



## > CONTENT INDEX

2 Message from the General Manager

### **4 AYGAZ and THE ENERGY SECTOR**

8 LPG sector

8 Turkish LPG market and Aygaz

### **10 SUSTAINABILITY MANAGEMENT**

12 Corporate governance

12 Ethical principles and internal audit

13 Anti-corruption

14 Risk management

14 Sustainability management

16 Corporate memberships

16 Material issues

17 Stakeholders

### **18 SUSTAINABLE OPERATIONS**

21 LPG supply security

21 Facilities

23 Storage and logistics

25 Aygaz vessels

26 Supply chain management

29 Aygaz dealers

32 Information systems

### **34 PRODUCT RESPONSIBILITY**

37 Product quality

37 Product safety

39 Accessibility of products

39 Responsible advertisements

40 Product information

41 Technical support

42 Customer satisfaction

43 Customer information confidentiality

43 R&D practices

### **46 EMPLOYEE DEVELOPMENT**

49 Social diversity and equal opportunities

50 Performance evaluation system

50 Trainings provided to employees

51 Compensation and fringe benefits

52 Internal communication

53 Work-life balance

55 Human rights

56 Occupational health and safety

### **58 ENERGY EFFICIENCY and EMISSIONS**

61 Energy efficiency in production

63 Emission reductions through products

### **64 WATER and WASTE MANAGEMENT**

67 Water consumption and wastewater management

68 Material use and waste management

68 Scrap and waste management systems

### **70 SOCIAL DEVELOPMENT**

73 Investments in health

75 Investments in education

76 Investments in cultural activities

79 Investments in sports activities

79 Investments in environment

82 Aygaz and Vehbi Koç Foundation

### **84 PERFORMANCE INDICATORS**

### **90 GRI CONTENT INDEX**

# SUSTAINABILITY JOURNEY OF AYGAZ

The concept of transparency lies at the heart of Aygaz's business and from the supply of the cleanest alternative fuel LPG to its sales, Aygaz runs all its business process, according to the expectations of its stakeholders. Aygaz creates value for all its stakeholders, pursues its employees' welfare, takes part in environmental projects for climate change, takes careful steps to make efficient use of natural resources and develops projects on health, education, sports and culture for the community's needs.

In 2011, during the the 50th anniversary of Aygaz's foundation, all of Aygaz's stakeholders, primarily Aygaz's dealers and employees, business world representatives and the community who have made Aygaz a part of their life, have come together to share the 50th anniversary excitement. Aygaz has entered into a new era by developing plans, new strategies and technologies for the future with its business culture of fifty years.

Aygaz presents its sustainability performance with this 8th sustainability report to all its consumers who would like to purchase Aygaz products and services safely, individuals who are looking into career opportunities at Aygaz, national and international investors, members of the media who are interested in getting comprehensive information about Aygaz and all its stakeholders who are willing to find out more about the work and value behind the Aygaz brand.

This sustainability report which covers two calendar years between 1st of January 2010 and 31st of December 2011, is communicated with stakeholders in a genuine manner and under 8 subheadings; energy sector and Aygaz, sustainability management, sustainable operations, product responsibility, employee development, energy efficiency and emissions, water and waste management and social development. All the performance indicators are supported by the data from the official records of Aygaz. Following the last sustainability report which provided extensive information on the institution and its practices, this report focuses on the sustainability performance of Aygaz during the 2010-2011 period.

The scope of this report is the operations of Aygaz. More detailed information on subsidiaries, of which only the financial indicators are included in this report, can be found on [www.aygaz.com.tr](http://www.aygaz.com.tr). Binding nature of this report is formed by the performance of Aygaz in social, environmental, economic and ethical areas.

Following the 2008-2009 sustainability report, which was prepared in accordance with the GRI (Global Reporting Initiative) principles and complies with application level C requirements; this report's application level is raised in consequence of complying with level B requirements. As a Koç Group company and signatory of UN Global Compact, Compact's principles were also envisaged while preparing the content of this report. In order to minimize the environmental impact, the report is printed in a limited number and presented to the stakeholders of Aygaz in pdf format via internet.

Besides the biennially sustainability report, Aygaz shares its corporate sustainability performance in the annual financial reports. Aygaz also provides data for the annual Koç Holding Corporate Social Responsibility Reports that are communicated at [www.koc.com.tr](http://www.koc.com.tr).

**Our stakeholders' feedback and opinion about this report is the best guidance for us to increase our productivity in this area. Should you have any suggestions or comments please contact us at [skr@aygaz.com.tr](mailto:skr@aygaz.com.tr) or +90 212 354 15 15.**



“We take the risks brought about by climate change seriously in all our operations and develop our business processes accordingly.”

## Dear Stakeholders,

This period, in which we are celebrating the 50th anniversary of Aygaz, whose products and services have become a part of millions of families' lives, has been a very efficient process where we have come altogether as employees, dealers, business partners and stakeholders and made plans for the future. Since our establishment, we try to perceive the expectations of the society accurately and focus on improving ourselves. In all of our economic, environmental and social activities, we strive to be a corporation that respects humans, environment and laws. We are reducing the environmental footprint of our production processes, services and products in line with our commitment to the Global Compact, continue to work with a management approach respecting human rights and engaging in projects that add value to our society. We are happy to share our aims and where we have reached with our half a century of knowledge and experience. In this 8th sustainability report, in which we present our sustainability performance and cover our activities during the 2010-2011 period.

We take the risks brought about by climate change seriously in all our operations and develop our business processes accordingly. Whilst ever-increasing energy requirements, decreasing energy resources and increasing greenhouse gas emissions encourage us to develop more energy-efficient processes in our operations, use natural resources more economically, provide less energy consuming products, apart from LPG —that which is our main field of business and plays an important role in alternative energy sector— invest in different fields with our solid investment portfolio that extends from electricity to natural gas, and at the same time, undertake projects that would improve awareness of climate change in the society we live in. In this respect, we strive to realize resource savings in our production processes. Within the framework of the same target, following the Aygaz Euro LPG+ —which we offered to the market thanks to our R&D investments and activities in 2009— we have developed our new product even more. Now auto gas consumers save more fuel with the Aygaz Euro LPG+ with Enhanced Formula. In addition to the innovative projects countering climate change we realized in our production processes and products, we are developing

projects for creating public awareness in this matter and seeking solutions together. Between 2010 and 2011, we have reached 8,360 people with our project "What Will the Weather be like Tomorrow?" which gained the admiration from many organizations, with training and activities that inform about the causes and dangers of climate change. We have reached millions of people with our awareness campaigns via television, newspapers, magazines, radio and internet.

As an indication of the efficiency gains achieved by our corporate governance and business processes, and as ranking Turkey's 8th and 7th largest industrial enterprise in 2010 and 2011 respectively, we continue to increase our efficiency and do not remain solely in our main field of business LPG, but also attach importance to energy diversity. In this context, in 2010, we have increased our presence in the field of electricity. In line with our objective of becoming one of the leading companies in electricity production in the future, we have transferred the 49,6% share of our subsidiary ENTEK to the American energy giant AES, and hence, created a joint partnership. With this partnership, we plan to invest in electric plants that work with natural gas, coal, hydroelectric and other sources.

At the same time, we started trading pipe gas through our company Aygaz Dođal Gaz with the aim of expanding our product range in natural gas. By obtaining Spot LNG import license, we are assessing opportunities in natural gas segment which is an important element of Turkey's energy pool. In order to enlarge our direct distribution activities, we have started the preparations in our subsidiary AKPA, which started in early 2010, and completed by the end of the year.

In addition, we continue growing in cylinder gas segment by adding Total Oil Turkey's cylinder gas activities to Aygaz. We are glad to continue our activities as being the market leader in the customer satisfaction index in cylinder gas segment. Besides the energy diversity we provide, we are increasing our logistics capacity as the only Turkish LPG company that is engaged in international Turkish flagged maritime transport. In this context, we have increased our maritime logistics capacity by 60% with

the participation of the Beylerbeyi tanker to our fleet that is run by our subsidiary Anadoluhisarı Tankercilik.

We create significant direct and indirect employment in Turkey with our dynamic business processes, cylinder gas dealers, auto gas stations, tankers and service vehicles. Finally, in order to optimize our distribution network and increase the satisfaction of our dealers, we have started drinking water distribution with our Pürsu brand. Although this is our first year in the field, Pürsu provided us a competitive advantage in domestic LPG market.

In addition to direct and indirect employment we create, we are working to enrich our society with educational, health, sports and cultural activities run mostly on a voluntary basis by our employees.

On the occasion of our 8th sustainability report in which we lay out our sustainability performance, I humbly pay respect to our founder Vehbi Koç, and extend my gratitude to our employees who in addition to their knowledge and skills, add value to Aygaz with their volunteering work for our society, to our dealers and suppliers who identify with Aygaz and work selflessly, to our shareholders and investors for their confidence in Aygaz, and finally, to our customers who chose Aygaz in many areas of their lives from their homes to the vehicles they drive for half a century.

Kind regards,



Yağız Eyübođlu  
General Manager

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## AYGAZ and THE ENERGY SECTOR

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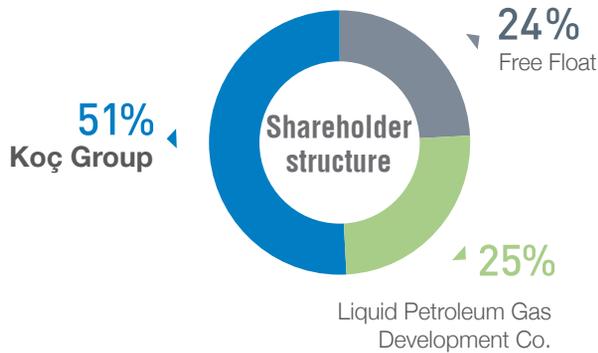


- > LPG sector
- > Turkish LPG market and Aygaz

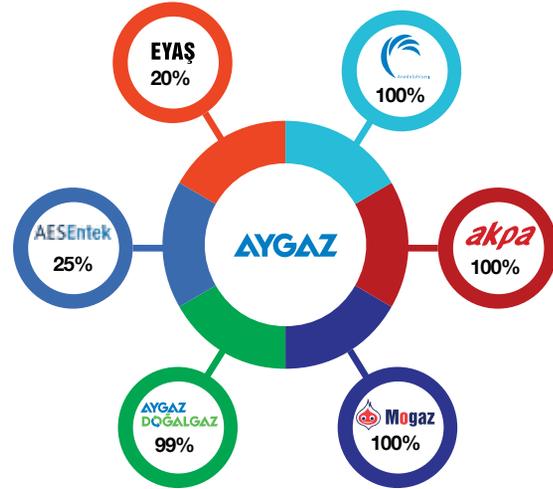


Making a new beginning from  
a 50-year old history...

→ Aygaz shareholder structure



→ Subsidiaries and affiliates



Along with being the first and the only publicly listed LPG company of Turkey, Aygaz is the only LPG company in Turkey which performs all the processes that involve LPG supply, storage, production of pressure vessels and equipment. Operating since 1961, today, Aygaz is Turkey's 7th largest private enterprise.

With its strong dealer network and qualified workforce Aygaz operates in the LPG sector of Turkey, which consist of 71<sup>1</sup> distribution companies. Being Koç Group's first company to operate in energy sector and with the understanding of "being the company closest to consumer", alongside the services Aygaz provides in cylinder gas, auto gas and bulk gas; it also exports cylinders, storage tanks, valves,

regulators and appliances to more than 30 countries in European, Middle Eastern and African markets.

By the end of 2011, Aygaz provides cylinder gas to around 100,000 households and offices, Aygaz Euro LPG + to almost 1 million vehicles and bulk gas to more than 20,000 clients in 81 provinces of Turkey, through its 1,341 auto gas stations, 2,459<sup>2</sup> cylinder gas dealers and more than 15,000 employees working at the head office, facilities and as dealers. Aygaz persistently increases market share by 1.7 million tons of LPG supply, 26 facilities across the country, 218,000m<sup>3</sup> of storage container, 5 LPG vessels, 230 tankers, 159 cylinder gas trucks and more than 5,000 cylinder gas service vehicles.

Despite the increase in the use of natural gas, during the reporting period Aygaz continued to increase its efficiency and market share in the LPG sector, thanks to the investments made at facilities and logistics infrastructure. At the same time, utilizing its wide dealer distribution network, Aygaz tapped into distribution of water in 19 liter polycarbon bottles with the Pürsu brand.

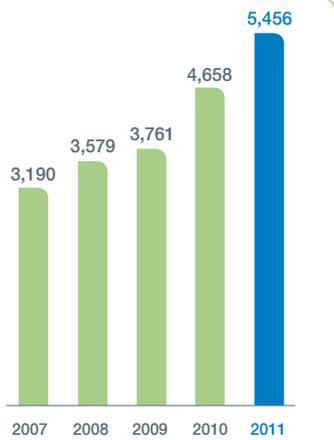
Together with its subsidiaries; Mogaz, Aygaz Doğal Gaz, AESEntek, Akpa and Anadoluhisarı Tankercilik, due to its shares in Enerji Yatırımları A.Ş. (EYAŞ) Aygaz also holds 10% share in Turkey's only refinery company Tüpraş. Thanks to this wide portfolio Aygaz operations are not limited to its main field of

<sup>1</sup>2011 Sector Report for Liquefied Petroleum Gas Market

<sup>2</sup>Station and dealer numbers are consolidated to involve both Aygaz and Mogaz.

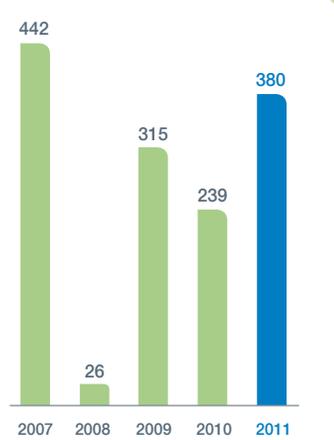
Being the market leader since its foundation in 1961, market value of Aygaz reached its historical high during its 50th year.

### > Sales Revenue (M TL)



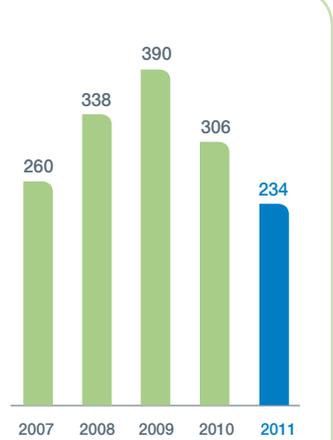
Turnover increased **17%** compared to 2010 and **71%** in the last five years

### > Profit (M TL)



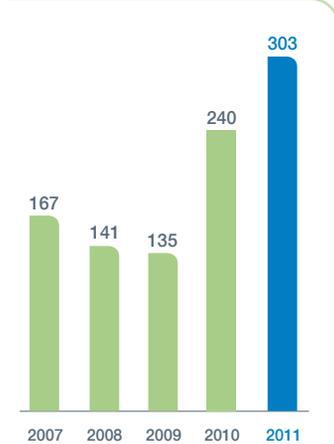
Growth of **59%** over the previous year

### > EBITDA (M TL)



Decrease of **24%** due to increased logistics expenses and the impact of stock

### > Export Sales (M USD)



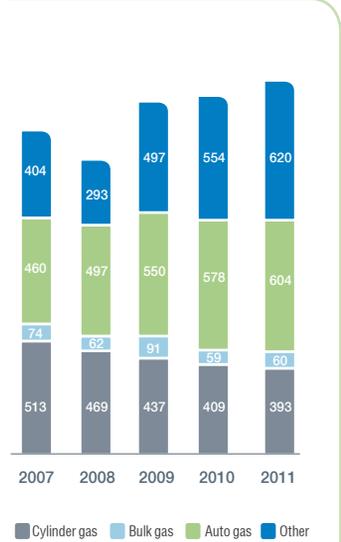
Continual growth in international sales which are up **26%** compared to 2010

### > Net Cash (M TL)

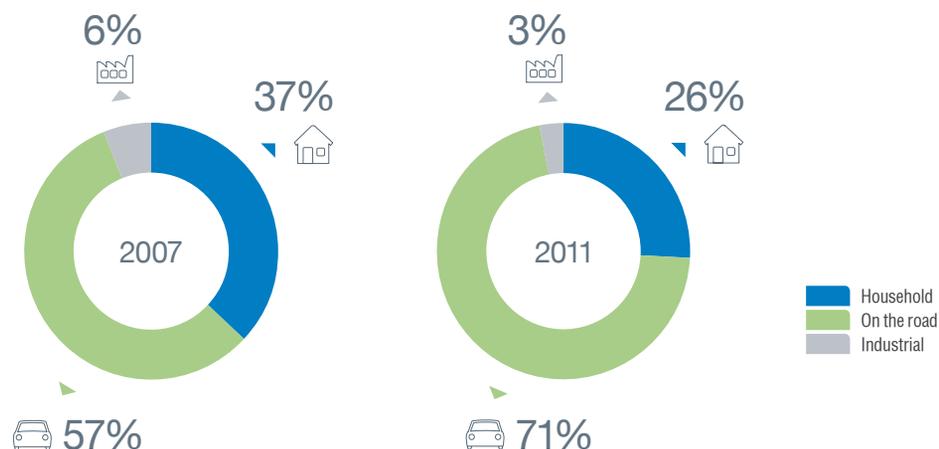


**68%** increase in net cash compared to 2010 due to strong cash generation

### > LPG Sales (000) Tons



→ Areas of LPG usage in Turkey and consumption percentages



As the Turkey's 1st and Europe's 5th largest LPG company, according to the LPG market sector report, Aygaz retained its well ahead leadership position in the LPG sector with 28% market share in 2011.

business LPG but ranges from natural gas to electricity. While Aygaz follows privatizations in natural gas sector and after the restructuring of its subsidiary AESEntek, Aygaz is now taking steps towards adding plants that work with natural gas, coal, hydroelectric to its portfolio. In 5 years, Aygaz aims to raise its power generation capacity to 3,000 MW.

### LPG sector

40% of the global LPG is produced in refineries as a side product while the rest is obtained from natural gas wells. In Europe 75% of LPG is obtained in refineries. 5 million vehicles are run by LPG in Europe which makes up 3% of the market and remains to be an alternative fuel. By 2020, in European countries, the auto gas used in roads will be more than tripled (rising from 3% to 10%). According to the data of the World LPG Association, LPG production in 2011 reached 254 million tons. Especially the growth of

Asian and African markets are expected to lead to the continued growth of global LPG market in the coming years. 47% of the global LPG consumption occurs in households. Household consumption of LPG specifically takes place in China, India and the US, whilst in auto gas consumption; Turkey and Russia are right behind South Korea. 1.5 billion people who have not yet used LPG constitute the potential market.<sup>3</sup>

### Turkish LPG market and Aygaz

With its 3.7 million tons of consumption, excluding petrochemicals, Turkey is the 2nd largest LPG market in Europe after Russia and the 14th largest LPG market in the world. In auto gas consumption, Turkey is the 2nd in the world and 1st in Europe. In 2010, 15% and in 2011, 19% of the total LPG supply of Turkey came from local sources. The top import countries are Kazakhstan, Algeria, Norway, Russia and Nigeria.

<sup>3</sup>Aygaz Annual Report 2011 and World LP Gas Association <http://www.worldlpgas.com/about-lp-gas>



In 2010, total LPG consumption of Turkey consisted of 68% of auto gas, 29% of cylinder gas and 3% of bulk gas, while these rates for 2011 were 71%, 26% and 3% respectively.

In 2010, distribution of Aygaz sales by segment was 39% for cylinder gas, 56% for auto gas and 5% for bulk gas.

