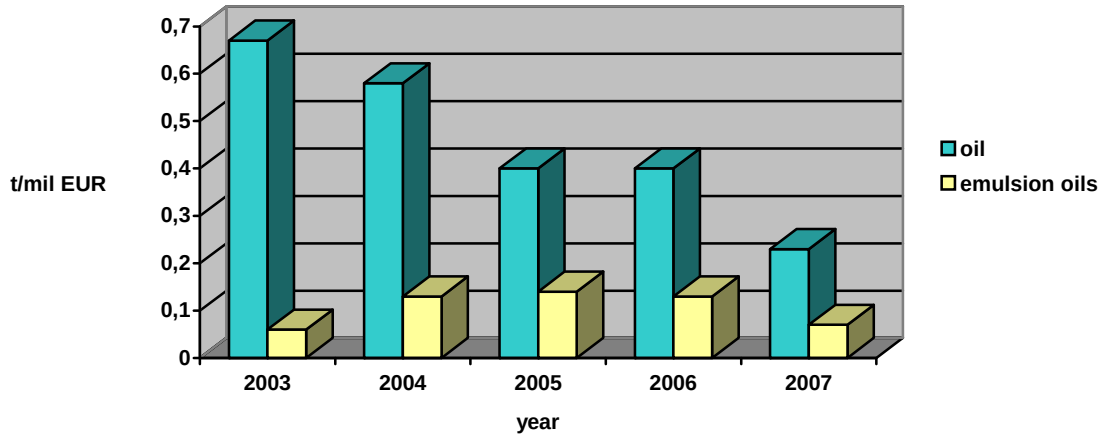

Diagram 5: Consumption of oils and emulsion oils with regard to the sales

3.2.1.1 Chlorinated solvents

In addition to introduction of BAT technologies, innovative techniques are those that help to achieve the set environmental objectives. Wherever possible we are replacing the hazardous chemicals with those that are environment friendlier. The use of chemicals that have a special effect on the health of people, i.e. carcinogenic, mutagen and reprotoxic chemicals, is in our production processes prohibited. Due to the change in technology and replacement of accessory raw materials (soldering paste) in the programme of electronics, and supply of a new washing plant that uses a biodegradable aqueous cleaning solution, we completely eliminated the use of trichloroethene years ago. In 2003, we also replaced the very dangerous solvent dichloromethane, which had been used for cleaning of the impregnating machines with a cleaning agent based on citrus oils. In this way we lowered the emissions of chlorinated high-volatile substances to air and significantly improved the working conditions of the employees.
The only chlorinated solvent that we are still using is tetrachloroethene, which is used for semi-manufactures cleaning in the washing plants with completely closed system of washing. In 2008 we are going to replace these plants with those that use detergents. In this way, we will prevent the emissions of chlorinated volatile substances at the source and importantly improve the working conditions of the employees.

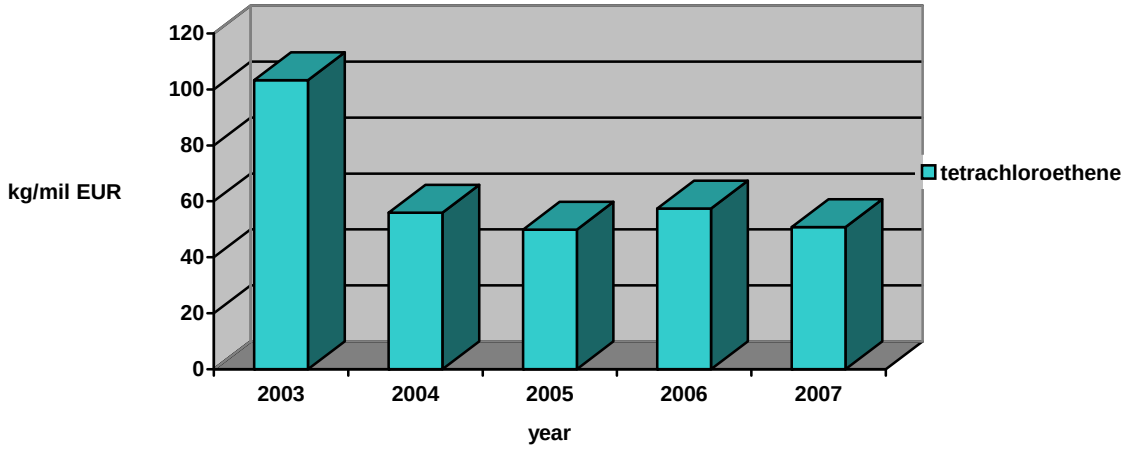

Diagram 6: Consumption of tetrachloroethene with regard to the sales

3.2.2 Water

Two preliminary conditions for natural and harmonious development and high quality of life are clean water and air. Climate changes, increasing number of inhabitants, pollution due to the wrong methods of farming and industrialization are only a few reasons causing reduction of disposable clean water from day to day. Responsibilities for such treatment cannot be shifted to the shoulders of the future generations, therefore responsible treatment is an obligation of all of us. Also in Iskra Avtoelektrika the relation towards the drinking water in the last years changed a lot, what is proven by the information in the diagram below. Implemented BAT technology in the field of surface protection (zinc coating line with cleaning unit, the new phospating lines), replacement of the water cooled compressor with the screw compressor, placement of closed cooling systems, elimination of leakages and other organizational measures in the sense of greater control and raised awareness of the employees contributed to the reduced water consumption by **71%** per unit of sales in the last five years.

