3 Our Susceptibility To Ecological Environment

CORPORATE RESPONSIBILITY REPORT 2009

Protecting the Environment and Reducing The Usage of Natural Resources

Our Environmental Management

We start our activities from the design stage with the idea of protecting the ecological environment. We extend this line of thought throughout the stages of acquisitions production and the recycling of the waste from products. We handle these issues with the environmental dimension and the impacts they have on the environment, hence in a manner that allows us to observe the protection of natural resources. In this context, we take care to use materials with low environmental effects. We organise routine training sessions on the environment in our corporation to help the protection of ecological environments and to inform our employees frequently.

We have structured our Environment Management System on the basis of 'Environment-Dimension- Effect Evaluation' and Bilim Pharmaceuticals Environmental Policy and in compliance with ISO 14001 standards encompassed by Integral Management Systems. Our activities within the scope of 'Environment-Dimension-Effect Evaluation' are always assessed according to their environmental dimensions and effects. We have also put together a Yearly Environment Management Action and Management Plan to be able to reduce environmental effects to a minimum and to control them.

We have put together important procedures and directives with direction from the results of 'Environment-Dimension-Effect Evaluation' to keep environmental effects under control. We take 'Waste Management Procedures' and 'Energy Management Procedures' as a guide in activities we undertake on the sustainability of ecological environments. The expansion and application activities are assessed and reviewed through the last ' Environment-Dimension-Effect Evaluation', internal and external auditing findings, incidence reporting and the feedback of employees.

We identify the environmental dimensions and effects of our activities and products, their legal and local requirements, the ins and outs of every procedure, their routine and exceptional management circumstances and emergency situations by assessment with our ISO 14001 work teams. Even though there may not be any changes in management circumstances that are altered every year we evaluate and review environmental dimensions based on functions that pay heed to feedback from partnerships and suppliers, employees, altering and precaution activities, internal and external auditing findings and changes in regulations. The demolishment of our products that have been decided to be demolished as waste under the procedure of ' Refusal and Demolishment'.

Exemplary Environment-Dimension-Effect Evaluation

Environment Dimension and Impact Evaluation Form

Area: Liquid and Pomade Production										**Date of Activity:**					
Basic Activity: Production										**Activity No:**					
Prepared By				**Volume Manager**						**Management Rep/ Assistant**					
Ayhan DEMİREL / Adnan KAYABAŞLI				**Adnan KAYABAŞLI**						**Cengizhan NAS / Bülent EROL**					
				Environmental Impact Criteria											
Dimension No	**Sub Activity**	**Dimension**	**Effect**	**A**	**B**	**C**	**D**	**E**	**F**	**Total Effect Point**	**Level of Importance**	**Existent Precaution s/ Existent Related Procedure**	**Legal Implications**	**DF / ÖF Possible Activityet**	**DF / ÖF No**
1	Cleaning Project	Waste Water	Soil and water pollution	4	1	1	1	1	2	24	IV	Waste Management Procedure	Regulations for Waste Management General Rules, Regulations for the Control of Hazardous Waste, Regulation for Water Pollution Control, Regulation for Soil Pollution Control		
2	Cleaning Project	Water Usage	Reduction /pollution of natural resources	4	2	3	1	1	1	24	IV	Waste Management Procedure	Regulations for Waste Management General Rules,		
3	Cleaning Project	Detergent Packaging Waste	Soil and water pollution	3	2	2	1	1	2	30	IV	Waste Management Procedure	Regulations for the Control of Hazardous Waste,		
4	Cleaning Project	Contaminated Waste	Soil and water pollution	4	2	2	1	1	2	40	IV	Waste Management Procedure	Regulations for the Control of Hazardous Waste,		
5	Cleaning Project	Product Waste	Soil and water pollution	4	2	2	1	1	2	40	IV	Waste Management Procedure	Regulations for the Control of Hazardous Waste,		
6	Liquid and Pomade Production	Contaminated Cloth	Soil and water pollution	4	2	2	1	1	2	40	IV	Waste Management Procedure	Regulations for the Control of Hazardous Waste,		

We actualise the follow-ups for legal adjustments in the direction of 'Occupational Health and Safety, Environmental Legislations and Coherence with Other Requirements', taking ' Coherence Assessment Table' as a basis.