As the Turkey's 1st and Europe's 5th largest LPG company, according to the LPG market sector report, Aygaz retained its well ahead leadership position in the LPG sector with 28% market share in 2011. According to the same EMRA report, Aygaz Group's total domestic sales of cylinder gas, bulk gas and auto gas was recorded as one million tons. Together with domestic wholesale, exports and transit sales total sales volume reached 1.7 million tons.

### > Market Shares



28%  
Market share

Increase of **5%** in total tonnage compared to 2010 and **the largest** market share in history in cylinder gas for the periods being reported



40%  
Cylinder gas  
market share



23%  
Auto gas  
market share



# SUSTAINABILITY MANAGEMENT



- > Corporate governance
  - > Ethical principles and internal audit
  - > Anti-corruption
  - > Risk management
- > Corporate memberships
  - > Material issues
  - > Stakeholders



In order to disseminate ethical values of Aygaz to its employees and future generations effectively, Aygaz produced “Principles of Ethical Code and Conduct” booklet in 2011.

## Corporate governance

Implemented to all business operations, Corporate Governance Principles at Aygaz, includes principles on fairness, transparency, responsibility and accountability. These principles are at the heart of all management operations and decisions. Since 2005, Aygaz prepares “Corporate Governance Principles Compliance Reports”. These reports cover areas such as relations with stakeholders, Company Policy, Duties and Responsibilities of the Board of Directors, Committees within the Board, Risk Management and Internal Audit in detail. Corporate Governance Principles Compliance Reports are published at Aygaz’ corporate website [www.aygaz.com.tr](http://www.aygaz.com.tr) and published in annual reports.

## Ethical principles and internal audit

Koç Group companies are responsible to comply with the “Koç Group Common Values and Code of Ethics”. Abiding by Koç Group’s ethical principles, Aygaz;

- Respects individuals’ dignity, privacy and personal rights.
- Respects diversity and does not discriminate on the basis of race, origin, religion, gender, social class, nationality, age and physical disability.
- Provides equal opportunities in terms of personal and career development issues, as part of employer commitments and regardless of the employees’ origins or beliefs.
- Operates with mechanisms related to work disciplinary rules in case of human rights violations.
- Shows respect for the tradition, culture and history of the geographies that it operates in.
- Shows respect for the employees’ labor union rights.

In accordance with the 32nd article of the United Nation’s Children Rights Committee’s agreement accepted in 1989, Aygaz does not employ children. Within the 2nd article of the United Nations Human Rights Declaration,

employees are given equal rights and opportunities regardless of their sex, race and religion. In the 13th article of the Aygaz personnel regulations, it is stated that “Koç Group, aims to be the symbol of good reputation and reliability for its country, partners, dealers, subsidiary industries and consumers and abides by the rule of law.” Along with other issues covered by the law,

Aygaz Corporate Governance rating in 2010 was determined as 8,46. In 2010, Aygaz became one of the 27 companies which received a rating in this field and ranked 7th. This has been deemed a great success for a first-timer. In 2011, corporate governance rating of Aygaz was revised up to 8,50. Aygaz received specifically high marks under the heading of “Public Disclosure and Transparency” thanks to its effective use of website notifications. Aygaz also scored higher than Turkey’s average under the heading of “Stakeholders” due its positive relationships with employees and customers as well as its developed corporate governance practices.



prevention of child and forced labor are also defined in the regulations. Aygaz never allows forced or bonded labor. Aygaz does not provide financial support to any political party and it engages in transparent relationships with governmental bodies.

In order to disseminate ethical values of Aygaz to its employees and future generations effectively, Aygaz produced “Principles of Ethical Code and Conduct” booklet in 2011. This booklet is then given to the entire workforce and required from them to read the booklet and sign the Declaration of Commitment page at the end of the booklet to be placed into their personal documents. Ethical Conduct Committee is formed in order to assess and prevent situations related to non-compliance with ethical rules and ensure consistency in terms of practices. Ethical Conduct Committee consists of the General Manager, relevant Assistant General Manager, Human Resources Manager and Legal Adviser.

## Anti-corruption

Since its formation, Aygaz attaches great significance to audit operations. Internal Audit department systematically oversees and reports on all business operations. Internal Audit Department’s scope of responsibility includes all financial, operational, environmental, ethical and social operations. Internal Audit Directorate consists of 1 manager and 1 expert who received relevant anti-corruption trainings. Aygaz Internal Audit Directorate is under Aygaz General Management and reports to Audit Committee. Aygaz Audit department strives to develop a more effective internal control structure through analyzing all the business operations and reporting risk prone situations to senior management. As Internal Audit Directorate works directly under the General Manager it has no hierarchical links with other departments. Planning and execution of the audit is carried out by the Internal Audit department hence the independence of the unit is ensured. In case of an ethical principles violation, stakeholders can notify Aygaz,

externally through the Customer Services Lines and Dealer Portal and internally through the Audit Department and Koç Holding Audit Committee’s Notification Lines, without facing any pressure or having to disclose their identities. Aygaz is audited by Koç Holding Audit Committee and an independent audit company on regular basis. Reports resulting from these audits are then presented to the Board of Directors. All major business units have been audited and reported at least once during 2010 and 2011. Areas which have scope for improvement are discussed with relevant parties, tied to an action plan and monitored closely.

A major difference of management systems at Aygaz in terms of internal audit is the mechanism capacitating departments to supervise each other. For this purpose, department representatives are provided with trainings on auditing of management systems. All the management systems audit reports produced are with corrective nature.



## Risk management

In 2011, a multi-staged risk management action plan was implemented for the purpose of presenting principles of Corporate Risk Management (CRM) processes, developing corporate governance practices, coordinating risk management and its central monitoring. For this objective, acknowledging the suggestions from Corporate Governance Principles of Capital Markets Board a Corporate Risk Management Team is inaugurated, within the operations of Finance Directorate, in the leadership of Finance Manager and with participation from Quality Systems – Health and Safety Directorate and Internal Audit Directorates. This Team's scope of responsibility includes detection of strategic, operational, financial and all other types of risks which could have an impact on Aygaz, assessment of risk probabilities, management of risks in accordance with the company's corporate risk taking profile, reporting and

scrutiny of risks in decision-making process and formation and integration of internal audit systems for this purpose. Within the framework of the work plan, trainings and workshops have been arranged to increase risk awareness and various risk scenarios.

With participation from Aygaz, Mogaz, Akpa and Aygaz Doğal Gaz employees 500 scenarios of different functions were examined. Risks examined during the workshops have been consolidated to form Aygaz Group's risk mapping and priority action plans. These plans are actively monitored by the Corporate Risk Management team. Risk management is governed under Risk Management Committee which consists of members of Board of Directors.

## Sustainability management

As a company which aims to present products and services in line with universal quality and standards by

working together with its employees and through ensuring consumer satisfaction, Aygaz strives to become the symbol of reliability, continuity and reputability for its country, customers, dealers and subsidiary industry. In this respect, objectives and principles of Aygaz are in parallel with Koç Group's.

Koç Group has carried its principles regarding social responsibility, corporate governance and ethical conduct to universal standards, through becoming a signatory of UN Global Compact. Global Compact is also the main point of reference for sustainability management at Aygaz.

**Vision:** To become the pioneer in generating energy solutions especially in LPG and natural gas operations both in Turkey and all potential markets.

**Mission:** To provide the best products and services in all businesses that Aygaz operates, in the highest quality and environmentally conscious manner and within the Koç Group Common Values and Code of Ethics.

## › Sustainability Management at Aygaz

<b>Board of Directors</b>	Responsible for determination of Aygaz' sustainability strategy and review of its performance.
<b>Audit Committee</b>	Responsible for supervision of accounting systems, release of financial information to the public, independent audit and efficiency of internal control systems of this partnership.
<b>Risk Management Committee</b>	Detection of strategic, operational, financial and all other types of risks which could have an impact on Aygaz, assessment and calculation of the probabilities of these risks, management of risks in accordance with the company's corporate risk taking profile, reporting and consideration of risks in decision-making process and formation and integration of internal audit systems for this purpose are under this Committee's responsibilities.
<b>Investments and Business Development Committee</b>	This Committee gives advice and suggestions to the Board of Directors about in-house idea and strategy development, coordination between relevant departments, design of new project and investments.
<b>General Manager</b>	Responsible for the supervision of the entire sustainability performance and division of labor.
<b>Assistant General Manager (Finance)</b>	Director of the units responsible for finance and accounting, transparency, risk analysis, investor relations, corporate governance, budget planning and control.
<b>Assistant General Manager (Technical affairs and investments)</b>	Director of the units responsible for production process, investment decisions, R&D activities, quality, environment and employment health and safety, relations with NGOs and intellectual property.
<b>Assistant General Manager (Sales)</b>	Director of the units responsible for sales points and technical support for dealers and consumers.
<b>Marketing Director</b>	Director of the units responsible for social and investment, dealer and consumer relationships, affordability and accessibility of the products.
<b>Logistics Director</b>	Director of the units responsible for logistics, LPG procurement security and supply chain management.
<b>Production Director</b>	Director of the units responsible for the production of pressure vessels and accessories in line with the relevant standards for domestic and international markets, along with sales-transport and export activities.
<b>Information Systems Manager</b>	Director of the units responsible for employment continuity, disaster recovery, green IT, information security.
<b>Human Resources Manager</b>	Director of the units responsible for human rights, career management, employee development, trade union relations, equal opportunity, remuneration, fringe benefits, internal communications and work-life balance.
<b>Internal Audit Manager</b>	Director of the units responsible for human rights and prevention of breach of ethical principles.
<b>Corporate Communication Manager</b>	Director of the unit responsible for dissemination of correct information about Aygaz from the first hand and in a timely manner and community investments.
<b>Purchasing Manager</b>	Director of the unit responsible for sustainable practices in supply chain.
<b>Legal Consultant</b>	Director of the units responsible for the compliance with law.

Aygaz monitors, reports on and focuses on continuous improvement of its performance under four main headings of the Compact, which are working conditions, human rights, environment and anti-corruption. Sustainability management at Aygaz is a process under the responsibility of all business departments and the supervision of senior level management. At Aygaz, key sustainability performance areas subsist under the performance evaluation criteria of relevant departments.

Aygaz managers took part in Koç Group Sustainability Performance Assessment and Reporting System representing social, economic and environmental issues. This embodiment enables group companies to share best practice. Aygaz is one of the few companies in Turkey that binds management compensation to operational and financial performance of the company.

You can reach detailed information on the practices like the corporate governance approach of Aygaz, Board of Directors, Corporate Governance Principles Compliance Report and Company Policy via the Investor Relations link on Aygaz' corporate website [www.aygaz.com.tr](http://www.aygaz.com.tr).

Sustainability management at Aygaz is a process under the responsibility of all business departments and the supervision of senior level management.

### Corporate memberships

- LPG Association of Turkey
- The Union of Chambers and Commodity Exchanges of Turkey
- Istanbul Chamber of Commerce (iTO)
- Turk Trade
- Lüleburgaz Chamber of Commerce
- Kocaeli Chamber of Industry
- Istanbul Chamber of Industry
- Bursa Chamber of Commerce and Industry
- Employers Union of Turkey
- Aegean Region Chamber of Industry
- Istanbul Foundation for Culture and Arts
- Eskisehir Chamber of Industry
- Aliağa Chamber of Commerce
- Dört Yol Chamber of Industry
- Kırkkale Chamber of Industry
- Safranbolu Chamber of Commerce
- Diyarbakir Chamber of Commerce
- Gebze Manufacturers' Association Organised Industrial Zone
- Deniz Chamber of Commerce
- Samsun Chamber of Industry
- Kırkkale Province Employment and Vocational Education Association
- Körfez Chamber of Commerce
- Foreign Economic Relations Board (DEİK)
- Turkey Quality Association (KALDER)
- Association for Corporate Communicators
- World LP Gas Association (WLPG)
- Turkish Standards Institute Mirror Committees
- World of Business and Sustainable Development Association (2008)
- Technology and Licensing Executives Association
- Association of Advertisers
- Istanbul Minerals & Metals Exporters' Association
- Metal Manufacturers' Union of Turkey (MESS)
- Turkish Industry and Business Association (TÜSİAD)
- Investor Relations Society of Turkey (TUYİD)
- Union Of Chemical Petroleum Rubber And Plastic Manufacturing Employers (KIPLAS)
- Turkey's Trade Association (TURK TRADE)
- Turkey's Employee Management Association (PERYÖN)
- Lüleburgaz Chamber of Commerce and Industry (LTSO)

### Material issues

Issues in the scope of this report are driven from the framework of the issues that are in the impact area of Aygaz and of which Aygaz focuses its problem-solving efforts. Before the 2008-2009 Sustainability Report, in order to determine priorities of Aygaz, a workshop, has been organized with the participation of departmental representatives. While forming the basis of 2010-2011 report, departmental heads revised these issues and decided to retain them during this reporting period.

Priority issues for Aygaz are under marketing and sales; product quality, product responsibility, product accessibility under operations; quality systems, emergency planning, logistics and raw material supply, within the breadth of environmental impact; energy efficiency, emissions, environmental safety, waste management and conservation of natural resources, under the human rights heading; employee health and safety, career planning, fair compensation, right to education, right to unionize, in terms of social issues; job creation, contribution to local economy, donations and sponsorships.



## Stakeholders

Aygaz considers all individuals, institutions and organizations that directly or indirectly affect operations of Aygaz or that are affected by Aygaz as its stakeholders. The sustainability report is one of the most important communication tools of Aygaz which is presented to the stakeholders in order to inform about Aygaz' activities and get their feedback. Aygaz supports non-governmental organizations (NGOs) which have overlapping objectives with the corporate strategy of Aygaz. Aygaz employees take active roles in the NGOs that does advocacy for the community.

Aygaz maintains its leadership position within the sector not only by means of its market share but also due to the sector-development activities it undertakes. By active participation in various NGOs, Aygaz contributes both in the formation of legislation and efforts increasing the reach of the use of LPG.

Aygaz, together with the Assembly of TOBB LPG and Turkey LPG Association, carries

out studies on LPG legislation, contributes in the composition and implementation of ethical conduct in the sector. As members of the ISO Environmental Working Group and TUSIAD Environment and Intellectual Property Rights Working Group, Aygaz conducts studies in environmental legislation and protection of intellectual property rights.

By participating in the World LPG Association, which consists of international organisations within the LPG sector, Aygaz enables the spread of LPG throughout the world as well as being up to date with the current developments. As a member of Metal Manufacturers' Union of Turkey (MESS), Aygaz runs studies regarding efficiency and quality in production.

## Awards

As a result of efforts to adopt innovative and rigorous conduct in stakeholder notification methods, Aygaz has been awarded various international prizes during this reporting period.

- With its corporate annual report, Aygaz won the Gold Award in "Overall Assessment" category and the Bronze Award in "Interior side Design" category of the 2011 ARC Awards (Annual Report Competition). ARC Awards which evaluates annual reports is considered to be one of the most prestigious international competitions.
- With the internal communication magazine; World of Aygaz, Aygaz won the Platinum Award in Print: Magazine, Newsletter category at LACP's (League of American Communications Professionals) 2010 Spotlight Awards.



# SUSTAINABLE OPERATIONS



- > LPG supply security
  - > Facilities
  - > Storage and logistics
  - > Aygaz vessels
- > Supply chain management
  - > Aygaz dealers
  - > Information systems



Aygaz takes responsibility for the operations of every unit-from suppliers to dealers, from facility and vessel workers to transport operators and to IT teams who ensure data security and business continuity-with latest technology.

### Why does Aygaz value sustainable operations?

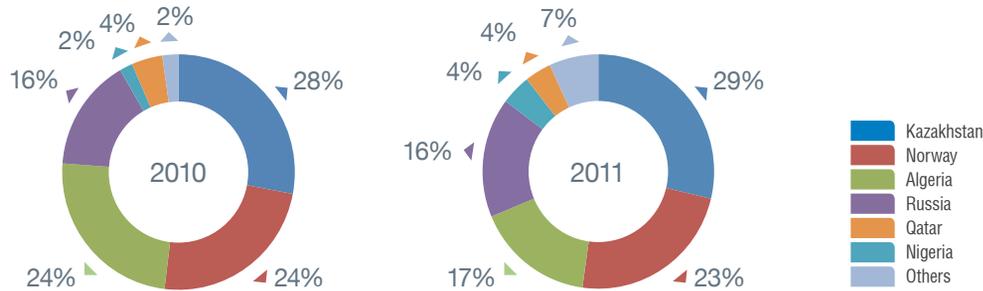
Aygaz holds great responsibility in the energy sector for being the only LPG company that performs all the processes from LPG supply, storage, filling, to the manufacture and sale of LPG devices and products. In order to maintain safe delivery of LPG to consumers, to provide technical support to consumers and to minimize environmental impact during this whole process; Aygaz takes responsibility for the operations of every unit-from suppliers to dealers, from facility and vessel workers to transport operators and to IT teams who ensure data security and business continuity-with latest technology. In this context, the primary priority for Aygaz is the uninterrupted continuation of operations at the optimum level.

### How does Aygaz manage sustainable operations?

The sustainability of operations is the basis of Aygaz's continued existence. Aygaz, together with all its units, is fully accountable for the management of this process. In this course of action, while the technological infrastructure of facilities and vessels are expanded, their environmental impact is minimized. LPG supply, storage, transport are optimized, information systems are developed, and business growth of suppliers are enhanced.



## > Aygaz' LPG supply by country during the reporting period



### LPG supply security

LPG supply security and sustainability is Aygaz's primary business strategy. All long-term contracts are made with direct producers or their extensions, thus reliability of supply is assured. Aygaz is the only Turkish company that conducts purchasing from abroad with its own fleet. International supply is handled in levels much above the European Standards determined for the product. Thanks to its supply strategy, Aygaz is not 100% dependent on any region or country. It does not supply LPG from countries that are subject to restrictions and/or embargoed by Turkey or international organizations.

### Facilities

Aygaz operates 5 marine terminals, 7 filling facilities, a production plant and a cylinder renovation facility in accordance with international standards and managed by modern technology. With 218,000 m<sup>3</sup> total storage capacity, Aygaz has the largest LPG storage capacity in Turkey.

Aygaz prioritizes environmental safety in the regions in which operates through an understanding of good neighborly relations. At each stage of the filling process, risk assessments are conducted and necessary infrastructure maintained against natural disasters and possible gas leakages. For the elimination of all harmful effects for the environment, risk analyses are carried out and criteria measured and electronically monitored on a regular basis. Monthly drills under various scenarios are done in order to ensure environmental safety. Many forms of collaborative activity concerning environment and safety are realized with neighboring plants.

The emergency drill that is required under ISPS Code (International Port Facility Security Management System) was conducted in Aygaz Ambarlı Terminal on 30 June 2010. Common hydrant lines and periodic safety meetings are exemplary for the Law No. 5312. Aygaz establishes relationships

For the elimination of all harmful effects for the environment, risk analysis studies are carried out and criterias are measured and electronically monitored on a regular basis.

#### Student visits in Aygaz facilities

In 2010, students and teachers of the Ziya Gökalp Primary School, which is adjacent to Aygaz Dörtüol Terminal Directorate, have paid a visit to Aygaz employees. In the Terminal Directorate, students were informed about LPG, cylinders and the use of water heaters. Students, on the other hand, presented their Aygaz-themed drawings to the employees.

In Ambarlı Terminal Facility, in 2011, Saide Zorlu Vocational High School students were offered a tour and seminars and trainings were provided under the project "Vocational Education: a Crucial Matter for the Nation".