Water type	EM	2003	2004	2005	2006	2007
Process water	m3	55000	55000	18000	20000	17000
	m3/mil EUR	**491.5**	**441.8**	**135.3**	**123.5**	**92.2**
Cooling water	m3	*	*	*	*	8000
	m3/mil EUR					**48.2**
Sanitary water	m3	23000	23000	23000	26000	28000
	m3/mil EUR	**205.5**	**184.7**	**172.9**	**160.9**	**149.0**
Mains water	m3	*	*	*	*	63000
	m3/mil EUR					**332.6**
Total water	m3	237000	237000	126000	116000	115000
	m3/mil EUR	**2118.0**	**1903.6**	**947.4**	**716.5**	**613.4**

* In the period from 2003 – 2006, the data on the cooling and mains water were not recorded separately.

Table 3: Water consumption

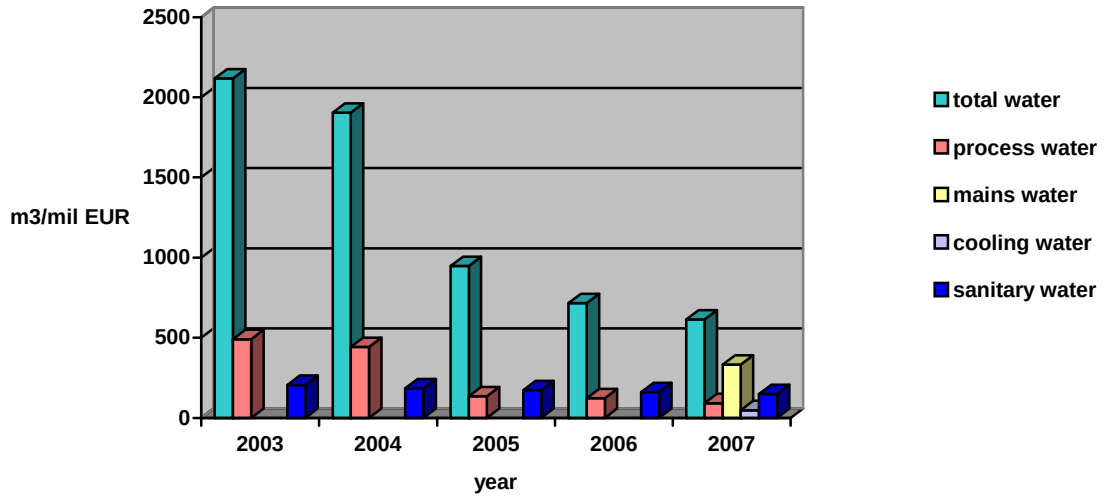

Diagram 7: Water consumption with regard to the unit of sales

3.2.3 Energy

In the last years one can notice the reduction of the specific use of energy sources with regard to the sales. This is a consequence of more rational consumption of energy and better exploitation of working means due to increase in production. Building a boiler house to heat electro-plating and phosphating baths using liquefied naphtha gas that was in 2001 replaced with natural gas greatly contributed to a considerable reduction in the consumption of electric power. In the last five years the specific use of energy sources was reduced by **29.0%.**

Energy products	EM	2003	2004	2005	2006	2007
Electric power	MWh	12856	14005	14089	15070	15959
	MWh/EUR mil	**115**	**112**	**106**	**93**	**85**
Natural gas	sm3	1245448	1372838	1453593	1418446	1402965
	MWh	11781	12987	13751	13419	13272
	MWh/ EUR mil	**105**	**104**	**103**	**83**	**71**
Total	MWh	24637	26992	27840	28489	29231
	MWh/mil EUR	**220**	**216**	**209**	**176**	**156**