We assess and review the legal approvals, permissions and licensing documents under the same procedure by taking the permissions and approvals supplied supplementary to the procedure at least once a year. We have not been legally penalised or received any warnings with regard to Environmental Legislations.

Our Policies on the Environment

We use suitable technologies in order to minimise and control the important impacts caused by our corporations' activities on environmental dimensions, the environment and human health.

- We adapt to the laws and regulations of the Ministry of Health required by pharmaceutical production sector and rules of Good Management Practices as well as Environmental Legislations and local requirements.

- We predicate our actions for a sustainable environment through the minimisation of loss in the ratio of raw materials, the efficient use of energy, the absolute minimisation of waste products and the increase in support of recycling.

- We organise training events for our corporations' and subcontractors' employees with the aim of raising awareness about protecting the environment. We assess and control our suppliers and contract manufacturers in view of their effects on the environment.

We ensure the continuity of ISO 14001 Environment Management Systems and improve them through set targets and review. In this manner, we commit to preventing environmental pollution.
We share our Environmental Policies, throughout our corporation with our stakeholders, at points of availability within our firm, on our website, on Bilim Portal, in annual internal training sessions and in other written documents.

Environmental Management Board

Our Environmental Management Board consists of our departmental managers and executives. They meet twice a year to assess and review the following agenda.

- Environmental Policies
- Environmental Management Programme and Environmental Targets
- Internal and external auditing findings, activities related to amending and preventing the environment.
- Improvement Plans

Environmental Management Programme and Targets for 2010

Hedef	Related Environmental Dimension	Activities
Draw the hazardous waste leaving the facility down to 0.9 gr. per box	Hazardous Waste	Separating the non-hazardous chemicals packaging by classifying them and ensuring they are recyclable at the source. Evaluating waste such as sorbitol, starch and sugar (assessed as hazardous waste though not really hazardous waste) as industrial waste with the condition of analysing them.
		Preparing a risk map for chemical spills. Providing these areas with chemical spill vehicles. Actualising a chemical spill drill.
		Utilising new equipments such as UPLC and 'Short Column' that carry out more analysis in a short period of time using less solvents.
	The Utilisation of Natural Resources	Decreasing the solvent use rate by 50% in 2009.
Decreasing the loss of materials in production by 1,31 %	Hazardous Waste	Quality Improvement Projects and The Creation of Quality Circle Projects
Decreasing the usage of electrical energy to 0,1590 kWh per box	The Utilisation of Natural Resources	Continuing work on energy efficiency in respect of the Energy Board. Ensuring that the decisions made by Gebze Industrial Zone are applied.
Organising adequately to be able to directly decharge to the central purifier to be provided by the Gebze Industrial Zone in the 3rd quarter of 2010.	Water Pollution	-Mounting coarse screens to the entries of retention ponds to ensure the efficiency of the lift pump. - Ensuring the homogenised distribution of waste into water by integrating mixers into the concrete retention ponds. - Mounting vaseline and oil separators before the mouths of tanks.
To provide at least 4 hours of training a year to our employees about ISO 14001 Environment Management Systems	The Utilisation of Natural Resources	Continuing our work for a sustainable future under the values of projects such as 'Bilim Pharmaceuticals' Community Volunteers and 'Add Value In Layers' and 'Respecting Future Generations'. (Seeds to Sapplings, Sapplings to Trees, Give Life to Nature) Providing Vocational School students who participate in the activities of the Gebze Industrial Zone with awareness seminars on 'What Should We Do As Individuals for a Sustainable Future?'
		Training all Sales Representatives of Bilim Pharmaceuticals in Turkey for at least one hour a year on the subject area of environment.
		Participating in the training for Environment Attendants in compliance with Environmental Laws.
		Ensuring the usage of 'SAP Environmental Module' as a vehicle for the management of Environmental Activities

* The sectoral comparative ratio for hazardous waste is 1,8 gr per box.

Environmental Work Teams

Environmental Work Teams consist of managers and experts determined by our departmental directorships. In scope of Energy Management Systems, these teams come together once a month or more often when needed, to review environmental dimensions and their effects every year and to review, popularise and to increase the efficiency of the application of procedures and directives in the direction of experience gained and current legislations, while also to ensure waste management in areas where they are responsible, evaluating environmental feedback and preparing/managing action plans for areas of improvement.