✓  
**1,052 man\*hours**

of training given by Aygaz Environmental Management Unit officials

with local population, that support social and economic development. Aygaz's recruitment procedures give priority to applications made from local communities. The great majority of the 93 high school and 62 university level student interns in 2010 and 95 high school and 73 university level student interns in 2011 come from local population. In 2012, environment-related training is planned in surrounding schools.

Aygaz manages quality, environment, occupational health and safety, and customer satisfaction systems in an integrated mode. In order for assessing the environmental impacts of planned investments, Environmental Impact

Assessment (EIA) reports are prepared under the framework of relevant legislation. In investment decisions, legislation and standards-related developments, environmental impact, fire and occupational health and safety assessments are taken into account. Environmental audits for 12 facilities were conducted in line with environmental legislation in 2011. 1,052 man\*hours of training by Aygaz Environmental Management Unit officials was given.

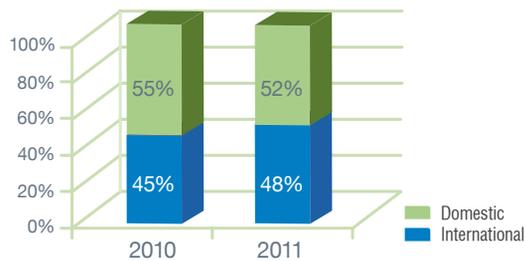
In 2012, the completion of environmental permit processes in all facilities and visits and OHS-Quality based control and audits together with training programs are aimed to be realized on a facility by facility basis.

→ Environmental investments of Aygaz

2010 **817,632.54 TL**

2011 **1,872,179.76 TL**

### > Gebze Plant sales distribution (%Revenue)



### > Amount produced in Gebze Plant (Units)

	2010	2011
Cylinder	1,898,120	1,932,222
Tank	1,367	1,688
Regulator	486,623	454,699
Valve	2,845,374	3,230,855

Aygaz cylinders, tanks, valves and regulators are produced by the cutting edge technology in the Gebze Plant, which is subject to both internal and external audits and has ISO 9001 Quality Management System, ISO 10002 Customer Complaint Management System, ISO 14001 Environment and OHSAS 18001 Occupational Health and Safety certificates. In order to ensure the free movement of its products in the EU, Aygaz provides CE and PI approvals under 'Transportable Pressure Equipment Directive' and 'Pressure

Equipment Directive'. Products produced in the Gebze Plant are exported to many countries such as Germany, Belgium, Czech Republic, England, Spain, Sweden, Italy, Greece, Romania, Slovenia, Afghanistan, Angola, UAE, Ethiopia, Morocco, India, Iraq, Cyprus, Lebanon, Nepal, Sri Lanka, Sudan, Syria, Tunisia, and Jordan.

#### Storage and logistics

Storage and Logistics is an important part of Aygaz's business strategy. LPG that is stored in filling stations is

delivered to cylinder gas and auto gas consumers through dealers and bulk LPG consumers by tanker trucks. In 2011, Aygaz, which has a land transport fleet with the biggest capacity in Turkey, has 230 tanker trucks and semi-trailers and 159 cylinder gas vehicles of different sizes. In line with its business strategy, Aygaz engages in planning for all transport operations in various alternative ways. In cases where it is not possible to reach LPG to filling facilities directly through pipelines or marine transportation, it is transported through

#### Gebze Plant integrated project management and increased efficiency project

Thanks to the integration of TPM infrastructure into the SAP-MII program, the project for growing production efficiency by automatic collection and transformation of the information on the machine based units, cycle time, operator-work time and performance losses in production lines into digital data, and further, by allowing quick and effective decisions by providing practical reports has been completed during the reporting period and was nominated for the Most Successful Koç Employees award. With this project, all the machinery has been included in the system and accurate and fast access to production data without waiting for paper printed reports has been achieved. TPM infrastructure has been transferred to digital media, and full integration with SAP maintained. With the automated data collection system, potential manual data entry errors have been prevented. Traceability is enhanced by visual elements. The installation of LCD screens inside the facilities allows transparency and direct access to production data by employees from operators to management. This provides the employees the opportunity to monitor their own performance.

With the project, the achievement of quick results and increase in productivity through fast and effective decision making realized by immediate access to performance loss data and determination of focus-areas. By the transfer of many process control reports into electronic environment, paper use is reduced, traceability, effective analysis and easy retroactive reporting is maintained. Maintenance process is fully transformed into automation. A robust reporting infrastructure for decision support system is created.



✓  
**218,000 m<sup>3</sup>**

Storage capacity

#### **Tanker operator in-house training**

Aygaz has launched the Tanker Operator In-House Training Project in order to ensure tanker operators are able to supply more securely, increase safety awareness and preparedness for an emergency, minimize risks and dangers, draw attention to traffic rules, increase cooperation and communication. The project aims to reach 284 operators that serve in 8 facilities and 230 road tankers, and serve to 2,500 customers. The first of the trainings is realized between 5-6th December 2011 in Ambarlı Terminal with the presence of 16 operators. In the training, information about LPG products, tanker equipment, meters, filling and fire safety is provided. The courses are planned to take place twice in 2012 in each facility.

70 tanker semi-trailers. When gas cannot be provided for residential, commercial or industrial customers via pipelines or marine transport, products are carried by tank trucks that are in international standards. In addition, gas is transported to distribution centers tied to filling facilities and cylinder gas dealers spread throughout the country by trucks and semi-trailers.

Aygaz is the LPG distribution company that has Turkey's largest storage capacity with 218,000 m<sup>3</sup>. 1,700,000 tons of LPG is transported through Aygaz annually. Unlike many other LPG companies, Aygaz carries out separate storage management systems for four different types of products; mixed LPG, auto gas, propane and odourless LPG, and in this way, high quality is maintained by preventing the deterioration of products' compositions. Auto gas has started to be stored separate from other products for the first time in Turkey by Aygaz. Aygaz

provides other LPG companies with pipe transfer thanks to its storage capacity. Other LPG companies can also transfer from marine tankers by the means of the pipeline usage services provided by Aygaz.

As a priority issue, transport security is monitored by occupational health experts of Aygaz, which has a large logistics network. In possible accident situations, in order to prevent the harms of LPG—which is defined as an explosive substance among hazardous materials—all the security measures are taken as required by Turkish Standards, European Norms and the ADR (European Agreement on the Carriage of Dangerous Goods by Road). In this context, transport tanks are manufactured according to standards, certification of compliance with the standards of tanks and equipment, test certificates, certification of safety valves and projects are archived. Scenarios and exercises on potential hazards, fire

Necessary training on the transport of hazardous substances is offered as required by the ADR and legislation. Total amount of training given to transport staff has been realized as 12,000 man\*hours and training per person as 13 hours.

> Aygaz vessels building year and transport capacity information

(cbm)

	Built in	Capacity
Anadoluhisari	1981	3,450
Kandilli	1991	3,200
Kuleli	1996	5,025
Kuzguncuk	2001	6,820
Beylerbeyi	2008	11,000

safety and first aid training are organized throughout the year.

With these frequent trainings, responsible staff is informed and necessary measures are taken against possible emergencies. In-house and on-site breaking, stopping without drifting and rolling trainings are given to the transport staff of Aygaz. Necessary training on the transport of hazardous substances is offered as required by the ADR and legislation. Total amount of training given to transport staff has been realized as 12,000 man\*hours and training per person as 13 hours. Vehicle locations and speed can be controlled through the Vehicle Tracking System. With this system, besides the step-up in fleet security, transporter-operator performance assessment and customer satisfaction are also maintained. The Transportation Safety Board is aimed to be assembled as a specialized management unit in the next reporting period.

### Aygaz vessels

Aygaz' marine fleet creates a competitive advantage in terms of logistics. Thanks to the fleet, it can operate in marine logistics independently and with large lots, achieve advantage in supply-chain, and win customer satisfaction with the uninterrupted provision of bunkering. Aygaz, with its principle of continuous learning, will join the benchmarking meetings by other chemicals and petroleum transporting firms, where management, cruising, personnel, cargo and environmental safety issues are discussed.

Aygaz has brought its marine stations under one roof with the launch of its subsidiary Anadoluhisari Tankercilik in 2010. With the five high capacity and specially equipped vessels, Anadoluhisari, Kandilli, Beylerbeyi, Kuzguncuk and Kuleli Tanker corporations meet a significant part of imports as well as LPG supply between

terminals. Along with the inclusion of the Beylerbeyi tanker to its fleet in 2011, carrying capacity of Aygaz has increased by 60%. As being one of the few pressurized tankers in the world that can upload up to -10 (minus 10) degrees, it is a ship that can be used all year round for the Black Sea ports that Aygaz makes purchases via its vessels. With the acquisition of Beylerbeyi, the average age of the fleet is reduced from 19 to 15. Beylerbeyi is the largest marine vessel that serves under Turkish flag with its 7,893 gross tons and 11,025 m<sup>3</sup> LPG capacities. The Anadoluhisari tanker that has past the age of 30 pulled from service in the first half of 2012 in line with fleet rejuvenation efforts.

In order to maximize cruise safety, electronic navigation devices such as radar, wireless and gyro are used. Cruise safety is aimed to be carried to the highest level with the completion of ECDIS (Electronic Chart Display System) developed in accordance with latest technology in all ships by 2015.



Aygaz complies with the rules that are put into effect and constantly updated by IMO (International Maritime Organization) and its sub-agencies. The fact that, every ship and tanker carries minimum 50 certificates that are periodically controlled, renewed and verified by international classification societies, flag state, port state and insurance companies indicates that P&I (Protection and indemnity) status evaluation and MOC (Major Oil Company) approval processes are well-managed. Since 2004, Aygaz fulfills the requirements of ISPS (International Ship and Port Facility) Code against dangers borne in international waters (especially piracy, stowaways, theft at port etc.) in its port facilities together with its fleet ships. In addition, TMSA (Tanker Management Self-Assessment Information), which is regarded as the self-assessment model for tanker managers, is an important guide for Aygaz. Accordingly, 'Chevron TMSA Office Audit' will take place in the Gebze Plant in February 2012.

In all shipping processes, Quality Assurance Management System (ISM Code) has been carried out in parallel with ISO 9001. The membership process for ISO 14001 has been started in Kuzuncuk vessel, as the pilot ship, with the publication of Environmental Management System Policy in October 2011 and office audits in February 2012. All the fleet ships are planned to enter into the scope of ISO 14001 with the completion of the membership process in the first three months of 2012.

Fleet ships are subject to SIRE (Ship Inspection Report Programme) controls under OCIMF (Oil Companies International Marine Forum). The compliance of the fleet ships with targeted standards has been approved following the inspections by the main product supplier Chevron and in 2011, by leading companies in the sector. The ships adhere to all the rules for environmental safety in line with MARPOL (International Convention for

the Prevention of Pollution from Ships). Requirements of 'waste management' and 'standard for the gall-water intake/discharge' are also abided by.

SOLAS (International Convention for Safety of Life at Sea) requirements are successfully pursued for the occupational health and security of employees. That there have been no accidents up to date is due to the importance given by seamen and employees to this issue. On-board trainings on a regular basis have a large share in achieving this result.

### Supply chain management

Managing the supply-chain as value-chain, Aygaz has generalized its supply-chain responsibilities to its affiliates onwards 2010. From the beginning of 2011, purchases by Mogaz, Aygaz Dođal Gaz, Akpa and Anadoluhisari Tankercilik have started to be executed by Aygaz Purchasing Department. With this adjustment in management

Managing the supply-chain as value-chain, Aygaz has generalized its supply-chain responsibilities to its affiliates onwards 2010.



process, procurement rose by 25% while benefits in supply costs remained between 10-15%. The new structure allowed new specialization areas, transport optimizations, accelerated supply times, direct access to producers and joint suppliers. As a result of this expansion, onwards the beginning of 2011, Purchasing Department has been managing the products and services it supplies under three main product groups: "Facility Management and Investment Goods", "Gas Systems" and "Sales-Marketing Support Materials".

By the end of 2011, Aygaz has been working with nearly 1000 suppliers-300 of them being approved-across the country. Aygaz realized 93-94% of its supply from local suppliers for the past 5 years.

#### Supplier selection and evaluation

In order a firm to become an Aygaz supplier it has to:

- Meet technical and organizational

competence standards,

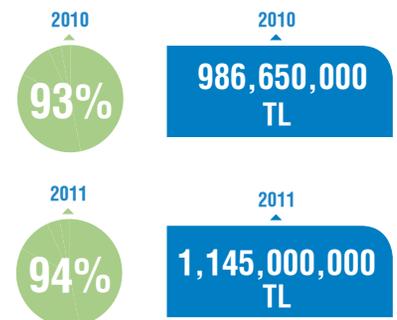
- Yield favorable results from the site visits conducted by Aygaz,
- Pass successfully from the first sample control process,
- Comply with the principles of confidentiality for products that have special supply conditions for Aygaz,
- Acquire the product certificate test reports that guarantee material properties and security conditions (CE, ATEX etc).

Required information about Aygaz suppliers is provided by the assistance of Company Information Forms. Commercial, technical and organizational information regarding the management systems, personnel and machinery inventory are gathered and recorded with this form. Following the evaluation by Purchasing and related departments, companies that have relevant production and services inventories based on Aygaz quality standards are given priority. Purchasing department and other relevant departments visit the firms,

#### Supply chain development day

Aygaz has been participating in Supply Chain Development Day organized by Koç Holding in March every year in order to promote supply chain management among new graduates. In this way, new graduates are informed about supply chain management, allowing them to make more informed career choices.

#### > Local supplier (%) and balance (TL)



Suppliers are expected to operate through the norms of business ethics that would keep the material and services quality at a high level, such as whether they use the systems that secure conditions that may threaten human health and environment, comply with laws and regulations in accordance with joint responsibility, and engage in forced or child labor, comply with rules on compensation and working hours.



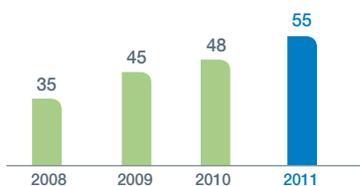
which emerge as appropriate supply sources, in order to verify and monitor the information they declared.

2011 onwards, matters relating to environment, occupational security and business ethics began to be included in supplier selection criteria. In this context, suppliers are expected to operate through the norms of business ethics that would keep the material and services quality at a high level, such as whether they use the systems that secure conditions that may threaten human health and environment, comply with laws and regulations in accordance with joint responsibility, and engage in forced or child labor, comply with rules on compensation and working hours.

the termination, transport conditions, packaging, and correction of non-conformities and disruption of work) both according to purchasing occurred during the period of demand and long-term material supplies. The sharing of information about operating conditions, industry developments, demands and expectations is realized by the systematic visits to suppliers by Aygaz Purchasing teams throughout the year.

Aygaz helps its suppliers in capacity development as part of its local procurement policy. In this way, external dependency is reduced, whereas product range and knowledge of suppliers increased. As a result of the initiatives undertaken in 2011, LPG pumps used in auto gas stations, which were obtained from a German firm for the previous ten years, are now bought from local companies. Aygaz shifted to local producers in hoses for Aygaz Industrial Cylinder Systems and tank-top auto gas LPG tanks and plastic-based housing

→ Number of suppliers visited



Suppliers are evaluated on the basis of product groups. Companies that supply goods and services to Aygaz are evaluated through performance follow-ups such as service-quality and delivery (quantity and compliance with



units in recently implemented project for attiring of camp-type gas cylinders that were previously imported from Far East are now being manufactured locally.

The security forms for all the chemical substances has been collected from suppliers while labeling and packaging procedures for these materials have been implemented during this reporting period, following the interviews and informational meetings with suppliers.

With the introduction of the Supplier Portal in 2012, a healthy communication network for information and training in records, quality, environment, occupational safety and business ethics will be available to suppliers.

### E-purchasing

The E-purchasing System that was first introduced in 2005 and restructured in 2009 constitutes the backbone of Aygaz' procurement and logistics processes. The latest version of e-purchasing program has

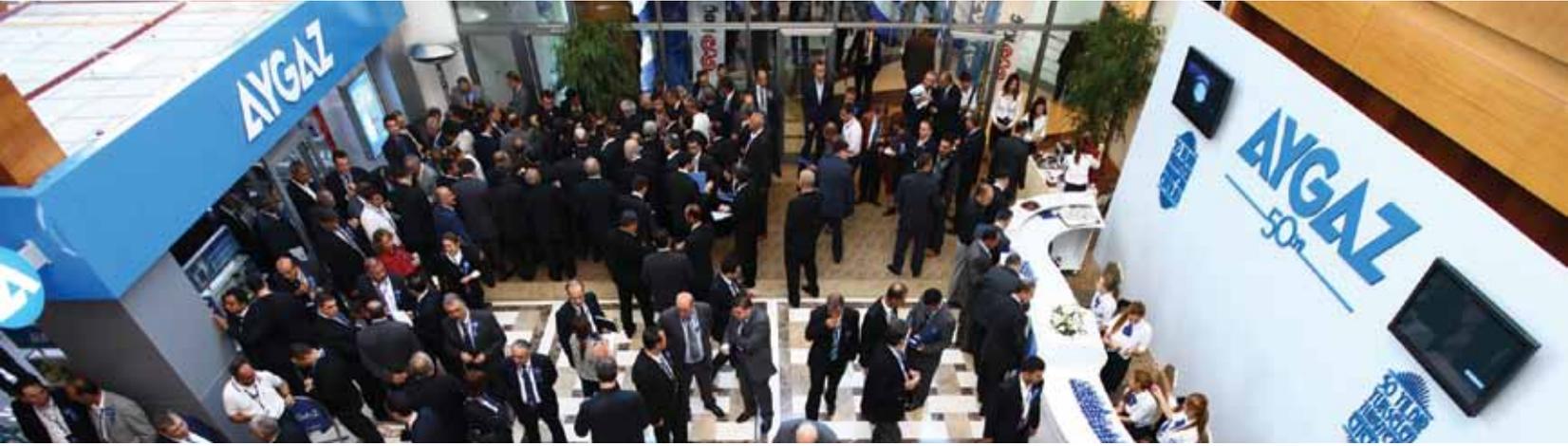
been commissioned in 2010. In early 2011, SAP program was started with the integration of e-purchasing and storage programs. With these integrations, post-request approval process purchase order, sale order and sales delivery have been automated. Also, along with marking of the related budget, cost center, detail motion procurement process is completed and expenses are automatically directed to the relevant accounts. Reporting within the SAP system allows a more efficient and transparent management of the procurement process.

### Aygaz dealers

A robust and strong dealer network plays an important role in Aygaz' success. Communication between Aygaz and its dealers is of great value for the preservation of long-standing relationships and a wide network. Aygaz has set the improvement of dealers' market as a business objective. Accordingly, communication with

### > E-purchasing user information





dealers is maintained by visits made by field sales teams, trainings provided, mini and national dealers' meetings, inspections, the dealer portal, campaigns and submission of application circulars. Dealers can share their suggestions and complaints over the dealer portal during the visits. With the help of the web site and the dealer portal; feedbacks and other ideas about new products, new services, advertisements and other works are received, information are gathered and steps for increasing dealer satisfaction are taken. Care is taken to develop innovative products based on demand from the dealers. During the reporting period, mini-valve long cylinder

and industrial evaporator cylinder system are the products developed by taking the requests of dealers into account.

Informing the dealers about Aygaz products and quality standards is a product liability issue for the management. In the Local Communication Catalogue, communications under quality of services, campaigns and Aygaz products are used effectively. When an issue that necessitates advertising at local or national level, campaigns, promotional work or communication with consumers is the case, visuals (banners, posters, flyers, cylinder labels, booklets and brochures) are prepared and shared with the dealers.