Table 4: Consumption of energy products

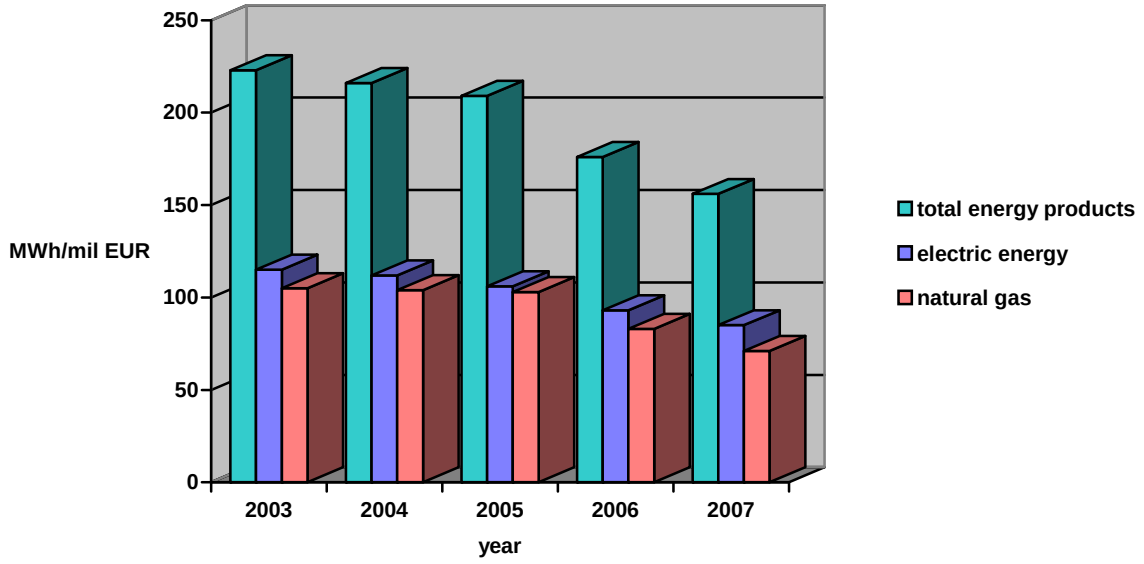

Diagram 8: Consumption of energy products with regard to the sales

3.2.4 Emissions

3.2.4.1 Emissions to air

A certain amount of pollutants, which is unavoidable by product of fossil fuels combustion, is also a cause for the climate changes that we are facing in the last years. These are mostly carbon dioxide, which is the main cause for the greenhouse effect and global warming, sulphur dioxide, which together with nitrogen oxides causes acidification of air and as a result destroys green areas, and carbon monoxide as a result of an incomplete combustion. Our company pays a lot of attention to the firing plants; we maintain them regularly. By replacing medium fuel oil with gas in the year 2001 we contributed to better quality of air, as we eliminated SO_2 emissions, reduced CO_2 emissions and got rid of the soot. The use of natural gas not only helps to reduce the emissions, but it also burdens the natural environment less, since its transport beneath the ground neither makes any noise nor burdens the road, rail or sea transport.
In Iskra Avtoelektrika we regularly control emissions that cause pollution in compliance with Slovenian legislation. Constant control is carried out by the specialized institutions that are authorized by the Ministry of Environment.

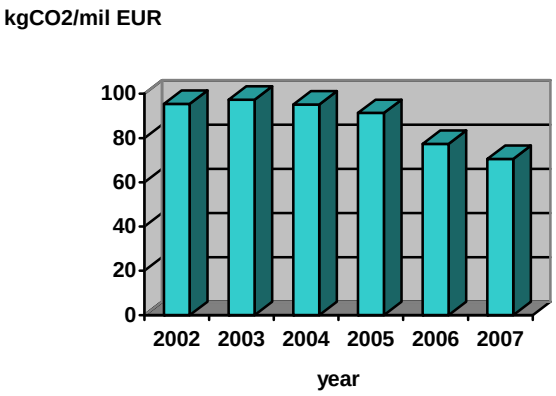

Diagram 9: Annual CO_2 emission with regard to the sales

3.2.4.2 Emissions to water

Quality of waste process water is controlled daily in our own laboratory. Monthly analyses and monitoring (3 times per year) are carried out by an external authorized organization.
The renovation of the zinc coating and phosphating lines and waste water treatment plant (WWTP) in the year 2000/01 helped us to significantly improve the quality of waste process water. The average concentration of heavy metals in waste water is way below the allowed limit values (see diagrams 10 and 11).
Parameters in table 5 marked with blue are considered when calculating the units of burden (UB) and a tax is paid for them. Until 31.10.2007 we are exempt from measurements for the parameters, of which values are below the quantitative limit for the method of testing – free cyanide and cadmium. In the year 2006 the average limit value of zinc was exceeded due to the high concentration of zinc in the third monitoring. The cause was uncontrolled batch treatment of the waste water. By introduction of colorimetric rapid tests for additional checking of zinc concentration in batch treatment the cause for nonconformities was eliminated.