Energy Management Board

The Energy Management Board consists of the representatives in departments responsible for the procurement, distribution and consumption of energy and our Energy Manager. Our Energy Management Board meets twice yearly, identifies disposal and development projects that ensure the efficient and effective usage of energy, in a way that will support the policies and strategies of the energy sources and infrastructure of our corporation. It also assesses and reviews the advancement of projects with the permission to be applied and the specific energy consumption per box.

Increasing The Environmental Awareness of Stakeholders

We produce projects that raise environmental awareness and popularise them among stakeholders through Bilim Pharmaceuticals' Community Volunteers. For example, projects such as 'Seeds to Saplings and Saplings To Trees' and 'Add Value In Layers' are among the top four projects in the project group of 'Give Life to Nature'. Moreover, we ensure that a sapling is planted on behalf of every single employee and their families every year on their birthdays, through our co-operation with civil society organisations in order to raise awareness on the environment and the importance of protecting the environment.

On the other hand, we do not only appraise the efficiency projects related to Environment and Energy Work Teams organised in collaboration with institutions and corporations in Pharmaceutical Industry's Employer's Union and Industrial Zones, which we are members of, but we also assess opportunities benefiting from recyclable energy within the scope of sustainability and the development of the awareness on the environment.

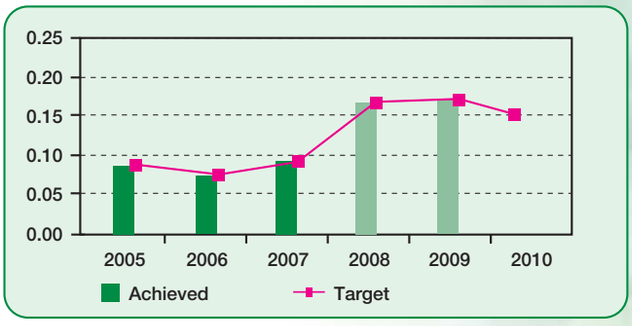
In scope of yearly auditing we organise visits to companies we collaborate with and assess their activities compliance with the standards of ISO 14001. During these visits, we share our knowledge and experiences with our collaborators in order to popularise and develop awareness on the environment. We encourage our collaborators to acquire the ISO 14001 Environment Management Systems and pay heed to this in our choices. We evaluate the environmental awards we have received as an indicator of our approaches and our efficiency with regard to our other stakeholders and society in general.

Reducing Energy Consumption

In our corporation, we undertake systematic activities in order to reduce the utilisation of natural resources in the direction of our Environmental Policy. We monitor the consumption of electricity, gas and water per box produced within the scope of Main Performance Indicators every month. We manage all our projects in compliance with our strategy to reduce the utilisation of natural resources and to protect nature and hence, reduce the utilisation of natural resources in manufacturing each box. As a result of this, we have acquired a trend where the usage of natural resources (electricity, gas and water) are reduced every year. We have transferred our manufacturing activities at our Ayazağa facility to our Gebze facility which is 5,5 times bigger in 2008. As a result of the enlarging production and action areas in our Gebze facility the utilisation of natural resources in 2008 has been greater than 2007. The energy consumption reduction projects we have undertaken and the actualisation of rates in 2009 are below the consumption level in 2008. Following this trend, the targets for natural resources consumption in 2010 have been determined as lower than 2009. As a corporation, we support activities that focus on the usage of recyclable energy sources and the way in which they are used within the scope of Energy and Environment Work Teams in the Industrial Zone, which we are a member of. The investments we have made with regard to environmental protection and the reduction of consumption of energy in the last 5 years totals to 2 million Euros.