In 2010, a Device Order System has been included into the Dealer Portal in order for all the devices found in Aygaz' product range to be ordered by the dealers easily. Inventory tracking is enabled with this system. In 2011, Current Account System has been activated within the Dealer Portal in order to allow propane dealers' to control of current accounts on monthly

basis. This system targets increased financial transparency through facilitation of tracking invoices to and from dealers. Dealers can log-in to the system with their portal passwords.

"Aygaz Dealer Contact Line" is activated in April 2010 in order to improve communication with the dealers. The field sales team that manages Aygaz' relations with dealers undertakes tasks such as; sales and after-sales services, dealer, shop and vehicle standardization, training of services staff, completion of dealers' technological infrastructure. Dealers in the auto gas segment are periodically visited by the sales teams just as the ones in cylinder gas segment. All the information and developments on marketing activities are communicated to the dealers via circulars.

No child or forced labor is employed at Aygaz. The dealers are expected to apply Aygaz standards in order to provide high quality products and services. In addition to the information

#### The Grand Dealers Meeting in Antalya

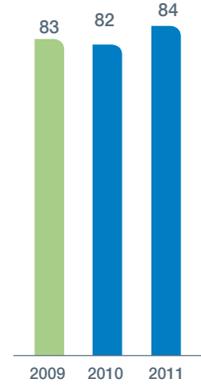
Aygaz held its 50th anniversary Grand Dealers Meeting in Antalya. 1,400 dealers participated in the event. By visiting model cylinder gas shop, Aygaz express stand and Aygaz Training Bus, participants had the chance to view Aygaz' new coated small cylinders, Aygaz Express Sales System, a visual frame, service vehicles and many innovations that will increase customer satisfaction.



### > Cylinder gas dealer satisfaction



### > Auto gas dealer satisfaction



and directives on dealer stores, vehicles, employee outfit and behavior found in Aygaz Dealer Portal, standards expected from dealers is explicated in the Dealers Standards book prepared for cylinder gas dealers.

The most basic standard in the auto gas segment is the TS 11939 standard that describes the security measures to be taken in the stations. In addition to this, the pump staff who works in our stations must pass and acquire the necessary TMMOB Authorized Personnel Training certificate.

Regular checks are performed in order to ensure continuous application of standards. Accordingly, Mystery Shopping Surveys that include controls in store visibility, technical adequacy of employees, compliance with employees' appearance, product, price and a variety of issues are conducted and the results are communicated to the sales team.

Aygaz provides trainings for dealership owners and employees. The Aygaz

Training Bus tours Turkey every year, offering employees a 4-hour training. Dealer owners receive an 8 hour training every year. Perfect Service and Safety Training and Specialist Training taken regularly by cylinder gas dealerdealers and subscriber service personnel include issues such as quality services, products, technical information and security. Onwards 2008, a total 5,248 subscriber services and orders personnel are trained. The headings of the trainings given under Super Service Training are: Aygaz and its applications, bout LPG and LPG accidents, Customer Satisfaction, Behavior and Elocutionary. During 9 dealer trainings between 2010 and 2011, 301 dealership owners received training. The trainings will continue in every region of Turkey in 2012 with the objective of 10 trainings. In the trainings given to dealership owners, courses on Aygaz and its Applications, Sales and Marketing practices, About LPG and LPG Accidents, Finance and Accounting, Human Resources, Law, Logistics, Cylinder Filling and Facilities.

#### **Awards for Subscriber Services Personnel**

In 2011, the Subscriber Services Personnel who gained the most customers through credit card campaigns were rewarded.

#### **Personal Accident Insurance for all the Employees who own the LPG Authorized Personnel Certificate**

With the practice that was launched for the dealer employees-who are the face of Aygaz in the field-to feel secured, all the dealer employees who own the LPG Authorized Personnel Certificate receive a personal accident insurance. Certain amounts of payments are planned for the dealer employees in cases of death, permanent disability and treatment.

An effective information systems management provides data security and business continuity, and alleviates workload in Aygaz. The Koç Group Information Technology Standards are applied in information technology process management. The content of Information Technologies controls are formed on the basis of the COBIT (Control Objective for Information and Related Technology), ISO 27001 Standards and the Koç Group Information Technology Standards.

Dealership trainings are repeated every year according to demand.

In 2010, a total of 498 Subscriber services personnel and orders staff received LPG Authorized Personnel Training in 31 sessions. The number of Aygaz Authorized Personnel Certificate holding SSOs reached 4,136.

In the auto gas segment, services and behavioural trainings for dealer employees are given regularly by Opet. A circular letter is sent to the dealers every six months in order to ensure

the necessary trainings given by the Chamber of Mechanical Engineers to pump officers are conducted on a regular basis.

Aygaz periodically measures dealer satisfaction. All Aygaz dealers were interviewed in the dealer satisfaction survey carried out by Koç Holding in July-November period. In the research-which was done by the CAPI (Computer Aided Personal Interview) method- the general satisfaction index of Aygaz dealers resulted as 77 points during 2010 and 2011, rising by 2 points.

Aygaz received the highest score in dealer satisfaction in auto gas category with 84 points for a seventh time in a row. The company evaluates dealer performance according to the targets set annually together with the dealers. Dealers successful in reaching its goal are rewarded under Dealer Award System.

### Information systems

An effective information systems management provides data security and business continuity, and alleviates workload in Aygaz. The Koç Group Information Technology Standards are

#### The confidentiality of dealer information

The confidentiality of dealer information in the cylinder gas segment is taken under legal protection through the Cylinder Gas Dealership contract that is renewed every 5 years. The storage of customer information in electronic environment is possible with the Aygaz Express System (AES). The security of the system is maintained by the AES OTP (One Time Password) device and the SSL VPN (Secure Sockets Layer-Virtual Private Network) technology.

Up to date, Aygaz Services Line or Aygaz Call Centre received no complaints due to a breach of confidentiality. In the auto gas segment as well, confidentiality of the dealer information is under legal protection within the context of contracts signed with them. Information specific to the dealers, such as sales and current account, is protected in the database and these can only be viewed by persons with certain qualifications.



applied in information technology process management. The content of Information Technologies controls are formed on the basis of the COBIT (Control Objective for Information and Related Technology), ISO 27001 Standards and the Koç Group Information Technology Standards.

In order to ensure data security, password, user and PC management is exercised in all locations and systems in accordance with certain policies. Backups for server and data sources in localities are stored in Istanbul. All types of data that may affect business continuity are replicated in Disaster Recovery Centre in Ankara. Security policies for mobile devices are enabled. All the systems are under multi-layer security, such as IPS, Anti-virus and Firewall.

Aygaz Risk Management and Business Continuity Plans are preserved in three copies in different locations. Authorized

personnel in regions are trained on what to do in case of a disaster. The workability of these scenarios is tested twice a year. Risk Management Project continues across the company. Following this project, corporation-wide business continuity plans will be shaped.

All the new systems that currently exist are created on virtual server architecture or cloud computing. The quotas for instant communication, portal, web site applications and the mail system have been renewed and increased three folds. In this way, the communication infrastructure is enhanced and inter-personal access made easier.

In 2010, the “My Personal Portal” application was started in corporate portals. With the “My Personal Portal” all users can share their blogs, work and messages with their fellow company members. When these applications are implemented the annual User Satisfaction

Survey and other user notifications are considered.

In the 2010-2011 period in Aygaz, the instant communication application created the possibility of virtual meetings under green IT practices. Visual, audio or written communication facilities are available for every user in Aygaz Group. With this application, 800 users have set up 10,000 instant communications and handled 250 audio and 25 visual conferences on a weekly average. As targeted in the previous reporting period, numbers of laptops increased from 200 to 287, and in this way, energy consumption is reduced.



# PRODUCT RESPONSIBILITY



- Product quality
  - Product safety
  - Accessibility of products
  - Responsible advertisements
  - Product information
- Technical support
  - Customer satisfaction
  - Customer information confidentiality
  - R&D practices



Delivering its products and services to consumers with high quality, securely and with an awareness of product responsibility is extremely important for Aygaz.

### Why does Aygaz value product responsibility?

As a clean alternative energy source with lower greenhouse effect LPG is portable, accessible, affordable and multi-purpose and offers energy solutions in multiple points of our lives when it is produced and consumed responsibly. Delivering its products and services to consumers with high quality, securely and with an awareness of product responsibility is extremely important for Aygaz. Aygaz not only aims to raise the perception of security for Aygaz products but also of all LPG products.

### How does Aygaz manage product responsibility?

The quality, accessibility, affordability and secure delivery of our products, correct recognition of LPG, after-sales technical support for our customers and ethical advertising are the cornerstones of our understanding of product responsibility. At the same time, these issues play an important role in the performance evaluations of senior executives. We establish bidirectional communication with our customers and focus on R&D activities within the framework of our principle of providing innovative, high quality and reliable products and services that meet our customers' demands and expectations.





In Aygaz, product responsibility is managed under a number of departments and in the spirit of team work. Together with LPG Supply Office, Product Quality Management, Marketing Directorate, Production Directorate and Purchasing Directorate—which are the departments that have the main responsibility for product responsibility—all Aygaz employees are responsible for maintaining quality and secure usage of Aygaz products. Pricing is a transparent process that takes place in accordance with Energy Market Regulatory Authority (EMRA) directives in Aygaz.

### Product quality

The product quality process is managed with the standards set much above the legal minimum and with the participation of Product Quality Management. Aygaz monitors and controls the quality levels of its products through LPG purchase, storage, shipment and sample analyses in the LPG Quality Assurance System. All the samples taken during LPG distribution are measured in Aygaz facilities in Ambarlı, Yarımca, Dört Yol, Samsun and Alağa, as well as in METU (Middle East

Technical University) PRL (Petrol Research Laboratory). Aygaz participates in the “Fuel-Products Laboratories Comparison Program” (LABKAR) coordinated by METU PRL, which is important for assessing the effectiveness of quality assurance system. Aygaz compares the results from TÜBİTAK MAM and TÜPRAŞ laboratories with the co-sampling study that is conducted monthly.

Since 2001, Aygaz has been serving customers in accordance with the European Auto gas Quality Standard EN 589. Although there is no legal requirement, periodical samples are taken from auto gas stations, sample reports sent to auto gas stations and the product provided is certified. During the reporting period analyses of samples taken from 1,200 stations were performed. Aygaz LPG Quality Control Team travels 150,000 km per year.

### Product safety

Aygaz operates with the mission of delivering all its products to its customers in the most secure way. To this end, Aygaz

### Pürsu

Aygaz has started bottled water distribution activities in 2011 with its Pürsu brand, in order to take advantage of its existing distribution network and to improve dealer satisfaction. Pürsu is bottled in two natural springs in Sapanca and Nazilli and is presented to our customers in May 2011 in 19 lt. and promotional 0.5 lt. bottles and at the TSE TS266 quality standard. Analysis results of the spring water, manufacturer information and information about legal permission are made available to our customers on the Pürsu label. The Pürsu line 444 9787 began its services. 10,760 calls were recorded to Pürsu call center in 2011. Customers are also given information about the product through local promotional activities.

### Aygaz products

Aygaz's products are cylinder gas, auto gas, bulk gas, pressure vessels, valves, portable LPG heaters, palm heaters, barbecues, picnic tube devices, cartridge camping devices, high-pressure regulators, low-pressure regulators, regulator sets and hoses. Aygaz started bottled water distribution activities in 2011 with its Pürsu brand.

The product quality process is managed with the standards set much above the legal minimum and with the participation of Product Quality Management.

### Aygaz quality systems

#### Facilities and Directorates that ISO 9001 Quality Management System and ISO 10002 Customer Satisfaction and Customer Complaints Handling Systems are in effect:

General Management, Ambarlı Filling Facility, Yarıncı Filling Facility, Bursa Filling Facility, Eskişehir Filling Facility, Işıkent Filling Facility, Kırıkkale Filling Facility, Samsun Filling Facility, Dörtöl Filling Facility, Safranbolu Filling Facility, Diyarbakır Filling Facility, Aliğa Filling Facility, Lüleburgaz Filling Facility, Gebze Plant, Cylinder Renewing Unit, Marmara Region Sales Directorate, Trakya Region Sales Directorate, Ege Region Sales Directorate, Çukurova Region Sales Directorate, Orta Anadolu Region Sales Directorate, D. Anadolu Region Sales Directorate, Karadeniz Region Sales Directorate, Antalya Sales Directorate, Erzurum Sales Directorate.

adopts security applications that go far beyond legal requirements.

In Aygaz, manufacture, filling, distribution and after-sales support services are carried out in compliance with all the security standards in order to reach the cylinders to customers, and to maintain a secure use without any problems. The cylinders reach our customers only after passing all the security checks in Aygaz facilities and fitted by certified Aygaz Service Officers after final controls. The “hologram seal”, which shows that the cylinders have passed all the safety tests in Aygaz facilities, have been fully filled and opened for the first time by the users, means that the product’s welding and body damage, corrosion control, hydrostatic leak and dare tests are performed prior to filling and leakage control tests are all completed after the filling.

There is information on the proper and secure use on the Blue Information Card located on domestic cylinders. On the cylinders, the brand of cylinder

manufacturer, the brand of cylinder distributor and the sign that indicates the periodical control of the cylinder had been done in accordance with Turkish standards. Consumers are able to receive the information they request 24 hours from Aygaz web site and Aygaz Call Center. Besides consumers are informed about their safety in the Education Bus by dealers and service officials who handle the distribution of cylinders.

Auto gas is provided to consumers in line with EN 589 European Quality Standard. Aygaz informs all its employees from facility personnel to pump staff on security and product properties using regular trainings. In order to increase the LPG conversion safety standards, Aygaz has formed the ‘Aygaz Conversion Club’ for all authorized auto gas conversion centres and customers with TSE Service Compliance Certificate, in cooperation with automotive industry and auto gas conversion companies. Aygaz is in cooperation with automotive sector on the issue of safe conversion. 12



car producers whose market share is 34% offer guaranteed LPG conversion options.

### Accessibility of products

Aygaz maintains the accessibility of its products through a broad distribution network. Aygaz increases the availability of its products and meets the clean energy needs of consumers from every segment of the society with its constantly renewed marketing campaigns. Aygaz is the only company that can perform a credit card campaign at the national level in Turkey thanks to the “Cylinders in Space” advertisement campaign since 2006 and the Aygaz Express System that is first communicated in 2011. Defined as a satellite-based fast order system, Aygaz Express System is used by 700 dealers by the end of 2011 and 64% of all sales are done through it. There are 1.5 million active customer records in Aygaz Express database.

Aygaz uses social media actively; Aygaz Cylinder Gas Facebook page was

launched in 2011. The Aygaz Cylinder Gas Facebook page has been visited 72,027 times and fan page has been followed by 4,535 users by the end of March 2011. In addition, Aygaz iPhone application has been activated in order to allow iPhone users to be able to find cylinder gas and auto gas dealers quickly, make instant orders and reach required information. The application has been downloaded by nearly 2,000 consumers.

### Responsible advertisements

Aygaz acts as a ‘Responsible Seller’ in all its marketing activities. The products and services are explained to consumers in the most accurate, direct and clear way. Care is shown for the articles of detailed information about campaigns that are given through sub-texts, to be in the size and the flow-speed that is most visible for the consumers in films, TV commercials. Campaign details are also presented to consumers via printed materials and the website.

✓  
**64%**

sales realized through Aygaz Express System

#### Awards

- Aygaz received the “Company Aiming Customer Satisfaction” award organized in the 14th Traditional Consumer Awards by the Ministry of Industry of Turkey.
- Aygaz was chosen one of the four best brands in Turkey and the best brand in LPG sector in the “Best Brands” study conducted by an independent research company.
- The Improved Formula Aygaz Euro LPG + advertisement campaign has won the “Silver Effie” award in Effie Turkey Advertising Activity organized by Advertising Agencies and Advertisers Associations in 2011.
- Aygaz’s “Cylinders in Space” advertisement film was awarded in ‘Humour in Advertising’ category in 6th Humour Awards organized by the Association of Humour Producers.

➤ Aygaz Call Centre service

	2010	2011
Number of persons called Aygaz call centre	120,338	148,352
Monthly average of number of persons that call Aygaz call centre	10,028	12,446
Average solution time for requests concerning service (minutes)	38	10
Average solution time for requests concerning products (minutes)	8	1

Year	Unit		Total time		Average solution time	
	2010	2011	2010	2011	2010	2011
Requests about product	5,463	7,803	44,317	9,462	8	1
Requests about service	3,661	4,453	137,834	42,985	38	10
<b>Total</b>	<b>9,124</b>	<b>12,256</b>	<b>182,151</b>	<b>52,447</b>	<b>20</b>	<b>4</b>

Product information

Aygaz shares clear and periodical information with consumers in various media. General communication with cylinder gas consumers is done by Aygaz Service Line, Aygaz website, consumer SMS and emails, one-to-one communications, trainings performed in the Education Bus and consumer research groups.

Aygaz Service Line serves 7 days 24 hours and aims to respond and resolve customer requests. All the requests received by the Line are resolved in accordance with Customer Information Request and Complaints Procedure as required by ISO-9000.

In order to promote a safe and smooth use of cylinder gas 1,181 customers

In Aygaz Services Line, the average solution minutes, which was 20 minutes in 2010, was realized as 4 minutes in 2011.

in 67 provinces are informed by the means of Aygaz Education Bus-which is a first in the sector-and Cylinder Gas Information Booklets are distributed. During information provision, information necessary for the most secure and efficient use of cylinders are given.

Consumers are informed on cylinders and their usage by markings on the cylinders. These markings provide details about the properties of the cylinders provided to consumers, and thereby, attention drawn to the importance of security. Cylinder's date of manufacture, technical specifications of the gas contained and compliance with EU norms are communicated with the consumers with these markings.

The Blue Information Cards provide Aygaz contact information together with information about the proper and secure use of cylinders and things to do in case of an emergency in order to maintain complete security.

Information about auto gas can be obtained from auto gas station employees, Aygaz corporate website and the Call Centre. Product per liter price information can be viewed in the price board at the entrance of the station or in the clipboard found on the dispenser. Information required for safe and optimum utilization of auto gas is shared in the journal 'Automagazine' that is published four times a year for taxi drivers.

Customers seeking to meet their needs such as heating and warm water and industrial establishment that use LPG in industrial processes can make orders and check the status of their orders through Aygaz website for the bulk gas product that is provided with tanker trucks. Bulk gas informational work is conducted by the "Architect and Contractor Club" from which architects and contractors can reach any information they need about bulk gas. During the reporting period, all the information of the products and services, are directly available to the consumers.



### > Number of calls received

	2010	2011
Service directed	6,842	9,017
Remote connection	3,265	5,805
Others	2,955	6,627
<b>Total</b>	<b>13,062</b>	<b>21,449</b>

### > Services provided by segment

	(Unit)	
	2010	2011
Auto gas	12,607	16,238
Bulk gas	21,539	25,097
Industrial type gas	5,255	5,940
Tank truck meter	443	599

## Technical support

Aygaz supports every stage of the product life cycle in order to provide product quality and safety to its customers. For the purpose of ensuring, secure and continuous use of LPG, there are 29 Aygaz Technical Service points across the country. All the Service Personnel are well trained on LPG systems and equipments and are endowed with all the necessary equipment and spare parts so that they can make immediate interventions when necessary. Aygaz Technical Service carries out surveillance visits for its bulk gas and industrial gas cylinder customers before the installment of the systems. The startup of the systems are allowed only after checking their suitability and the customers are informed about all the stages of these process. For the working bulk gas and industrial-type gas systems, Aygaz conducts periodical controls at least once a year so that systems can operate uninterrupted.