Parameter	Unit	Limit value	2003	2004	2005	2006	2007
Unit of burden	No.	-	515	623	528	524	633
pH	mg/l	**6.5-9.5**	9.1	8.8	8.3	8.5	8.7
COR	mg/l	-	71.4	154.4	111.7	50.8	281
copper	mg/l	**0.50**	0.015	0.020	0.020	0.019	0.015
nickel	mg/l	**0.50**	0.029	0.020	0.064	0.038	0.033
lead	mg/l	**0.50**	0.003	-	-	0.006	0.005
cadmium	mg/l	**0.20**	0.000	-	-	-	-
chromium (VI)	mg/l	**0.10**	0.006	0.010	0.09	0.010	0.034
AOX	mg/l	**1.00**	0.051	0.035	0.299	0.177	0.07
total phosphorus	mg/l	**2.00**	0.7	0.7	1.2	0.4	1.4
total bonded nitrogen	mg/l	-	4.8	9.5	10.3	39.4	9.0
zinc	mg/l	**2.00**	0.626	0.669	1.352	3.73	1.11
HVCH	mg/l	**0.10**	0.016	0.020	0.428	0.142	0.02

UB..... unit of burden
COR..... chemical oxygen requirement
HVCH.... Highly volatile chlorinated hydrocarbons
AOX..... Absorbable organic hydrocarbons
-... Exempt from measuring until 31.12.2005

Table 5: Quality of the process waste water (average values)

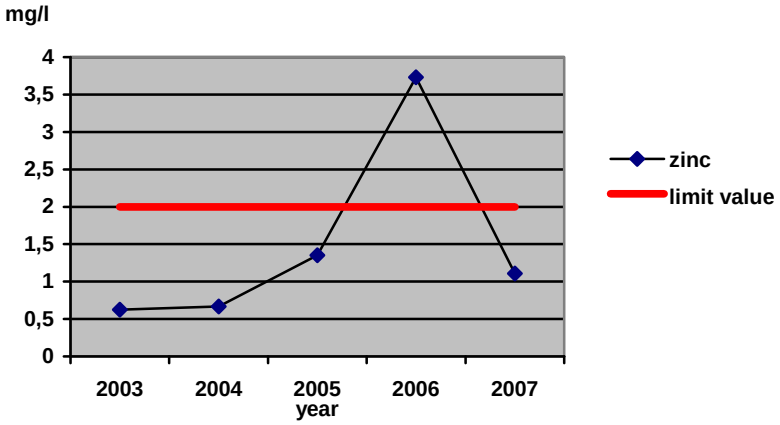

Diagram 10: Average concentration of zinc in waste water

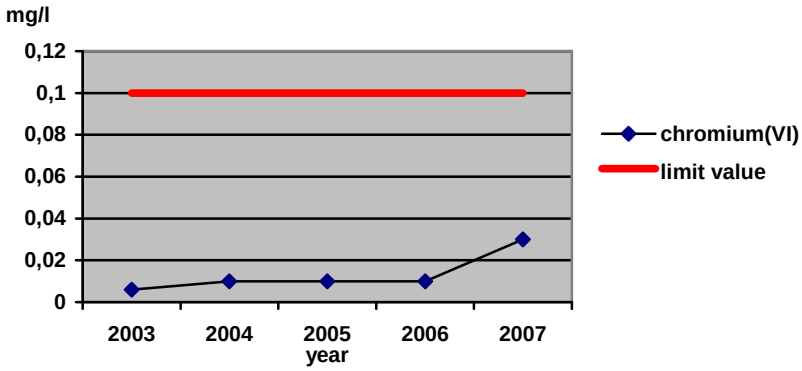

Diagram 11: Average concentration of chromium (VI) in waste water

3.2.5 Waste and waste packaging

3.2.5.1 Waste

In Iskra Avtoelektrika d.d. we are aware of the fact that in waste there are many costs hidden, which we usually do not record, therefore in reducing their amount we see a great opportunity of making savings. Proper waste management brings direct financial benefits to the company and has at the same time decisive impact on the wider environment and future of the man and his role in it. Separate collection of waste enables the useful waste to end in the processing industry and not at the landfill sites. In this way, we return materials to the industry for production of new products, protect the valuable landfill sites, preserve natural resources, water and energy, reduce the emissions of greenhouse gases and make savings.
We divide our waste in hazardous waste (waste chemicals and packaging polluted with hazardous substances, bacteria, fluorescent lamps, cartridges and printing toners, electronic equipment), recyclable waste (ferrous metals, non-ferrous metals, plastic packaging, paper, wood, biodegradable kitchen and canteen waste, waste edible oils) and non-recyclable waste (municipal waste, non-recyclable plastic packaging (PVC, foamed polystyrene) car tyres). We keep records of the sorted wastes, store them temporarily in well arranged storehouses and dispose them in cooperation with the authorized waste collectors and disposers – Saubermacher, Ekol, Surovina, ONM-ENERGIJA, Biotera, and Komunala. In 2007 we upgraded the system of separate collection of waste and in this way substantially reduced the amount of the municipal waste. Consequently, we lessened the burdening of the municipal dumping in Stara Gora for 180 tons of municipal waste and created EUR 31,000 of savings at the annual level.