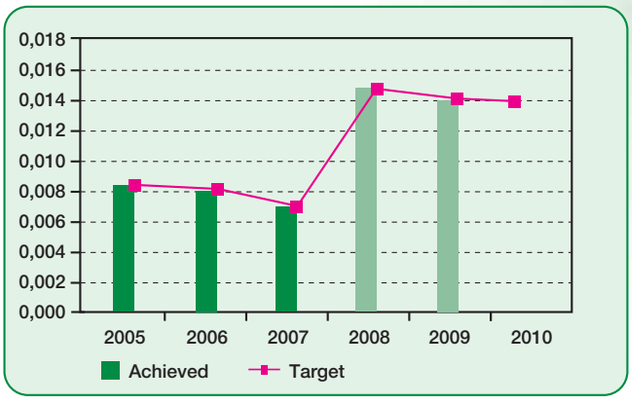
The tables below convey the details of our environmental applications and the targets for 2010.

Electricity Consumption Per Box



Kwh / Per Box	2005	2006	2007	2008	2009	2010
Achieved	0.0890	0.0829	0.0833	0.1683	0.1664	
Target	0.0960	0.0845	0.0819	0.1987	0.1835	0.1590

Gas Consumption Per Box



m^3 / Per Box	2005	2006	2007	2008	2009	2010
Achieved	0.0085	0.0081	0.0077	0.0146	0.0144	
Target	0.0101	0.0085	0.0079	0.0162	0.0145	0.0140

Reducing Waste

The Waste Management procedure written through taking all legislations and other requirements published by the Ministry of Environment and Forestry as reference, identifies all the requirements and processes with regard to the separation, storage, transportation, removal or recycling of all waste products at their source. We follow the application technique of the systematic identified under the scope of the procedure with the amount of waste produced per box, as shown below.

We observe and control the environmental impacts of all our hazardous waste continuously, that is created throughout the manufacturing process. We ensure that the waste produced per box is compliant with our yearly targets through the application of our planned improvement projects . We increase the level of recyclable waste to reduce the amount of hazardous waste and ensure the separation of types of waste at the source by training our employees. In view of the product transfer caused by the move to our Gebze facility , we have set the rate for 2008 above that of 2007. As a result of all the product transfers meeting the target we have reduced the amount of hazardous waste produced per box significantly in 2009 compared to that of 2008. Following the trend, we have set the rates for 2010 much below the rates in 2009.

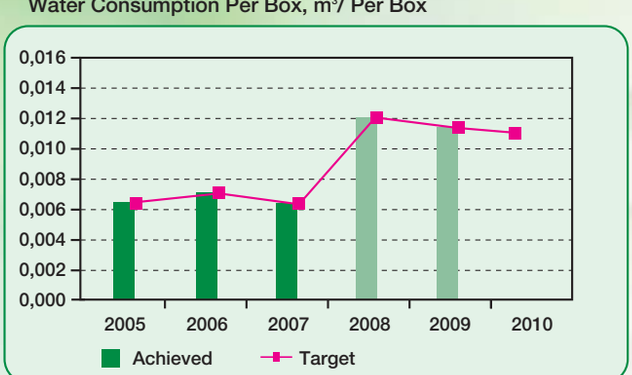
We monitor wastage rates as a performance indicator of the reduction of our waste at the source and to ensure that the level of waste doesn't increase. We reduce the wastage rates through projects such as Quality Improvement Project and Circle of Quality.

We provide our employees at our facilities with at least 4 hours of training on environment per year by supporting work undertaken on the reduction of waste at the source and the protection of natural resources. We raise and popularise awareness on the reduction of waste and ensure its continuity. Supplementary to our internal training sessions we undertake projects in collaboration with institutions and civil society organisations that act on the subject of environment in order to raise awareness in primary school students.

After purifying the waste water caused by our manufacturing activies in our industrial and domestic water purifying facilities we send it to receivers who accept it under the levels specified by water pollution control regulations. We handle waste water bulk and the reduction of waste water together with activities of reducing the consumption of water. In 2009 the amount of water re-used was distinguished as 3, 23%.

The garden irrigation system takes up a significant part of water consumption, especially in the summer months. Nearly 30% of the garden irrigation water is supplied by the domestically purified water in our Gebze facility.