There is a free 7/24 service available for additional test and control requests, fault notifications and other requests from the customers. Installation and revision of bulk gas and industrial LPG systems are carried out by Aygaz Installation Sub-Contractor teams consisting about 30 people across the country. Installation and revision processes are monitored by Aygaz Technical Services ensuring safe use of LPG by clients.

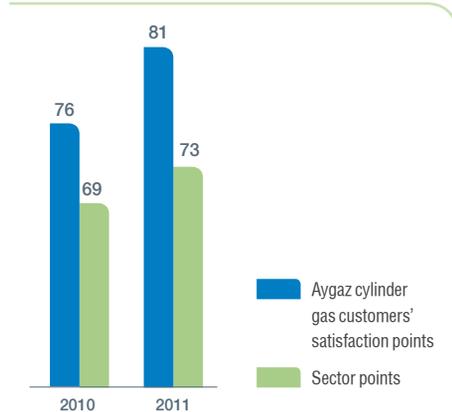
Installation and post-installation technical services are carried out by Fault Solution Centre (FSC) teams who are experts in their fields, approximately 40 persons, trained by Aygaz and working exclusively for Aygaz. Apart from making periodic inspections and calibration of dispensers in auto gas stations once a year, FSC team also provides services in stations upon failure notifications, additional control and calibration requests from dealers along with other requests. LPG stations that are included in maintenance systems prepared especially for Aygaz auto gas stations can receive free and

unlimited services. Fault notifications coming from auto gas stations are initially received by Aygaz Technical Call Centre. For the failures that cannot be resolved by Aygaz Technical Call Centre, FSC teams are directed to the stations.

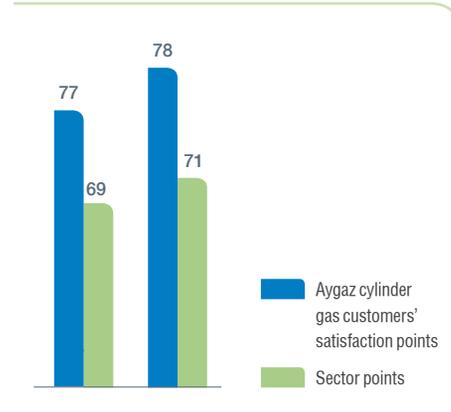
Aygaz works with a wide field team composed of 100 people and trains the field personnel by itself. Besides trainings on issues such as communication with customers and behavioural patterns, a 3-month theory and practice training on technical equipment, meetings and other events are also organized. After the approval of expert trainers, technical personnel commence to work in the field.

Aygaz traditionally organizes Maintenance Days for Aygaz Euro LPG+ consumers. In 2010, 493 maintenance days in 197 autogas stations were conducted while in 2011, 427 maintenance days were held in 159 dealers' autogas stations. Customers may attend to the stations within the scope of this campaign and get their

➤ Cylinder gas customer satisfaction survey (-66.135 scale)



➤ Auto gas customer satisfaction survey (-66.135 scale)



gas adjustments, engine, ignition system, emission and gas leak controls done free of charge by Aygaz teams.

### Customer satisfaction

Customer loyalty assessment is carried out by Koç Holding every year regularly since 2003 for all Koç Group Companies. Through the question forms which are prepared via use of research, Koç Group does face-to-face interviews with the consumers on the sample quantities, aiming to measure the level of consumer satisfaction provided in key performance indicators and to create the annual targets for customer loyalty. Aygaz customer satisfaction research is made for cylinder gas and autogas segments.

Aygaz has been the leader of the sector with the highest score since 2003, the year the research started; and has successfully maintained its leadership position in all the criteria where the assessment has been done.

### Cylinder Gas Customer Survey

In the cylinder gas customer satisfaction survey that is carried out in 2011 with 4,973 customers in 34 cities, the loyalty points of Aygaz customers have increased by 5 points to 81 points in the (-66.135) scale. The difference between Aygaz and sector average which was 7 in 2010, rose to 8 in 2011. Aygaz has been the sector leader since the beginning of this survey in 2003 and has carried this position of sector leadership when all the criteria of the survey are taken into consideration.

Aygaz got the ISO 10002 certificate in June 2011, by adopting a systematic approach towards handling customer satisfaction and customer complaints. The ISO 10002 standard involves the whole process of handling all the complaint about the product including planning, design, management, maintenance and development. Aygaz is the first company to get the ISO 10002 in the LPG sector. Between 20th – 24th June 2011, audits

were carried out by the international organization for standardization regarding the handling of the customer complaint and requests; and as a result of these audits, compliance with standards was approved for ISO 10002. So, Aygaz has also certified management of customer complaints which is considered as “symbol of excellence” all over the world, in addition to its existing quality, environmental and occupational health and safety systems. With the received certificate, Aygaz has shown once again that it has adopted appropriate approaches towards the demands to be addressed carefully and to provide the best service for all the feedback received, as well as being a major solution provider with the customers' business processes.

Aygaz is also involved in Turkey Customer Satisfaction Index (TMME). Turkey Customer Satisfaction Index which has been conducted by the joint venture of KalDer and Ka Research since 2005,



involves more than 25 sectors and 120 organizations with the interviews held in 81 provinces across Turkey each year, and the figures which show consumer satisfaction regarding the purchased products and services received. As a result of this activity, as well as customer satisfaction; customer expectations, perceived quality and value, customer complaints, and the commitment results also are being assessed. In the years 2010 and 2011, Aygaz was among the leading companies with 81 points in cylinder gas sector. In 2010, nearly 90 thousand surveys were conducted in 16 points within the subscriber identification activities.

#### **Auto Gas Customer Satisfaction Survey**

Satisfaction and loyalty of 3,304 auto gas consumers in 26 provinces of Turkey, which make up 67% of auto gas sales all over Turkey, were measured in 2010. Being the company that increased its score the highest, Aygaz was found most successful in areas such as product performance,

product quality, long distance service and the convenience in the first run. The subjects that Aygaz shown most development in comparison to 2009 are defined as providing personal advantages, product performance, adverts and offering appealing promotions. As in previous years, being the highly sought after brand in 2010 as well, Aygaz has been the least rejected brand. Research was conducted in 27 provinces with 3,304 people in 2011. Aygaz continues to maintain the leadership in the sector for auto gas industry as well as cylinder gas industry since the start of the research in 2003.

#### **Customer information confidentiality**

Aygaz guarantees the confidentiality of the customer information via the confidentiality agreements conducted by third parties. The Aygaz Express Database, where consumers' information can be found, is kept securely in the electronic data bank of Koç System which is closed to unauthorized access

from outside. Information received from consumers during the campaign period, is used only with customer's permission and in no way shared with other companies. In line with these measures, a situation for violating customer privacy and security of customer information has never taken place during the reporting period.

#### **R&D practices**

Aygaz monitors existing technologies and develops new ones in order to provide innovative and safe products to its customers while minimizing its environmental impact. In Aygaz, R&D practices are separated into 3 categories; product development, machinery and process development and alternative fuels. Aygaz develops projects and presents innovative products and improves the quality of existing products through engaging in joint projects with universities and Technocity companies as well as taking advantage of TUBITAK TEYDEB R&D incentives. 2.6 million TL of the project

Towards the end of 2011, with the pilot application of the small gas cylinder “body-belt”, it is targeted to improve visual image of small cylinder gas. During 2012, this application will be implemented in all the facilities.

budget of the projects completed since 2006 is financed by TUBITAK TEYDEB. Currently 2 projects with the budget of 1.8 million TL are being supported by TUBITAK TEYDEB. With ownership of 30 patents, Aygaz is a pioneer company in R&D. In order to protect property rights Aygaz made 25 patent applications since 2005. 3 of these patent applications took place during the reporting period. With the patent applications titled; Jugular Tire Removal-Installation, Auto gas Test Apparatus, and Automated Cylinder Recognition System, Aygaz capacitated maximum protection of intellectual property rights.

The R&D Team that was formed in 2005 has been continuing its practices with the R&D Management that was formed in 2010. In order to develop an R&D culture and to ensure the continuity of accumulation of knowledge, Aygaz has run practices to develop its R&D infrastructure together with Tüpraş R&D Center. The R&D processes have been modernized through revisions and a R&D Portal is established. With this Portal, all the R&D projects are followed

with one single interface and transference of knowledge accumulation to next terms is ensured. Within the scope of the infrastructure practices, also, in 2011, the establishment of R&D Laboratory in Yarımca Terminal and R&D Test Field is completed.

Within the scope of machinery and process development, it is aimed to achieve high-provision filling of LPG gas cylinders, get controls to be done with the most reliable and the latest technology and develop automation systems which provides operational efficiency. Aygaz makes separate patent applications for all these pioneering systems within the global LPG sector. Developed together with Aygaz R&D team and technical teams at Filling Facilities, following machinery and processes began to be used at all Aygaz cylinder gas filling facilities; Automatic Filling and Filling Control System, Automatic Jugular Tire Replacement Machines, Domestic Rotary Cylinder Painting Machine, Camp Cylinder Recognition Systems and PLC controlled Leakage and Jugular Tire Control Machines. Within the scope of “Jugular Tyre 100%

Replacement Application” which was launched in 2009, the work on the design of machinery that automatically replaces jugular tyres of round-type cylinder began in 2010. Following the one year long R&D activities; during the first 6 months of 2011 the machinery has been made widespread across the country and in 1.5 years it was implemented in all facilities. In 2011, as a first in the industry, Automatic Jugular Tire Replacement Machine was presented at the 24th World LPG Conference held in Qatar.

While improving and increasing its production ability, Aygaz considers needs of the domestic markets as well as the demand and the expectations from international markets. In line with the demand from abroad Aygaz developed production lines that enable double layer powder coating, while domestically using more resistant and long-lasting non-leaving aluminum paint. In order to make cylinder gas to last longer, a pre-heating project is initiated so that metalized coating applied becomes more efficient. These applications create added value in terms of the use of natural resources



and environmental impact, as they minimize the need for maintenance while prolonging the duration of the use of gas cylinders.

Apart from manufacturing capabilities, Aygaz continues to invest to increase its range of products with different types-models in order to expand in overseas markets and meet all the consumer demand. Within this process; two-piece commercial gas cylinders in various volumes, dust-holding and vertical outlet valves, storage tanks with 7,000 litres and 7,500 litres of volume are the products added to the portfolio.

Total reduction in the energy consumption generated by the R&D practices and Aygaz products and services was recorded as 4% between the years 2010 and 2009. This rate remained constant at 4% between the years 2010 and 2011. In 2010, total reduction was 934,413 GJ while 1,215,999 GJ in 2011. In the reporting period, 100% of the product and service portfolio of Aygaz consist of less energy consuming products compared to its equivalents.

Aygaz continues its product diversity practices without pausing. In 2011, small

cylinders of LPG that are 2kg. are put on market with their plain blue binders in East Anatolian area. This practice is planned to be generalized within the whole country with various designs.

#### **Aygaz Euro LPG + with Improved Formula**

Aygaz aims to increase innovation and safety in products and processes by meeting the customer expectations and demands with the R&D activities carried out. Aygaz adopts the principle of developing new products thanks to its communication with customers. Turkey's first additive auto gas Aygaz Euro LPG + formula has been improved further in 2010 after extended R&D activities and customer feedback results. It has passed independent laboratory tests under the supervision of İTÜ OTAM (Automotive Technology R&D Centre) where it's cleansing effect

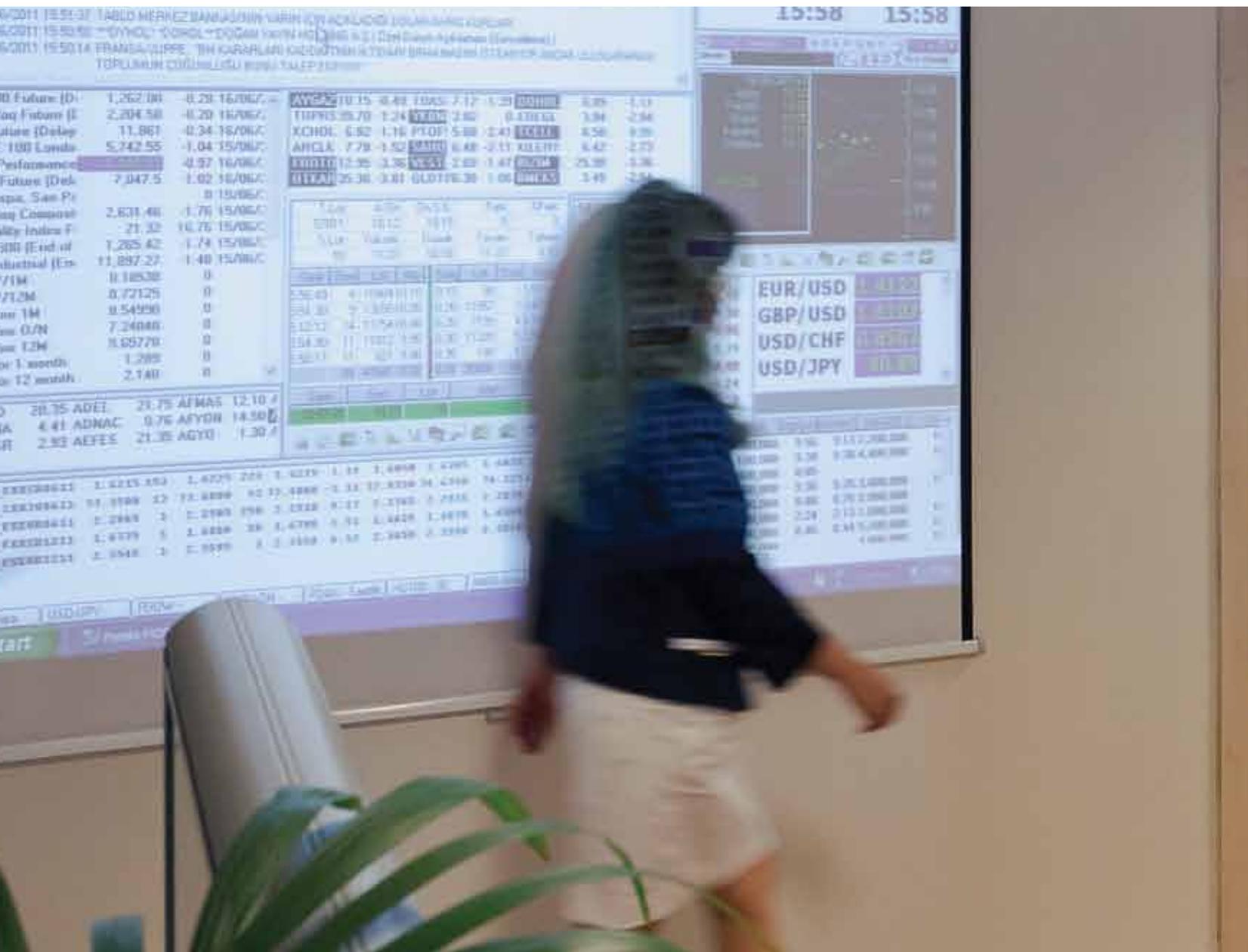
created by the engine, performance increase and fuel economy has been proved.

Aygaz Euro LPG + with Improved Formula provides high traction and more kilometers with less fuel. By creating the cleansing effect in parts of the engine, not only does it reduce the fuel consumption and the gas emission rates, but also it increases engine performance. Specific dosages of additives are added during the filling of auto gas vessels via a special injection system at Aygaz filling terminals. In this

way, Aygaz Euro LPG+ that enjoys the same quality, content and rate of additives is attained in every Aygaz station.

With the project, fuel saving improvements, reaching up to 5.13% at acceleration between 40-100 km/h, 2.66% at 90km/h constant speed and 3.36% at acceleration between 60-100km/h are achieved. Aygaz products generated 697,604.6 GJ in 2010 and 509,240 GJ in 2011 worth of energy savings.

# EMPLOYEE DEVELOPMENT



- Diversity and equal opportunities in the work place
  - Performance evaluation system
  - Trainings provided to employees
  - Compensation and fringe benefits
- Internal communication
  - Work-Life balance
  - Human rights
  - Occupational health and safety



Aygaz constantly works to attract the most competent human capital as well as providing its employees the work environment which enables self-development.

### Why does Aygaz value employee development?

As Aygaz advances to become an integrated energy company with a large investment portfolio, it works to have employees that are competent, knowledgeable and dedicated individuals. With this in mind, Aygaz constantly works to attract the most competent human capital as well as providing its employees the work environment which enables self-development. Aygaz keeps our founder, Vehbi Koç's statement "Our most important asset is our people" alive through the investments made in this field.

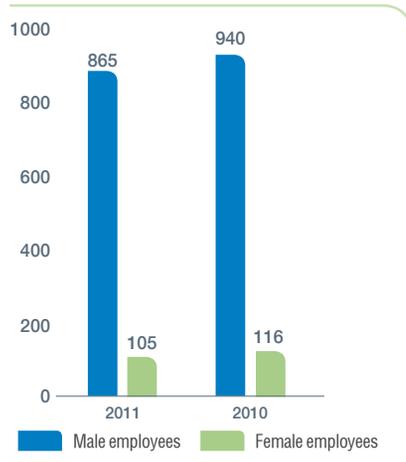
### How does Aygaz manage employee development?

Under the heading of Employee Development, Aygaz manages; human rights, recruitment, training, performance evaluation, the rights and opportunities offered to employees, relations with trade unions, work-life balance, social diversity and occupational health and safety. All the matters affecting working conditions at Aygaz are under the authority and responsibility of Human Resources Department which reports directly to the General Manager. Relations with trade unions are managed by the Industrial Relations Manager which is linked to Human Resources Directorate.

Human Resources Policies and Corporate HR practices of Aygaz can be reached at the following Internet address; <http://www.aygaz.com.tr/tr-TR/InsanKaynaklari/YonetimPrensiplerimiz/>



> Total number of employees during the reporting period<sup>4</sup>



> Employee tenure distribution



As a Koç Group company Aygaz acts in line with the rules and regulations covering social rights, working conditions, occupational health and safety as well as its own “Staff Regulations”. While reflecting Koç Group principles, the provisions of these Regulations are adapted to Aygaz on the basis of private sector conditions.

Along with the rest of Koç Group companies, Aygaz implemented the “Principles of Ethical Conduct and Practice” in 2010. Principles of Ethical Conduct and Practice regulate the relations of Aygaz employees with customers, government, shareholders, competitors, suppliers and dealers. This set of Principles also refers to the UN Global Compact. As in all Group companies, Aygaz has an Ethical Conduct Committee which monitors and controls compliance with the rules

and regulations. In accordance with the Ethical Principles and the agreements supported by the Republic of Turkey and Koç Group, Aygaz takes all the necessary measures to prevent human rights violations. Aygaz does not discriminate its employees, suppliers, and other stakeholders on the basis of race, origin, religion, gender, social class, nationality, age, physical disability and respects these differences.

### Social diversity and equal opportunities in the work place

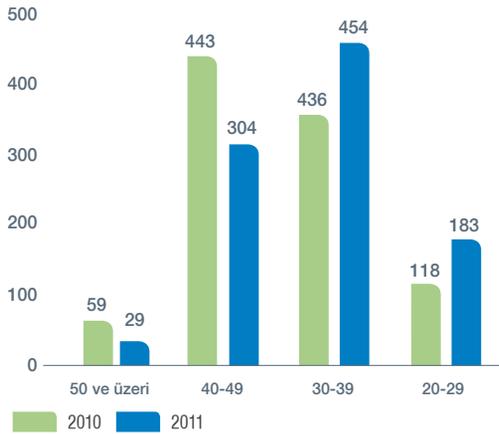
Aygaz believes employees with different views and qualifications enrich the work life and stimulate creativity. Aygaz never operates any of its activities based on criteria which could lead to discrimination in religion, language, race, nationality, gender, physical disability, age and ethnic origin. Aygaz

#### Awards

- > First Prize in “Performance Management” category of the 2010 Personnel Management Awards organized by Personnel Management Association of Turkey (PERYON)
- > “HR Team of the Year” award at the international competition organized by The Stevie Awards due to successful HR activities run by Aygaz in 2011.