TYPE	AMOUNT	2003	2004	2005	2006	2007
RECYCLABLE WASTE	t	*	*	*	*	4247.2
	t/EUR mil	*	*	*	*	**22.7**
NON-RECYCLABLE WASTE	t	*	*	*	*	167.7
	t/EUR mil	*	*	*	*	**0.90**
HAZARDOUS WASTE	t	*	*	*	*	272.2
	t/EUR mil	*	*	*	*	**1.46**

Table 6: Amount and type of waste

* There are no data for the past years due to the new data acquisition methodology and upgraded system of separate collection of waste system in 2007.

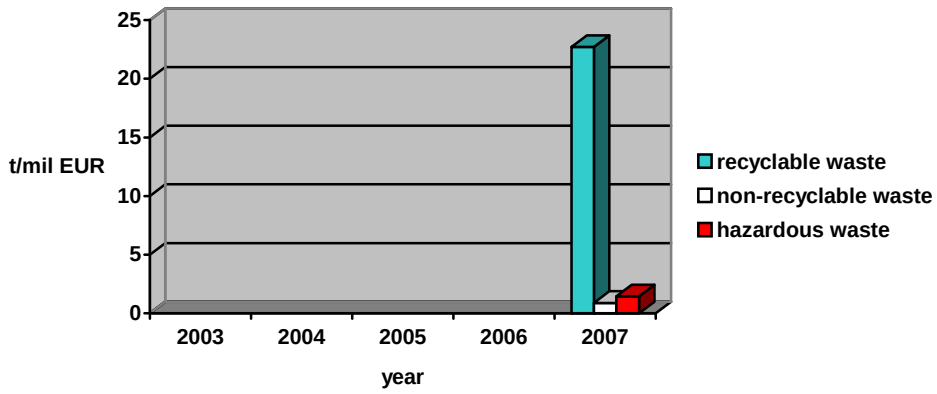

Diagram 12: Amount and type of waste with regard to the sales

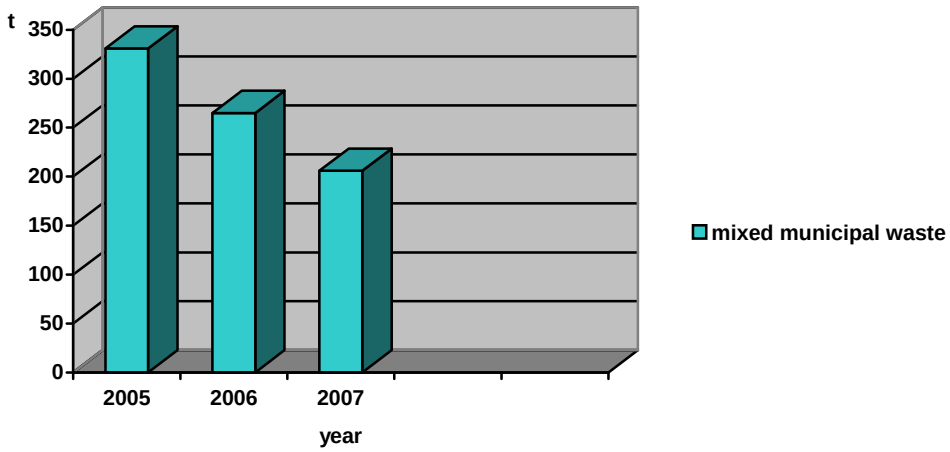

Diagram 13: Amount of mixed municipal waste by years

3.2.5.2 Waste packaging

The packaging has a great impact on the environment pollution and depleting the reserves of raw materials and energy, so we pay a lot of attention to the correct choice of type and amount of packaging and everywhere it is possible we are establishing a returnable packaging system. Only by replacing the non-returnable packaging with the returnable one for one type of impregnation varnish we, in the year 2003, reduced the amount of hazardous waste packaging by 2600 kg.
Since 1.1.2002 we as producer, importer, packer and final consumer have to provide the Environmental Agency of the Republic of Slovenia with an annual report about the amount of the packaging that we put into circulation and about waste packaging treatment. The responsibilities of waste packaging treatment in compliance with regulation (Ul.104/00 and 12/02) of 1.1.2004 were communicated to SLOPAK – a company that deals with waste packaging.