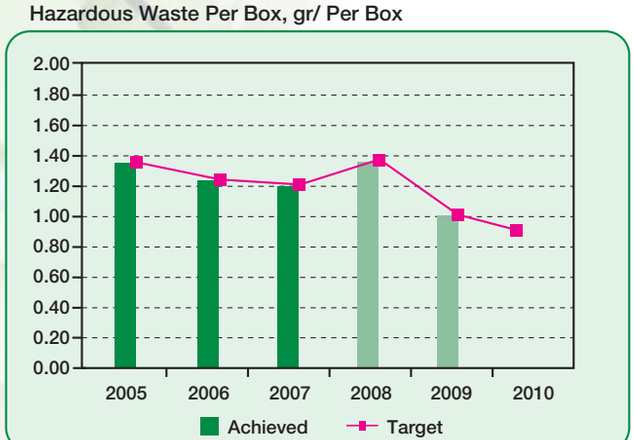
Water Consumption Per Box, m³/ Per Box



m³ / Per Box

	2005	2006	2007	2008	2009	2010
Achieved	0.00067	0.00069	0.00062	0.00119	0.00114	
Target	0.00070	0.00061	0.00067	0.00134	0.00115	0.00111

Hazardous Waste Per Box, gr/ Per Box



gr / Per Box

	2005	2006	2007	2008	2009	2010
Achieved	1.370	1,344	1.280	1.340	1.076	
Target	1.375	1.325	1.275	1.350	1.100	0.900

Recyclable Waste

The Regulation of the Control of Packaging Waste in scope of the Law on Environment and in the direction of our Sustainability and Environmental Policy we ensure that the packaging waste we introduce into the market with the aim of protecting resources are collected over a certain quota. We also work in collaboration with ÇEVKO, the authorised body in the recycling of waste products, since 2005.

The packaging waste that has been regained through our collaboration with ÇEVKO in 2009 is stated below.

Plastic: 189,840 kg.
Paper-Cardboard: 2,955,158 kg.

With the same approach, we separate the recyclable waste caused by our activities at the source in scope of the Waste Management Procedure, and regain them through collaboration with accredited firms licensed by the Ministry of Environment and Forestry.

The amount of regained packaging waste caused by the activities in our facilities in 2009 are as stated below:

Plastic: 39,186 kg.
Paper- Cardboard: 277,679 kg.
Glass: 3,150 kg.
Intact Palette Recycling: 4,018 kg.
Waste Palette: 59,050 kg.

The amount of re-gainable waste caused by our processes has been determined as 13,05 gr/per box in 2009.

Reducing Emission Gases

By means of heating with high thermal efficiency and steam boilers and de-duster systems we have acquired, the waste gas and process air emissions caused by our activities are much below the legal limitations provided by the 'Regulation on Air Pollution Controls Caused by Industry' .

Emission Values in Our Facilities

2008		2009		2010	
Target	Achieved	Target	Achieved	Target	
Carbon Monoxide (mg/Nm^3)					
<100	10,3	<100	10,40	<100	**Çerkezköy**
<100	27,09	<100	-	<100	**Gebze + Ayazağa**
Sulphure Dioxide (mg/Nm^3)					
<100	0	<100	0	<100	**Çerkezköy**
<100	0	<100	-	<100	**Gebze + Ayazağa**
Dust (mg/m^3%3Ref.O_2)					
<10	0	<10	0	<10	**Çerkezköy**
<10	0,73	<10	0,37	<10	**Gebze + Ayazağa**

We determine our emission targets under the limits determined by regulations. We monitor the emissions from our steam boilers to the air through exhaust gas analysis conducted by approved companies yearly. As a result of these measurements we observe that the emission measurement results are much below the legal limits in both of our facilities.

Reducing Carbon Monoxide Emission

Some of the improvement work we undertake to reduce our emissions are as follows;

- We have reduced our Sulphure Dioxide emissions by using natural gas instead of fuel oil in our Çerkezköy facility.
- We have invested in emission reducers/ cooling equipment for gases that are emitted into the atmosphere and economisers for our steam boilers and heaters.

We use dust gathering units for dust, which is filtrated before they are emitted through an exhaust fan, that's created during the filling of capsules and tablets in the manufacturing equipment cabins. The last stage filtration of these units are equipped with H13 HEPA filters and the efficiency of these filters are 99,99%.

Greenhouse Emission Rates	2009	2010
Facilities (c02 kg/ Per Box)	0,027	0,025
Vehicles (c02 kg/ Per Box)	0,051	0,046