<sup>4</sup>Part-time employees have not been reported. In 2010, there had been 2 part-time employees. In 2011, there had been none. In 2011, Anadoluhisari Tankercilik Company was established and 104 employees were transferred to this company. There is no decrease in the employee number as this company is not in the scope of this report.

➤ Employee age distribution



➤ Employee turnover rate



➤ Breakdown of employees by type of employment



deliberates company requirements and candidates' competencies throughout its recruitment processes. Job request forms and job adverts does not request data on gender, age or other data which may cause social inequality. An understanding of equality pertains onof the subjects like performance evaluation, training, promotion, task changes and provision of rights and equalities. There are no lawsuits filed against Aygaz on discrimination, which is a shared responsibility of HR Directorate, Legal Consultancy of Aygaz and the Aygaz Management Team. Also, Aygaz has no record of complaints filed in this regard.

**Performance evaluation system**

Performance Management System which is based on rewarding of the employees on their achievements and dissemination of the objectives to all employees starting from the top management aims to reward the high performance employees and plan improvement and development

activities for the low performers. Within the scope of the performance system which covers all white collar employees, the goals are deduced from the company objectives and determined according to the employee position's area of responsibility and authority. Starting from 2010, blue-collar employees in Gebze and from 2011 all other blue-collar employees started to be covered by the performance evaluation system. Accordingly, all the Aygaz employees have been integrated into the regular performance assessment system.

**Trainings provided to employees**

Aygaz recognizes the importance of training and development of its employees at all levels. Trainings planned by Human Resources Directorate, Quality Systems – Health and Safety Directorate and Aygaz Management Team carry significance for employee development understanding of Aygaz.

In order to support personal and career developments of employees, Aygaz plans training programmes based on the results of competency and performance evaluations every year.

Trainings are organised in three main categories which are Management Development Training, Personal Development Training and trainings required under Acts and Regulations. Management Development Training includes Leadership Trainings which are prepared with Koç Holding, English lessons and MBA support. In this category, 64 employees participated in long-term Leadership Programmes. English lessons are provided for all the employees who request. In 2010, 14 employees and in 2011, 26 employees received English lessons for a minimum of 1 year. In 2010, 2 employees and in 2011, 3 employees were given Executive MBA support at the Koç University. Until now, total of 28 employees participated in this programme.



Personal Development Trainings are prearranged according to the themes determined each year. For white collar employees, in 2010, “Golden Key for Performance Management” themed Performance Management training, in 2011 “Procurement Management Simulation” themed Creating Holistic Approach trainings were organized. Employees are enabled to follow current issues in their respective fields via attending seminars and conferences. The necessary training as required by rules and regulations are granted to the employees who work in relevant functions. LPG technical training involves blue collar workers as well as the white collar workers at the sales teams and Aygaz facilities.

Koç Academy System is a development platform integrated with Koç Group Human Resources Systems. It actualizes planning of personal development for employees facilitating the employees to get their preferred training via the electronic platform at a selected time or venue. In 2010 and

2011, 467 and 482 employees benefited from the Koç Academy System.

Leadership and Effective Performance Trainings are organized for the managers who would like to benefit further from their employees’ skills and knowledge. Training organized in May 2010 emphasized various approaches that will empower both Aygaz and Aygaz employees to reach their objectives in the healthiest way.

### Compensation and fringe benefits

Aygaz implements a compensation policy which is competitive, based on fair corporate policies and within the equal pay for equal job approach. Compensation of the employees is determined in line with their ranks, education and expertise which are based on employees’ knowledge, skills as well as their extent of problem-solving and scope of responsibility. Pay rises are implemented on annual basis depending on the annual inflation and performances evaluation results. Compensation

### > Trainings provided for employees<sup>5</sup>

	2010	2011
Total training hours	23,364	23,732
Average training hour per person	23.89	26.9

### > Average training hour per employee

	2010	2011
White collar	19.36	31.2
Blue collar	24.32	20.4

### > Total training hours

	2010	2011
White collar	9,040	14,117
Blue collar	14,324	9,615

<sup>5</sup> Anadoluhisari Tankercilik Company (established in 2011) employees, have not been included in the scope of this report.



policies are reviewed prior to pay rise periods according to salary surveys and benchmarking studies. Aygaz determines its compensation policy as the median of national and international companies in the sector. The lowest salary rate paid at Aygaz is 42% above the minimum wage in Turkey.

Employee retirement plan at Aygaz are carried out in accordance with legal obligations. Koç Holding Pension and Welfare Foundation includes all white collar workers and also the blue collar workers on request. In 2010, 883 employees and in 2011 840 employees are recorded as members of Koç Holding Pension and Welfare Foundation. For all the employees who are a member of the Foundation, Aygaz reciprocates the deducted 6% of the salary hence helping employees to increase their accumulation. Members of the Koç Holding Pension and Welfare Foundation can opt for optional private health insurance. In 2010 and 2011, the numbers of employees benefited

from private insurance were 368 and 373, respectively. Aygaz also offers life insurance and in-house doctor for its employees.

Part-time employees at Aygaz, cannot be members of the Koç Holding Pension and Welfare Foundation and the private health insurance but are provided with all other benefits.

### Internal communication

Adopting the approach that two-way and open communication with employees improves corporate efficiency, Aygaz utilizes as many communication channels as possible. Activities like the annual communication meetings, company results-sharing meetings, blue-collar picnics, holiday celebrations, Iftar dinners, end-of-year celebrations, exhibitions, social responsibility projects, regional and facility visits, service awards ceremonies, department dinners and Koç Sports Festival strengthens communication

and cooperation among employees and enables managers to address their staff in a transparent manner.

Senior management at Aygaz adopts an open-door approach hence all employees can reach managers from any level via telephone, mail or visit. Annual communication meetings are open to the entire workforce and gets white and blue collar workers and senior level management together. At these meetings employees are informed about the objectives of the company and the floor is open to questions. During the reporting period, 4 Company Results Sharing Meetings, 1 Big Dealers Meeting and more than 11 Regional Dealers Meetings, 1 50th Year Communication Meeting, 2 Service Awards Ceremonies and 9 Breakfast Meetings with participation of the General Manager and departments took place.

The efforts shown on increasing employee knowledge are also channelled to listening to their ideas and put them into practice.

Aygaz believes enriched social life positively contributes to a successful business life.



Aygaz employees can make suggestions in all issues by using “Individual Suggestion Forms”. In 2010, 453 employees made suggestions by using the Aygaz suggestion system and 18 of these suggestions were put in practice. In 2011, 52 proposals were made only in Gebze Plant and 16 of them were implemented. Employees participate in different categories of the annually held the “Most Successful Koç Employees” process within the Koç Group with very creative projects. In 2010, 4 projects have been finalists. In the category of Cooperating Blue Collar Employees, Scrap and Repair Cylinder Processing Machine project won an award.

Working Life Evaluation and Improvement Survey, implemented since 1996, is another tool that measures employee satisfaction. These surveys aim to set up action plans for improvement. In 2010, Aygaz achieved 3.88 satisfaction points out of 5. In 2011, Aygaz switched to Employee Loyalty Survey model and obtained 78 which is well above the average of 66

in Turkey. Effective leadership by senior management, open communication system and proper internal communication of company objectives and changes have emerged as the strong points in the survey.

During the reporting period, 17 Aygaz employees visited 63 cylinder gas dealers in 17 cities as part of the regular Dealer Visit Programme. The objective of these visits is to keep open communication between dealers and sales channels and enable dealers to be informed regarding the operations of Aygaz. Administrative notices, regulations and activities of each business unit are shared via internal communication platform Intranet.

### Work-Life balance

Aygaz believes enriched social life positively contributes to a successful business life. New projects are designed in order to enrich employee social life. At Aygaz Headquarters there is a well-equipped gym where employees can train with a sports instructor.

✓  
**78 points**

received by Aygaz in the Employee Loyalty Survey. It is well above the average of 66% in Turkey.

### Volunteers at Aygaz

In 2010 and 2011, 697 and 451 employees volunteered at various projects run by Aygaz and Koç Group.



181

number of students provided with scholarship and internship opportunities in 8 schools within Aygaz's responsibility in 2010-2011

On a voluntary basis, Aygaz employees provide trainings in their respective fields for high school and university students.

All other locations have spaces available for sports activities such as football, volleyball and table tennis. Tournaments are organized in line with the interests of the employees and employees from all locations are encouraged to participate in annual Koç Sports Festival. Aygaz participated in Koç Sports Festival with 166 in 2010 and with 193 employees in 2011. Aygaz employees who have competed in various categories won 4 trophies, 2 gold, 1 silver and 1 bronze medal.

Aygaz-Opet Turkish Music Choir which was formed in 2004 with involvement from Aygaz and Opet employees have now spread to other Koç Energy Group companies, Koç Holding employees, employee relatives and even dealers. The Choir provides employees with an environment to get together outside the business life and is now open to participation from all Koç Group members.

"My Social Activity Club" founded by 12 Aygaz volunteers in 2009 continues its activities. Along with the support from

management, the Club provides alternative routes for socializing outside work via activities like theatre, bowling, excursions, concerts and promotional days. The club carried on with its activities in 2010-2011 by doubling its number of participants. Activities like Dragon Fest, theatre, cultural excursions and bowling tournaments which occurred in 2010 also continued throughout 2011. Also, in 2010, "Looking from Another Perspective" themed photography training was organized. In September 2011, with participation of 9 teams, a bowling tournament was arranged. The winners from different categories were awarded prizes. In 2011, the football team of Gebze Plant participated in GOSBSAD Football Tournament.

Aygaz employs its skilled labour in social responsibility projects. In 2010, My Social Activity Club organized a relief campaign called "Stop Hoarding, Start Sharing" in order to support school libraries. Aygaz employees sent their books to My Social Activity Club and these books were transferred to 4 schools with the help of

## > Occupational Health and Safety Platform

	2010	2011
Number of active OHS committees	14	13
Total number of active OHS committee members	80	90
Number of representatives volunteering for OHS committees	12	25

12 Aygaz volunteers. With attendance from all regional employees and dealers, in 2010 and 2011, 440 and 241 units of blood have been donated to Red Crescent, within the scope of "Giving Blood for my Country" campaign.

Within the scope of the project "Vocational Training: a Crucial Matter for the Nation" that has been running since 2006, in the framework of the Collaboration Protocol on Development of Vocational Training signed between the Ministry of Education and Koç Holding, 9 Vocational High School mentors from Aygaz have been mentoring within determined limits to contribute to the students' personal and vocational development. During the 2010-2011 education year, in 7 different cities, 181 students were provided with scholarship and internship opportunities in 8 schools within Aygaz's responsibility.

Within the volunteering scheme and in order to raise awareness Aygaz employees provide trainings, in their

respective fields, intended for high school and university level students. In 2010, Aygaz management and employees conveyed their experience to the students at the Koç High School, Koç University and Yıldız Technical University. In 2011, Aygaz employees gave information to students at Koç High School, Middle East Technical University and Koç University on various subjects.

Following natural disasters such as earthquakes and floods, Aygaz provides help both at individual level and as a company. In 2011, after the earthquake occurred in the city of Van, Aygaz CEO and senior level management of Koç Group visited the area, carried out on-the-spot evaluations to determine necessities and ensured the transport of these items to the region. Aid collected by Aygaz employees have also been sent to the earthquake victims.

### Human rights

Commitment to human rights is a fundamental part of Aygaz operations.

Management approach to human rights at Aygaz involves internationally recognized practices. With this in mind, Aygaz primarily adheres to UN Universal Declaration of Human Rights and supports the international protocols on work and working conditions as well as on preventing child labour along with forced and bonded labour. In this context, no Aygaz employee can be given a different set of tasks without his/her consent or forced to change their careers. In case of any amendments with regards to tasks and positions, employees are given the minimum period of notice aligned with the relevant law and regulations.

For Aygaz, trade union rights are among the basic human rights. Union relations are carried out within the framework of rules set by the collective bargaining agreements. There is no specific disagreement with unions and sporadic problems are solved through consultation between the chief union representative together with the team of representatives

> Accident Statistics<sup>7</sup>

	2010	2011
Accident frequency rate	16.24	21.94
Accident-severity ratio	0.21	0.25
Days lost	268	357

> Occupational health and safety trainings



As an indicator of the value attached to Aygaz employees and value chain, Aygaz continues to invest in OHS activities with the objective of “0” accidents.

and Industrial Relations Assessment Commission.

At Aygaz, Private Security Services are outsourced. 130 security officers of the selected security company have been trained on topics including human rights, in line with the Law on Private Security Services, 5188. During the reporting period, Aygaz did not receive any complaint about human rights violations.

66% of blue collar Aygaz employees in 2010 and 58% blue collar Aygaz employees in 2011 are members of the union.<sup>6</sup>

**Occupational health and safety**

Occupational health and safety is extremely significant for Aygaz. As an indicator of the value attached to Aygaz employees and value chain, Aygaz continues to invest in OHS activities with the objective of “0” accidents.

Specialist Occupational Health and Safety Platform, established in 2008, continues to operate and make improvements as a

result of the Risk Assessments, Corrective-Preventative activities, Internal-External audits and Occupational Health and Safety Committee meetings. Assessments and practices that are implemented prior to and during the investments made are determined by the members of this Platform.

During the 2010-2011 period, In 2010 Aygaz has assigned 14 OHS committees more, except the 3 OHS committees that is legally expected. There are active OHS committees in all Aygaz facilities including the ones with less than 50 employees. These committees include union representatives as well and designed to represent entire Aygaz workforce. Occupational health and safety related views, suggestions and complaints from employees and union representatives are carefully considered. In addition, collective bargaining agreements contain provisions on occupational health and safety.

Aygaz’ understanding of OHS is shared with the entire value chain; hence there is an Occupational Health and Safety Specification in place for the contracting companies as

<sup>6</sup> Unionisation rates between 2008 and 2009 are calculated through the employees covered by collective bargaining. In this report breakdown of blue-white collar employees was possible due to amendments made in the calculation method.

<sup>7</sup> Employees of the contracting companies are not included. Number of lost days is calculated as calendar days. There is no record of work-related ill health during the reporting period.



well. Companies are encouraged to abide by these Specifications and the contracts of the companies that do not comply are terminated. Periodic trainings in general occupational health and safety rules, occupational accidents and diseases and the causes of the risks at the workplace, accidents, injuries and principles of disease prevention and protection techniques, safe use of work equipment, LPG Authorized Personnel Training and Heavy and Dangerous Works Training, legal rights and duties of the employees, information on rules and regulations, establishing secure medium and systems at the work place, the use of personal protective equipment, working

with equipment with display functions, warning signs, risks arising from chemical, physical and biological substances, cleaning and order, fire protection, thermal comfort conditions, ergonomics, electrical hazards, risks and precautions, first aid and rescue are given to relevant personnel.

#### **Occupational health and safety trainings**

Pre-employment and periodic health examinations are carried out for all Aygaz employees. During their employment period, employees get influenza vaccine, eye scans, lung X-rays, function tests and porter examination.



# 19.81

the accident frequency rate of the operational accidents that took place in Aygaz facilities in 2011

#### **Health and safety issues in collective bargaining contracts**

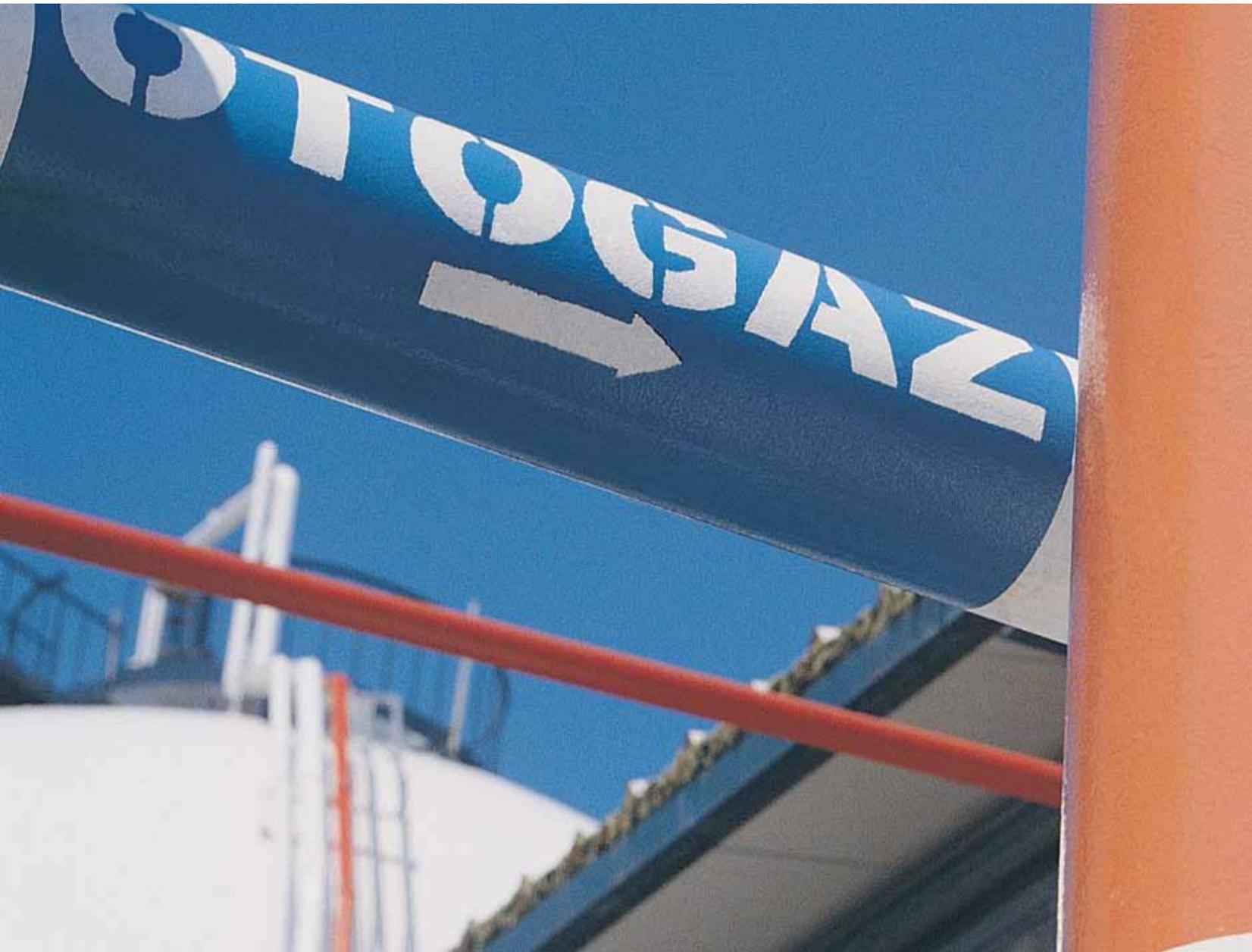
There is a section on occupational health and safety within the MESS Group's collective bargaining agreement. The collective bargaining agreement explicitly outlines employer's responsibilities regarding the working environment.