PACKAGING		PACKER (delivered packaging)					FINAL CONSUMER (received packaging)				
	EM	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Paper and cardboard	t	416	445	441	479	120	22	30	31	40	107
	t/EUR mil	**3.72**	**3.57**	**3.32**	**2.96**	**0.64**	**0.20**	**0.24**	**0.23**	**0.25**	**0.57**
Metals	t	7	8	8	8	11	9	9	9	10	12
	t/EUR mil	**0.06**	**0.06**	**0.06**	**0.05**	**0.06**	**0.08**	**0.07**	**0.07**	**0.06**	**0.06**
Plastics	t	31	32	33	35	17	9	10	11	12	19
	t/EUR mil	**0.28**	**0.26**	**0.25**	**0.22**	**0.09**	**0.08**	**0.08**	**0.08**	**0.07**	**0.10**
Wood	t	439	416	405	442	1919	19	20	22	25	76
	t/EUR mil	**3.92**	**3.34**	**3.05**	**2.73**	**10.28**	**0.17**	**0.16**	**0.17**	**0.15**	**0.40**

Table 7: Review of delivered and received packaging

3.2.6 Noise

Concern to reduce noise in the natural and living environment in the last few years can be seen in numerous activities, such as:
building noise protection on the pump for water cooling in the hardening shop (2002)
insulation of air-conditioning device and ventilation in the electroplating shop (2003)
building new (closed) testing room for motors, where our products are tested for durability run (2002-2003)
placing mufflers to the fans in the zinc line (2004)

The measurement results and noise analyses show that Iskra Avtoelektrika's operations do not burden the environment with noise more than is allowed neither during the day, evening, nor at night. Also, the peak noise is within the limits.

Measuring points		2002		2005		2008	
		daily (dBA)	nightly (dBA)	daily (dBA)	nightly (dBA)	daily (dBA)	nightly (dBA)
	IV category	**68**	**68**	**68**	**68**	**73**	**73**
	Measuring point No. 1, eastern border opposite the production hall MZ (building No. 4)	51	46	49	<40		
	Measuring point No. 2, eastern border opposite the canteen (building No. 6)	48	46	41	<40		
	Measuring point No. 3, NE border opposite the tools factory (building No. 11)	55	46	42	<40		
N	Measuring point No. 4 (the new **measuring point No. 1**), on the border with the dwelling house, ul. A. Gabrščka 40	48	46	39	37	49	42
W	Measuring point No. 5 (the new **measuring point No. 2**), western border opposite the testing grounds (building No. 23), after the extension construction	70	68	63	61	69	60
SW	Measuring point No. 6, SW border corner (the new **measuring point No. 3**) (building No. 28)	48	46	48	<40	50	40
	Measuring point No. 7, eastern border opposite the production hall VZ (building No. 2)	51	49	53	47		
NE	Measuring point No. 8 (the new **measuring point No. 4**), NE border by the old reception lodge	56	42	56	40	52	43

Note: As defined by the community Šempeter-Vrtojba under No. 354-11-1/2008, dated from 04.02.2008, Iskra Avtoelektrika is within the noise protection level IV.

Table 8: Noise measurement results by years

In compliance with the regulation on first measurements and operational noise monitoring of the noise sources and conditions for their implementation (Official Gazzete of the RS 70/96) for the points that are marked in grey, there is no need for monitoring, as the daily (56dBA) and the nightly (46dBA) limit noise levels were not exceeded during the noise monitoring in 2002 and 2005.

3.2.7 Working environment

The company pays a lot of attention to a working environment that is friendly and in good order, what is undoubtedly proved by the first place award in the regional and the second place award in the national competition for a neat and well-organized working environment within the project "Moja dežela, lepa, urejena in čista" (My country, beautiful, in good order and clean) in the year 2003.
Caring for health of the employees and creating a healthy working environment can also be seen in the better organization of work places and working conditions. In case of emergency, we have placed liquid traps and ecological containers with absorbents to the places with greater possibility of spillage of hazardous chemicals. We have acquired fireproof cabinets to store the chemicals and additional containers to collect waste separately. In 2004 we placed to the warehouse of hazardous waste a 37m3-large container for storing hazardous liquids, and we also equipped the delivery point for chemicals with a similar 18m3-large container and in this way enabled a safe delivery of hazardous chemicals. In the case of older machines, where leakages could not be eliminated, we placed absorbers on the floor and in this way reduced the risk of pollution, and accidents and injuries of the employees.

4. Environmental investments

In the last years we have been systematically replacing the old and environment-unfriendly technology with BAT technology that reduces the consumption of energy, water, and raw materials, diminishes emissions and the amount of waste at the source, and improves the working conditions of the employees. When investing in devices and infrastructure we always consider the environmental aspects and risks of occupational injuries and illnesses. The new technology greatly contributes to streamlining of business processes and increasing of our company competence.