Issues like pre-employment examinations, periodical examinations every 6 months, the annual X-ray, provision of legally required protective gears by the employer are all described within the agreement. The collective bargaining agreement signed with the Seafarers' Union of Turkey includes similar items in relation to the ship crews.

It is extremely pleasing that as a result of the importance Aygaz attaches to occupational health and safety, there has been no fatal accident during the reporting period.



# ENERGY EFFICIENCY AND EMISSIONS



- > Energy efficiency in production
- > Emission reductions through products



Aygaz's main field of business LPG is globally perceived as a clean energy resource. LPG is more environment friendly compared to other traditional fuels.



### Why does Aygaz value energy efficiency?

Measures that are being taken to reduce carbon emissions are fundamental to energy sector's business responsibilities. For Aygaz, retaining good urban air quality is very important. For that reason, Aygaz strives to be more energy efficient at every stage of its value chain, contribute to development of their stakeholders and take initiatives to reduce carbon emissions. Aygaz generates projects that aim to reduce energy consumption and develops environment friendly products both in terms of production processes and transport operations.

### How does Aygaz manage the process?

Energy efficiency and emissions reduction initiatives are being managed, under the coordination of the Technical Affairs and Investments under the Quality Systems–Health, Safety and Environmental Directorate with contributions from Technical Affairs and Investments Assistant General and Production and Filling facilities. Also, as

a part of the Environmental Coordination Committee, the highest management unit at Koç Group dealing with environmental issues, Aygaz contributes in the management of long-term strategic activities and strategic plans related to environment.

Koç Group Environmental Committee facilitates sharing "best practice" across all sectors. Koç Holding Audit Committee and Group Environment Committee carry out group-wide environmental audit every 2 years, continuously raising environmental awareness within the Group as well as identifying potential risks in a timely manner. In order to carry out simultaneous coordination of climate change and emissions management activities, Koç Group Companies' energy directors, Energy Group managers formed an Energy Efficiency Study Group in 2010. This Study Group develops joint projects and shares best practice across the Koç Group companies. "Protecting global resources and developing energy efficiency" clause under Aygaz's Quality, Environmental and Occupational Health and Safety and Consumer Satisfaction Policies constitutes the backbone of

the Aygaz energy policies. Also, Aygaz adopts 20-20-20 targets endorsed by the EU in 2007 as a set of climate and energy targets to be met by 2020. In this respect, it is aimed to reduce greenhouse gas emissions and primary energy consumption levels by at least 20% and to increase the level of energy consumption coming from renewable resources by 20% by the year 2020.

In 2011, Aygaz participated in Turkey Climate Platform initiated by the Turkish Industry and Business Association (TUSIAD) and the Regional Environment Centre (REC) Turkey. General Manager of Aygaz is also a member of Climate Platform Leaders Group.

Climate Platform is established to support fighting climate change and activities leading to low carbon economy. The Platform aims to finalize its work on Energy Management Systems Certification during the next term.

Please see the following link for Aygaz's Quality, Environmental and Occupational Health and Safety and Consumer Satisfaction Policies <http://www.aygaz.com.tr/tr-TR/Kurumsal/Kalite/KaliteCevreIsSagligiGuvenligiPolitikasi/>

➤ Amount of energy and emissions saved due to conservation and efficiency improvements

	2010	2011
Energy savings (GJ)	4,785	5,451
CO <sub>2</sub> emissions savings (Tons)	97,082	72,517



Aygaz's main field of business LPG is globally perceived as a clean energy resource. LPG is more environment friendly compared to other traditional fuels and it is less pollutant both in terms of domestic and auto gas use. LPG is the most preferred alternative fuel in the world due to its low emission values.

As a company that strives for lower emission targets, main energy resources of Aygaz are LPG, natural gas and electricity. Production facilities use natural gas for both production and heating purposes.

Along with investments in LPG, natural gas and electricity consumption, Aygaz also invests in renewable energy resources. In 2011, a solar energy system was implemented in Işikkent Filling Facility, which provides hot water supply for the personnel premises. Through this project a total of 870 kg of LPG savings were achieved. Also, there are on-going studies being undertaken at Gebze Plant in relation to implementing Photovoltaic solar systems.

Measurement of exhaust gas (CO, NO<sub>x</sub>, SO<sub>2</sub>), particulate matter and volatile organic compound (including leakage emissions) are being carried out at the facilities. In this context measurements are taking place via sampling, systematic sampling and random sampling methods.

Aygaz obtains emission permissions that document the pollutants emitted to the atmosphere by its operations are below legal limits and this is ensured by periodic measurements. Aygaz implements "emission holding systems" on the chimneys of the facilities in order to control and reduce the amount of emissions caused by its operations. In 2011, within the scope of ISO 14064 Greenhouse Gas Emissions Calculation and Reporting Standards, the amount of greenhouse gas emitted by the Aygaz Yarımca Filling Facility has been calculated and verified by an independent organisation. In 2011, emissions have been measured in 10 different facilities from total of 150 sources by accredited and independent organisations in this field. As a result, it is verified that level of emissions are

within the legally allowed limits. Through various practices undertaken in order to reduce energy consumption and increase energy efficiency, Aygaz ensures it achieves energy savings as well as reduction in CO<sub>2</sub> emission levels.

### Energy efficiency in production

Thanks to energy efficiency projects commenced during the previous reporting period, Aygaz reached 10% energy efficiency levels, when capacity and new investments are excluded. In 2010 and 2011, Aygaz continued with new energy efficiency practices to achieve continuous energy savings. One of the most significant projects came to life during this period is the renewal of 10 fixed gear compressors with four variable-speed locally made compressors. Also, pressured air tanks and lines are revised to prevent leakages and efficiency losses. In this way, amount of electricity consumed to produce pressured air production reduced down to 23% levels. Again during the same period, within the scope of maintenance investments, there



**Biological diversity and environmental development practices**

For Aygaz not creating adverse impacts on the physical integrity and the biodiversity within and around the fields that it operates is important. In order to meet this responsibility Aygaz conducts risk identification practices, takes precautions against potential risks, measures and monitors environmental impacts in a multi-dimensional manner. None of the Aygaz's operations are on natural conservation zones designated by law or international conventions, special environmental protection areas and Ramsar sites. There are no lands or water basins seriously affected in terms of biodiversity and the living population as a result of Aygaz's activities.

Initiatives regarding the protection and development of diminishing forested lands are deemed as a corporate activity for Koç Group companies and it is closely monitored via sustainability performance appraisal systems within the scope of environmental management. With this in mind, as a part of a joint project with TEMA Foundation, Aygaz plants one tree in Tekirdağ Memorial Forest on behalf of its employees on their birthdays. In this framework, Aygaz planted 512 and 1,116 trees in the years 2010 and 2011.

has been a design alteration on household-type cylinder sandblasting equipment and camp-type cylinder sandblasting equipment filters. They are changed to dry type filters hence increasing energy efficiency. It is made compulsory by agreement to use high efficiency electric motors; also to make economic benefits by selling the valuable waste that accumulates on the dry type filters and to recycle.

Besides, the efficiency practices took place at the bottlenecks on the production lines enabled more efficient production lines, increased machinery capacity, reduced wasted time due to waiting and transfers on the lines and hence increased energy efficiency generated per product. Improvements in industrial-type cylinder loading unit of circumferential welding system (25% capacity increase), lengthening of normalization furnace household-type cylinder (25% capacity increase), 30% increase in hydrostatic test capacity of cast gas tanks are all exemplary projects that ensure balance between all the

production lines' press-welding-grating processes.

Gebze Plant Integrated Production Management project, whose conceptual design was at its earlier stages in 2010, has been up and running since 2011. This Plant primarily considered quick-win projects as a result of enabling paperless and instantaneous monitoring of all production data and detailed analysis of machinery, personnel, production line efficiency, speed, machinery settings and losses made due to stopping on production lines. In this way, machinery setting and speed losses are avoided, respectively, 10%, 20% and 14% capacity increase for mini valve, handwheel valve body machining and household-type cylinder presses achieved.

During the reporting period, some changes were made at the Kırıkkale Filling Facility's stock platform full cylinder entrance by shortening it and getting rid of 2 elbow tubes. Energy consumption is reduced through cutting the load of 7.45 amps to 5.5 amps on 2 electric motors. Total of 12.6 GJ electricity

## > Aygaz environmental awareness trainings

Aygaz intends to share its deep-rooted accumulation of knowledge on environmental issues with the entire value chain therefore Aygaz conducts environmental trainings all year round. During the reporting period, 8,251 individuals benefited from these trainings.

Person*hour	For company employees	For contracting company employees	With the purpose of social responsibility
2010	19,172	5,184	313
2011	6,508	7,537	6,453

saving is achieved per annum. Through exchanging 2 air compressors feeding cylinder filling with a stronger and energy efficient one compressor electricity saving of 66.15 GJ attained on annual basis.

In order to avoid air consumption, existing system was abolished on the household cylinder gas cleaning tracks in 2010. Duration of brushing the side surfaces of the cylinder has increased however the total duration of cleaning remained the same. Hence, accumulation in the line is prevented. Air consumption and thus electricity consumption is reduced. Due to this project cylinders are now better cleaned.

Along with the efficiency projects that are developed on the production side, Aygaz also ensures energy savings at the offices. In this context, energy savings are achieved by changing lighting fixtures at the Aygaz Head Office's lounge area.

Aygaz values projects that generate energy efficiency in all its activities. In this respect, Aygaz also

conducts optimization initiatives in its transport operations. Aygaz ensures the safety of its supply chain through collaborating with 57 tanker transporters and 77 cylinder gas transporters, a total of 134 transporters. 70% of the transporters are Aygaz's own dealers. Efficiency indicators of optimization practices are based on distance per vehicle, load factors of the vehicle on the way out and return journeys. These ratios are monitored and reported on facility level. In order to optimize transport and reduce transport related emissions, Aygaz monitors and analyses all the transports to final destinations, as well as to main and sub facilities and alters distribution networks accordingly. Since 1st of January 2011 all the transport operations run via SAP. SAP project, which will ensure the tankers to travel at the optimum level, is projected to commence in 2012.

### Emission reductions through products

Aygaz's advanced auto gas product,

Aygaz Euro LPG+, generates 3.9% of fuel savings at a constant speed of 120km. Preferring Aygaz products has led to a total of 697,604.6 GJ and 509,420 GJ energy savings in 2010 and 2011. During the reporting period, CO<sub>2</sub> emissions have been reduced by a total of 20,786,517 tons. Calculations in relation to Euro LPG+ are based on the actual sales data and it reveals 20,714 tons of reduction in CO<sub>2</sub> emissions. As a result of emission reduction initiatives took place in the Head Office, Gebze and Kirikkale facilities, 72,517 tons of CO<sub>2</sub> emissions cutback is achieved. In terms of products' energy consumption requirement, in total, there had been a drop of 934,413 GJ in 2010 and 1,215.99 GJ in 2011. In 2010-2011, reduction rate attained in the products' energy consumption requirement is 4%. The reduction rate of Aygaz product portfolio's energy requirement compared to its equivalents in 2010 and 2011 is 100%. The decline in the use of energy intensive material in 2010 and 2011 are 4,774 GJ and 3,600 GJ, respectively.



# WATER AND WASTE MANAGEMENT



- > Water consumption and wastewater management
  - > Material use and waste management
    - > Scrap and waste management systems



### Why does Aygaz value water and waste management?

Using natural resources efficiently enables Aygaz to operate sustainably. While assisting consumers meet their energy demand, Aygaz ensures natural resources are consumed efficiently and responsibly. Therefore, Aygaz puts strong emphasis on water consumption; hence constantly strives to reduce water consumption both at production and operations level, to increase the quality of discharge and to raise the amount of recycled water. At the same time, Aygaz attempts to minimize use of natural resources, develops waste management systems and invests in recycling methods in order to prevent destruction of natural balance of life.

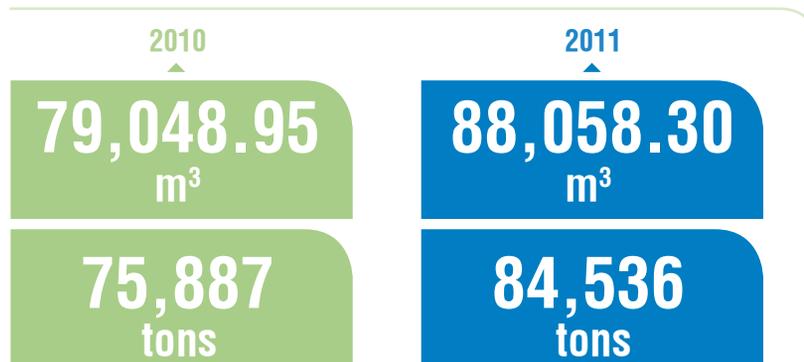
### How does Aygaz manage water and waste management?

Water and waste management is administered under the Technical Affairs and Investments Assistant General, by the Quality Systems –Health and Safety Directorate with contributions from Technical Affairs and Investments Assistant General and all other facilities. By putting Aygaz’s Quality, Environmental and Occupational Health and Safety on the foreground, Aygaz Purchasing department acts together with Quality Systems –Health, Safety and Environmental Directorate while conducting waste and scrap activities. As a member of Koç Group and in accordance with Koç Group Environmental Policies, Aygaz is primarily responsible for minimizing the source of waste resulting from its activities and recycling of it. Non-recyclable waste is disposed via methods in line with environmental regulations, management standards and the type of waste. Primary goal of the wastewater management is to bring recycled wastewater back into use in production processes.



> Total amount of water discharged according to the source  
(surface water, groundwater, collected rain water, wastewater and municipal water)

While assisting consumers meet their energy demand, Aygaz ensures natural resources are consumed efficiently and responsibly.



### Water consumption and wastewater management

Aygaz Head Office and filling facilities largely use groundwater and municipal water. In 2011, Aygaz discharged 63,000 m³/year of water at Sapanca and 11,000 m³/year of water at Nazilli for its Pürsu brand.

In 2010, Aygaz consumed 28,244 m³ of groundwater, 34,883 m³ of municipal water and 34,798 m³ of water from other sources while in 2011 these figures were respectively 32,678 m³, 38,926 m³ and 38,018 m³. There is no water basins seriously affected by water consumption levels of Aygaz. Aygaz does not discharge water to the fields under protection.

Recycling water and minimizing water consumption levels both at production and operations level are important for Aygaz. In 2010, Aygaz consumed total of 97,925m³ water and 50,465m³ of it has been recycled and reused. Rate of recycled water is recorded as 34%. In 2011, 109,622<sup>9</sup>m³ water was consumed while 89,628.05 m³ of water has been recycled and reused. In 2011, the rate of recycled water was 45%. The amount of discharged water in 2010

and 2011 are 49.899 m³ and 48.627 m³ respectively.

#### Recycling hydrostatic test water

Gas cylinders and tanks go under hydrostatic testing within the Aygaz facilities. This procedure allows testing cylinder gas and tanks for leakages through filling them with water. Water used for these tests pooled together and reused in operations involving gas cylinders and tanks.

#### Recycling water used in washing units and paint cabins

Aygaz recycles and reuses water consumed in washing units and painting cabins for camp and household gas cylinders.

In order to avoid deterioration of biological balance and environmental pollution Aygaz is committed to wastewater management. The total amount of wastewater generated in 2010 and 2011 are 49,899 m³ and 48,627 m³. Wastewater is discharged to municipal sewage or municipal wastewater treatment facilities and stream or sea as a receiving environment. Within the organized industrial sites wastewater is conveyed to centralized wastewater treatment facilities. Depending

on its contamination characteristics, wastewater coming from the facilities are discharged to the environment after it is chemically and biologically treated. Periodical analysis is carried out by authorized organizations and it is ensured that the results are within the legal limits.

Chemical wastewater is transferred to balancing reservoir in order to balance discharge. Wastewater is then pumped into the chemical reservoir tank to be dosed. Dosing and mixing enables the flocculation and settling of dissolved and suspended substances in the wastewater. The sludge produced is then pumped to the mud tank. At this stage it is blended with the help of mixers and pumped into the filter press unit where the solid sludge is removed. Rinsed water which remains from the chemical treatment is then transferred to the biological treatment balancing tanks and finally to the aeration unit. After the ventilation process wastewater is discharged to the receiving environment.

<sup>9</sup> Water consumption increased due to additional equipment installment

➤ Total weight of non-hazardous waste by recycling disposal method



➤ Total weight of hazardous waste by disposal method (Tons)

	2010	2011
Recycling	547,086	466,791
Safe Storage	140,509	19.02
Incineration	101,412	110,083

**Material use and waste management**

Aygaz takes initiatives to reduce material use and commits to waste management during its production and product packaging processes. At Aygaz facilities global resource consumption is monitored and evaluated based on targets in order to scrutinize Aygaz’s environmental impact and performance. Analysis of purified sludge and discharge water is carried out at the facilities. Waste disposal projects are developed and initiatives are taken to reduce material used in product packaging.

In 2010, thanks to the improvements made on welding lines 40% reduction in welding gas occurred. Studies are underway to recycle welding compound. Planned studies forecast a rate of 20% savings on material consumption. Thanks to the oil skimming systems implemented on the presses, 85% of spinning oil is recycled and the burden

on the treatment plant is reduced. In 2010, paint consumption was recorded at 1.53 consumption (kg)/total production (tons) below the target of 1.63 and paint sludge consumption was at 0.15 consumption (kg)/total production (tons) below the target of 0.16 consumption (kg)/total production (tons). In 2011, paint consumption was recorded at 1.58 consumption (kg)/total production (tons) below the target of 1.76 consumption (kg)/total production (tons) whereas paint sludge consumption was at 0.17 consumption (kg)/total production (tons) below the target of 0.18 consumption (kg)/total production (tons).

At Aygaz facilities trained personnel inspect gas cylinders. Cylinders that need to be retrieved from the market are identified then sent to be pressed and recycled. Gas cylinders that will be renewed are subjected to internal cleaning before hot work operations. The project that automates the complex procedures of these operations to

improve occupational safety and efficiency is still on-going. After testing the prototype machinery, it has been spread to all facilities and enabled water savings. Aygaz closely monitors the directives, which foresee registration, evaluation, authorization and restriction of chemicals namely REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) and CLP (Classification, Labelling, and Packaging). Aygaz received trainings from related organizations including European LPG Union. In addition to this, Aygaz closely follows the developments regarding the IPPC and the Kyoto Protocol along with the national harmonization efforts.

**Scrap and waste management systems**

Aygaz’s sensitivity towards environment at the production stage also continues in later stages, hence Aygaz attaches high level of importance to issues such as recycling and disposal of scrap and



waste as a result of the production. Entire waste and scrap generated at the Aygaz facilities are managed in line with the regulations and classified as hazardous and non-hazardous within the scrap storages that they are in. Consistent with Aygaz's Quality, Environmental and Occupational Health and Safety Policies, all the Aygaz facilities collect, temporarily store, identify appropriate disposal methods and dispose the waste aligned with the statutory obligations. Ministry of Environment and Urbanization and Provincial Directorate of Environment and Urbanization carry out inspections. The inspections cover permissions regarding temporary storage of waste and waste declaration. Depending on their categories used oils are collected separately in the facilities after being analyzed by Ministry of Environment and Urbanization accredited laboratories, in accordance with Used Oils Management Regulations.