Implemented environmental investments (in EUR):

No.	DEVICE	purpose*	2003	2004	2005	2006	2007
1	Ecological containers	7			1.464	1.211	
2	Liquid traps and containers	7				625	
3	Floor renovation in plant I	7					31.840
4	Device for mechanical cleaning of emulsion	1,2,10					16.000
5	Impregnating machine	1,8,10	532.748				
6	Circuits washing plants	9	9.000				
7	Tools washing plant	1	23.600				
8	Air cleaning on the press	4,7	12.489				
9	Screw compressor	1,8	116.300				
10	Sludge container	2	1.400				
11	Closed cooling systems in SBU AE	1		2.687			4.905
12	Device for selective painting PVA	7,9		5.321			
13	Reconstruction of phosphating line	1		392.000			
14	Storage containers (3)	6		16.565			
15	Cooling systems SES	1		23.500			
16	Mufflers in the electroplating shop	3		5.405			
17	Waste containers	2	7.400	7.484		6.529	4.603
18	Screw compressor GA 75	1,8		23.832			
19	Improvement of water ventilation ORO	7		4.000			
20	Improvement of ventilation	7		1.900			
21	Renovation of heat conductor	8		9.205			
22	Cleaning of heavy fuel oil tank	2		17.487			
23	Spray booth	4		5.697			
24	Alu booth	7		1.838			
25	Air conditioning device	7		1.932	8.440	15.697	10.765
26	Ventilation on the line ALT	7			3.550		
27	Alu booth	7			13.476		
28	Standing ashtrays	5			234		
29	Impregnating machine BOSIO	2,4,9,10			99.200		
30	Device with installation for cooling of	1,10			10.834		
31	Lifting and manipulating device	7			5.658		
32	Reconstruction of the production hall in	5			5.705		
33	Filter device for oil fog	4,7			3.313		
34	Container with a trap	2			1.308		
35	Air conditioning and cooling device MECH	7			103.215		
36	Equipment for cleaning the premises	2,7			11.759		
37	Liquid traps for tanks	2			1.400		
38	Screw compressor	8,10			56.659		
39	Industrial vacuum cleaners	2,4,7				544	9.950
40	Lights in the prototype shop	7				4.587	
41	Replacement of roof covering made of	4,9					37.998
42	Soundproof booth	7					16.890
43	Peristaltic pump	1,2					2.754
44	Suction	2,4					45.136
	TOTAL		**702.9**	**518.853**	**326.2**	**29.193**	**180.84**

Table 9: Overview of implemented environmental investments

* Review of environmental investments designations by the purpose:

1 waste water management
2 waste management
3 protection from noise and vibrations
4 protection of air and climate
5 protection of biological diversity and the country
6 protection and improvement of ground, ground water and surface water
7 improvement of working conditions of the employees
8 rational energy consumption
9 replacement of hazardous substances with the ones that are environment-friendlier
10 rational use of raw and accessory materials

5. Environmental programmes

In compliance with the requirements of the Environment Management System also for the following years, objectives and programmes are set based on the recognized environmental aspects. More rational water and energy consumption remains our priority objective also for the future. By setting up closed cooling systems in the machines, where up to now we have not managed to close the circuit, we will additionally reduce the consumption of cooling water and in this way make the best use of the available capacities.
We will reduce the compressed air consumption by introduction of air remote control. This will enable selective coupling of individual parts of production, which will require supply outside the working hours.
Due to the exceeded limit values of high-volatile substances in the air, we decided to replace the types of varnish that contain lots of solvents with those that are based on water, in compliance with the principles of preventive and proactive operations. The tests are being carried out. Moreover, in 2008 washing plants on tetrachloroethene will be replaced by washing plants on detergents.

6. Environmental communication

Our goal is to achieve the objectives of sustainable development with constant improvements, the highest possible protection of environment, health and safety of people, as the results can certainly be seen in the creativity and innovativeness of the employees, and also in their skills and competence. The competent people are those that can contribute to the process of continuous improvements. We realize that we can increase the environmental responsibility, which is an obligation of every individual, only by sufficient and quality informing, educating and making all the employees, suppliers, subcontractors and also the general community aware. In addition to regular annual training and education, we inform the employees about the environmental effects and the achieved improvements with articles in the internal magazine "Zagon" and through the intranet, where we publish shorter news about the important environmental events and achievements. By using the electronic documentation system EDOS, every PC user has the access to the environmental reports, records on the environmental college, relevant environmental legislation, and lists of environmental aspects, goals and programmes. Presentation of the process "Environment management" at the traditional "Excellence Day" in March 2004 was meant mostly to raise the awareness of the managers and senior executives of the corporation and daughter companies in Šempeter pri Gorici. In December 2004 we prepared a presentation for the managers and senior executives of our daughter company Avtodeli Bovec; the presentation was about the new Slovenian and European environmental legislation. At the traditional conference "World-class production" in December 2004 we spoke about the set environmental goals, programmes and requirements of IPPC Directive. The customers, investors, local community, employees and other interested publics are increasingly interested in how successful the companies are in integrating economic, social and environmental policy, therefore we established with them a close environmental communication. By publishing the environmental policy and environmental reports on our Internet sites, we have enabled an easy and free access to information to anyone that is interested in environmental performance of our company. We wish to be an environment-friendly company, open to a dialogue with the wider local community, therefore we have, for many years now, conducted a survey to find out what the locals think about the effects that we have on the environment. In December 2003 we organized an open door day called "Our common environment", where we openly spoke about the effects of our business on the environment, showed the progress in the field of environmental protection in the last years, and informed the public with our plans for the future. In this way we gave the public a direct opportunity to express its opinions, requirements or worries and established a two-way communication, which is undoubtedly important if we wish to be a company that acts responsible to the society. The process of raising the awareness is one of those that last the most, as it includes changing the life philosophy, system of values and consequently the way of life, what does not happen overnight.

Our suppliers and subcontractors are very important part of the process of product realization that can have a great impact on the environment, so we pay a lot of attention also to raising their awareness. At the tradition "Suppliers Day" in April 2004, we informed them about the orientations and novelties in the field of environmental protection and the requirements of the Slovenian and European legislation and European Directives. We check their environment-protective operations by a questionnaire "The Supplier's Attitude Towards the Environment" and we take the results in consideration when making an evaluation.

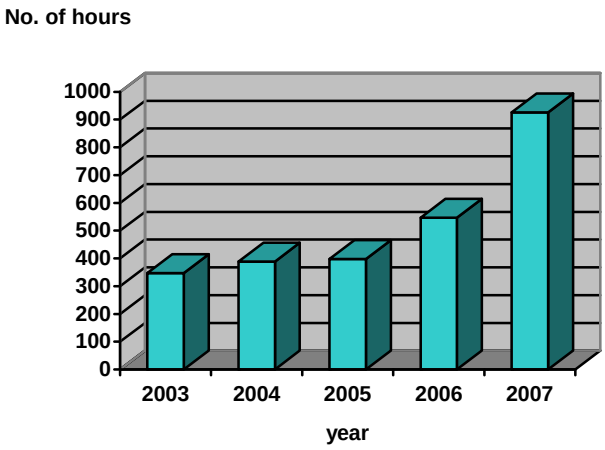

Diagram 14: Number of hours (man) per environmental training by years

7. Legislation and Directives

Implementation of the environmental legislation in the economy is closely linked to sustainable development. By entering the European Union, the volume of Slovenian requirements regarding environmental protection increased a lot, since in addition to legislative and regulation acts of the Slovenian legislative, there are also the EU regulations and provisions that are binding for all the EU members and have to be met consequently. Similarly, the requirements of Directives have to be transposed into the national laws.
The most topical and binding Directives from the field of industrial pollution and the prohibition of the use of hazardous substances for us at the moment are:

EU Directive on Integrated Pollution Prevention and Control - IPPC (96/61/EC)

The goal of this Directive is to achieve an integrated approach to pollution prevention and control and a high level of environment protection by using BAT techniques. It defines different kinds activities and devices that can cause the pollution of greater extent and for which an environmental authorization (permit) has to be obtained until 31.10.2007. Introduction of environmental permits requires from a company an integrated environmental control, constant monitoring of environmental aspects, and through the set and realized environmental programmes implementation of continuous improvements.

EU Directive on Packaging and Waste Packaging (94/62/EC)

This Directive binds the producers, packers, importers and merchants to responsibly take care of waste packaging in order to minimize the amount of waste packaging and to prevent and/or reduce the adverse effect on the environment due to the content of hazardous substances.

EU Directive on End of Life Vehicles (2000/53/EC)

Directive on End of life vehicles, to which we are bound as the producers for the automotive industry, entered into force on 1 July 2003. The aim of this directive is to bring into line different national standards with reference to disposal of end of life vehicles in order to minimize the negative impacts on the environment, what can be seen in the requirements to build in materials that do not contain environment harmful substances and in collecting, reusing and processing the vehicles components. Due to great damage in the environment caused by heavy metals, the Directive **prohibits** the use of **lead, mercury, cadmium, and chromium (VI).**

EU Directive on the Limitation of Emissions of Volatile Organic Solvents (99/13/EC)

EU Regulation on Registration, Evaluation, Authorization and Restriction of Chemical Substances – REACH (EC 1907/2006)

8. Conclusion

Economic growth and effective environmental management are compatible. Integration of environmental, economic and social goals is possible also in the business practice, if we only know how to gain the synergies between these fields. Iskra Avtoelektrika's Environmental Report for the year 2007 proves this, too.

Concrete examples from our business practice and the achieved results reflect innovative and responsible approaches, by which we try to combine the economic growth and effective environmental management in our operations. We are aware that striving for headway, success and profit, we must not forget that we are part of nature, which changes faster and more harshly than we wish. Today the consequences of irresponsible human treatment can be well seen and according to the scientists we can expect even worse, if the man does not make any radical changes.

So in order to adapt our material activities to the natural processes, we have to start acting better and in a completely new way.

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