Hazardous and non-hazardous waste is disposed or recycled through the

companies accredited by the Ministry of Environment and Urbanization and in line with the Ministry's rules and regulations. Recyclable hazardous waste generated by Aygaz operations are recycled via licensed recycling companies. Non-recyclable waste is disposed with methods like safe storage or incineration by authorized disposal companies. In 2010 and 2011, 788,595 tons and 596,821 tons of hazardous waste were handed over to companies accredited by Ministry of Environment and Urbanization using authorized vehicles. Packaging waste is delivered to licensed companies for recycling and reuse if there is one close to the facility. In 2012, it is planned to work with multiple disposal companies and deliver waste to the most cost-efficient company.

#### Awards

- At the Istanbul Chamber of Industry's 2010 Sustainable Eco-friendly Product and Applications Awards Ceremony, Aygaz received the first prize for Large-scale Enterprise Corporate Social Responsibility in the environment field.
- In 2011, Aygaz Safranbolu Filling Facility has been granted the Environment Award by the Karabük Province due to the positive initiatives that Aygaz adopted in the area and also for being the first company that obtained the Environmental Permission in Karabük Province.

#### Aygaz minimizes packaging material

Aygaz works with ÇEVKO (Environmental Protection and Packaging Waste Recycling Foundation), which is an organisation, authorised in relation to obligations to recycle packaging waste. Every February Aygaz makes a declaration about the amount of packaging in the market via the Ministry of Environment and Urbanisation's portal. Following the declaration, ÇEVKO documents that the amount and types of packaging waste and that they are collected and recycled in line with the regulations to the relevant authorities as prescribes by the regulations.



# SOCIAL DEVELOPMENT



- > Investments in health
  - > Investments in education
  - > Investments in cultural activities
  - > Investments in sports activities
- > Investments in environment
  - > Aygaz and Vehbi Koç Foundation





Aygaz intends to increase quality of life in the geographical areas where its operations are through investing in health, education, cultural and sports activities.

### Why does Aygaz value social development?

For Aygaz economic development is meaningful as long as it brings social development. Aygaz intends to increase quality of life in the geographical areas where its operations are through investing in health, education, cultural and sports activities. With this in mind, Aygaz strives to raise awareness and lead the way in development in every aspect of social life.

### How does Aygaz manage social development?

At Aygaz, health, education, environment, culture and sports activities are run under Corporate Communications Directorate and with collaboration from relevant departments. Volunteers make up the major source of energy in all Aygaz projects. Aygaz includes

dealers and suppliers to the projects hence widening its impact area and contributing to promotion of sense of awareness and responsibility. In Aygaz's leadership, 697 employees in 2010 and 451 employees in 2011 contributed to social responsibility projects.

In 2010 and 2011, Aygaz transferred 4,755,000 TL and 5,686,000 TL of funds to social responsibility projects.

Please see the following link for the details of corporate social responsibility at Aygaz <http://www.aygaz.com.tr/tr-TR/Sosyal-Sorumluluk/>



## Investments in health

Inspired by the quote of the Koç Group founder Vehbi Koç "Health comes before all", Aygaz considers public health as one of its priority areas of responsibility.

### Aygaz Supports Diabetic Children

There are approximately 20,000 diabetic children in Turkey and since 2004; Aygaz supports the Children and Adolescent Diabetics Association (CADD) in order to help diabetic children, between 8-18 years old, to live with diabetes as well as help their families to understand diabetes and gain awareness. Within this context CADD organises activities to educate and integrate the diabetic children and their families into the wider community. One of the most important activities of the foundation, supported by Aygaz, gathers diabetic children together at the Diabetic Children's Camp, which takes place each year in July.

Apart from the education that the children get regarding diabetes they are also able

to join handcrafting and sports activities. In 2010, during the special event organized for the last night of the camp, children staged an epic drama by Nazım Hikmet. In 2011, 19th Diabetic Children's Camp received 100 diabetic children. At this occasion, the Camp hosted Turkish Aeronautical Association officials' seminars. On the 4th day of the Camp, Turkish Aeronautical Association officials visited the camp and gave seminars to the children on gliders, parachutes and aviation.

### "Safe Motherhood" Project

Safe Motherhood Project is supported by Aygaz and run by Family Health and Planning Foundation of Turkey (TAPV). The aim of the project is to raise quality of lives of mothers and babies and help reducing mother and infant mortality rates. By supporting this project Aygaz aims to inform pregnant women and mothers about their own health as well as their babies' health. Following Istanbul, Düzce and Diyarbakir, in 2010 Safe

Aygaz includes dealers and suppliers to the projects hence widening its impact area and contributing to promotion of sense of awareness and responsibility.



Initially, Aygaz transferred and distributed numerous gas cylinders in different sizes for the 2011 earthquake that took place in Van.

Motherhood project was applied in Ordu and provided training and consultancy services to 679 pregnant women, 80 women who newly gave birth and 70 health service providers. Since 2006, with this project, total of 32,028 pregnant women, 16,566 women who just gave birth and 70 health service providers received trainings and consultations in Bakırköy, Düzce, Diyarbakır and Ordu.

#### “I am Donating Blood for my Country” Campaign

Aygaz participated in Koç Group's “Giving Blood for My Country” campaign which covers more than 80,000 employees and more than 10,000 dealers. In 2011, out of 490 Aygaz employees who applied to contribute in this project, 241 employees donated blood. In 2010 and 2011, 16 and 18 Aygaz employees were one of the individuals who donated blood for 10 or more times. With participation from Aygaz employees, blood donation campaign took place in 10 business units.

Aygaz ensures its commitment to social awareness in health through donations made for Somalia via the campaigns organised by Cerrahpaşa Faculty of Medicine, Altınokta Society for the Blind along with Disaster

and Emergency Management Presidency. In 2010-2011, Giresun Bulancak dealer for Aygaz met 2 years gas cylinder demand for Bulancak Disabled Association.

#### Support for children going under stem cell transplant treatment and for their families

In 2009, 19 Mayıs University's Faculty of Medicine established the Children Stem Cell Transplant Centre. Jointly with Atakum Municipality, Samsun Atakum Rotary Club will provide a social site with a 4-flat building for the children going through stem cell transplant treatment and their families as a place that they can stay during the transplantation process. For this purpose Aygaz supported 7th Children's Cultural Festival organized in conjunction with Governor of Samsun, the Metropolitan Municipality, Atakum Mayoralty, Rotary Club and Samsun Atakum Association for Children with Leukemia and Blood Disease (LOSAM). Four Aygaz dealers and their employees operating in the centre of Samsun, Samsun Terminal Manager and employees of Regional Sales Directorate visited the event. Aygaz provided the devices to the firms operating food stalls in the festival arena for



fundraising purposes. Samsun's main dealer contributed in the campaign by providing a vehicle and an employee.

#### **Supporting earthquake victims in Van**

Initially, Aygaz transferred and distributed numerous gas cylinders in different sizes for the 2011 earthquake that took place in Van. Additionally, Aygaz provided open-air heaters to be used in search and rescue operations along with catalytic heaters, stoves, LPG powered lighting devices and related equipment to be used in tent cities.

#### **Investments in education**

As a country with very high young population, investments made in education will play an important role in evolving Turkey into an information society. Aygaz believes private sector also has a role to play hence Aygaz continued with its social responsibility investments in education during this reporting period as well.

#### **“Vocational Education: A Crucial Matter for the Nation” (MLMM) project**

Within the scope of the project “Vocational Training: a Crucial Matter for the Nation” Project that has been running since 2006

by Koç Holding, with Koç Foundation's support and the collaboration of the Ministry of Education, Collaboration Protocol on Development of Vocational Training signed between the Ministry of Education and Koç Holding. During the 2010-2011 education year, in 7 different cities, 181 students were provided with scholarship and internship opportunities in 8 schools within Aygaz's responsibility. 9 Aygaz employees have been mentoring within determined limits to contribute to the students' personal and vocational development as Vocational Education Mentors. Within the scope of this project and in line with Koç Group's instructions, students are provided with mentoring, internships, scholarships and need based employment.

As part of this project, Emerald Group grant-holders and Aygaz visited the Kuzguncuk ship in 2011. Students were hosted by the ship personnel and had the opportunity to become familiar with a ship.

#### **Trainings in high schools and universities**

In order to raise awareness Aygaz employees provide trainings, in their respective fields,

intended for high school and university level students. In this context during the reporting period, students were provided with information at Yıldız Technical University's Sector-based Development Symposium, Koç Vocational High School's Presentation Days, University of Koç's Marketing Strategy seminar and METU Productivity Group's Management and Engineering Days.

In 2011, Aygaz employees participated in Hatay Mustafa Kemal University's career days. Graduates at the event are provided with information on Koç Holding and Aygaz.

Aygaz provided financial help to Contemporary Education Foundation, the Educational Volunteers Foundation (TEGV), Koç University, Turkish Education Foundation, Turkish Librarians' Association and Vehbi Koç Foundation in 2010, while Aygaz donated funds to Educational Volunteers Foundation, Koç University, Turkish Education Foundation and Vehbi Koç Foundation In 2011. In addition to this, Aygaz supports TEGV “Firefly Campaign” by sponsoring the insurance on 4 “Firefly” transporters. In 2010, 5,465 students have benefitted from the education and trainings



Aygaz will continue supporting Sagalassos Project in 2012 and 2013 for the purposes of space planning in the Upper Agora area where the Fountain is located.



provided in these transporters. In 2011, Aygaz renovated one of these transporters. “Firefly” transporters also provided education support for the earthquake victim children in Van. Throughout the year, total amount of children reached with this campaign is 6,185.

### Investments in cultural activities

Aygaz believes that investments in arts and culture stimulate social creativity. With this in mind, Aygaz supports projects in arts and culture in order to cherish cultural values and art, assist their representation in international arena and take ownership of our cultural heritage.

### Awakening of the Antonine Nymphaeum in Sagalassos

Nominated for the UNESCO World Heritage list, Antonine Nymphaeum is one of the most splendid structures of Sagalassos, which is an ancient mountain city famous with its monumental fountains situated 7 km north from the town of Ağlasun in the province of Burdur. Antonine Nymphaeum is situated in the political center of the ancient city (161-180 BC) and belongs to the Roman Emperor Marcus Aurelius period. With a width of 28 meters and height of 9 meters, 7 different

kinds of stones used in its construction, rich decorative ornaments, sculptures that are exhibited at Burdur Museum and 4.5m high cascade in the middle and a water basin in front of the Fountain is a magnificent structure as a whole. After an earthquake around AD 650, the Fountain was collapsed along with the entire city and obliterated with the land sliding from the slope.

The restoration of the antique city Sagalassos, which dates back to 4200BC, continues since 1990 with the support of University of Leuven from Belgium and in the leadership of Prof. Marc Waelkens from the University’s Archeological Department. On behalf of everyone who values cultural diversity and has an interest in archeology and history, Aygaz supports this project since 2005 as the sole sponsor from Turkey. All the pieces of the Fountain were combined and the fountain was erected in 2007 by the restoration team in the leadership of Senior Civil Engineer Semih Ercan. In 2008, due to the discovery of Hadrian statues, various archeological publications mentioned antique city Sagalassos as one of the ten places where the most important excavations

Aygaz believes that investments in arts and culture stimulate social creativity. One of the most important social investments of Aygaz in this domain is Awakening of the Antonine Nymphaeum in Sagalassos.



were made. The restoration was completed in 2010 and the Fountain was opened with a ceremony on 28 August 2010. In 2011, space planning of the landscape around the Fountains was accelerated. Also, a Sagalassos themed exhibition took place in Belgium.

In 2011, after being evaluated on research, planning, application, creativity and impact measurement criteria, Aygaz's Awakening of Sagalassos project competed with 15 other projects and won the award at the TUHID Public Relations Association's 10th Gold Compass Awards in Activity Management category. TUHID organizes Gold Compass Awards scheme since 1999 in order to reward and encourage public relations activities.

By supporting the project continuously for 7 years, Aygaz not only enabled job creation for the local community but also presented social development opportunities. Aygaz will continue supporting Sagalassos Project in 2012 and 2013 for the purposes of space planning in the Upper Agora area where the Fountain is located.

#### **Supporting Van Castle excavations**

In conjunction with Ministry of Culture and Tourism and University of Istanbul, Aygaz supports tumulus excavations at Van Castle. In 2011, a 5,000 years old mobile stove was found during the excavations of a mound located in the north of Van castle.

#### **Tell an archaeological story with photography**

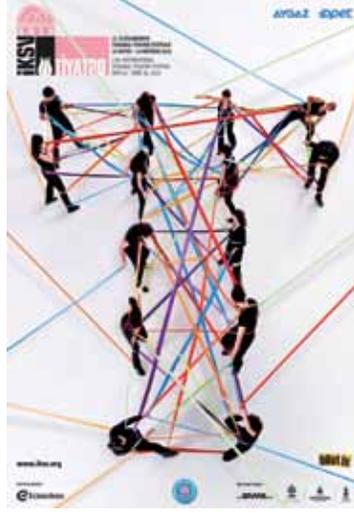
Sponsored by Aygaz, "Aktüel Arkeoloji" Magazine organised a photography competition called Tell an Archaeological Story with Photography. At the 1st National Aktuel Archaeology Photography Competition, 988 works from 224 photographers, in the categories of Archaeology-Human and Destruction, Antic City of Sagalassos and Antic City of Troy, were considered. Awards ceremony took place on 19th of November 2011 at the Istanbul Archaeological Museum.

#### **International Istanbul Theatre Festival and Biennale**

Organised every two years by Istanbul Foundation for Culture and Arts, in 2010 the International Istanbul Theatre Festival met art lovers for the 17th time. With sponsorship of Opet and Aygaz, 90 plays were staged



Aygaz supports projects in arts and culture in order to cherish cultural values and art, assist their representation in international arena and take ownership of our cultural heritage.



throughout the 30 days and the festival reached to an audience of 24,000.

The festival hosted 31 plays from 30 national, 9 international theatre and dance groups and was followed with great interest by the Istanbul audience, corporate representatives, theatre groups and foreign media. Since 2003, Aygaz is the main sponsor of International Theatre Festival and continues to support International Istanbul Biennale.

#### **Sevgi Gönül Theatre Days**

Since 2006 Aygaz continued to support Koç University Sevgi Gönül Theatre Days and this support was also carried on in 2010 and 2011. In 2010, the festival commenced with the play “Bigot” and carried on with the play “The Tail of the Kite” staged by Koç University graduates’ theatre group “Nefes Tiyatro” and other plays by the theatre projects from different universities. In 2011, the festival started with the play “Chaos Theories” staged by Koç University actors and actresses and

continued for 13 days with contribution from various theatre projects of other universities. Total of 12 plays were staged during the festival.

#### **Rahmi Koç Museum ticket sponsorship**

Aygaz supports Rahmi Koç Museum through ticket sponsorship since 2005. In 2010, Aygaz took over the ticket sponsorship of Ankara Çengelhan Rahmi Koç Museum. In 2011, total of 220,000 tickets was printed with the support of Aygaz.

#### **The Aygaz Library project**

With this project, which Aygaz has been supporting since 1996, it is aimed to share the cultural and historical wealth of the geography that we live in with the future generations. In 2010, the piece “Dynasty, and the camera-Portraits from the Ottoman Palace” was added to the Aygaz Library, which compiles and documents historical, cultural, geographical and arts related

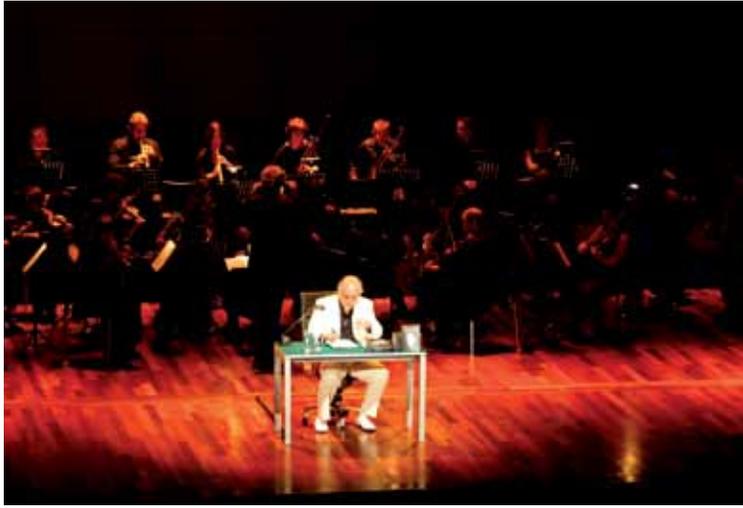
accumulation of Anatolia. Also, since 2008 Aygaz continues to support the efforts aimed at creating sources and publications regarding external relations during the Ottoman era.

#### **The Diplomatic History of Ottoman project**

Aygaz enables compiling and publishing of data and documents from Ottoman archives as well as diaries and notes of the diplomats worked in Istanbul in order to make the data and documents from the Ottoman diplomacy archives more accessible for local and international researchers and history enthusiasts.

#### **“50 Years of Rising Energy” Aygaz**

In 2011, to commemorate its 50th anniversary, Aygaz organised a photography exhibition describing the journey of a half century. The exhibition, which took place at the Aygaz Head Offices, also shed some light on Turkey’s 50 years with LPG.



Between July 2011 and September 2011, one of the activities organised for the 50th anniversary of Aygaz was the photography exhibition “Dynasty, and the camera- Portraits from the Ottoman Palace”. Supported by Aygaz and in collaboration with Sadberk Hanım Museum, the exhibition, which took place at the Aygaz Head Offices, was prepared by Bahattin Öztuncay with selection of pieces from Omer M Koç’s personal collection.

### Investments in sports activities

Recognizing the importance of sports activities in social development, Aygaz supports the promotion of sports in all parts of society, starting from Aygaz employees. In 2010 and 2011 Aygaz continued to support sports activities.

#### **Aygaz supports Koç University RAMS American Football Team**

Since 2007, Aygaz continues to support Koç University RAMS American Football Team. Aygaz sponsors the team members’ sporting goods and costs

of away games. Koç University RAMS American Football Team completed 2010-2011 season 2nd League games undefeated and has been the 2nd League champion.

#### **“What will the weather be like tomorrow?” at Dragon Festival**

Dragon Festival continues increasing participation since 2008. Dragon Festival is the most attended sporting event in Turkey that takes place between leading prestigious institutions from Istanbul, Ankara, Izmir, Adana and Bursa. The competition consists of teams with 16 rowers and a drummer beating rhythm with the objective of quickly crossing the 200-meter long track on their specially designed dragon boats. In May 2011, Aygaz Group participated in the festival and rowed against climate change with their team called “How will the weather be tomorrow? The festival took place at Istanbul-Haliç Imrahor Park and a total of 112 teams from 80 institutions attended to the competitions.

### Investments in environment

Along with developing technological and innovative projects that enables energy and resource efficiency in its operations, Aygaz also takes initiatives to promote environmental awareness throughout its value chain. With this sense of responsibility, in 2010, Aygaz provided environmental trainings to 4.058 persons by the REC experts within the scope of “How will the weather be tomorrow?” project and besides 90 individuals adding up to 313 person\*hour, has received environmental training. In 2011, this figure rose to 4,302 individuals, reaching to 6,435 person\*hour of environmental training provided by Aygaz. In 2010, Aygaz gave financial support to Clean Sea Foundation, Turmepa and TEMA and in 2011 Aygaz continued to provide funds to Clean Sea Foundation and TEMA.

#### **What will the weather be like tomorrow?**

In September 2010, in conjunction with Regional Environment Centre (REC),



“What Will the Weather be Like Tomorrow?” project aims to raise awareness in the subject of climate change. High school and university students were trained with the help of two high technology devices, a mobile planetarium and a spherical simulation device named “magic sphere”.

Aygaz started the project “What Will the Weather be Like Tomorrow?” The objectives of this project are to raise awareness in the subject of climate change through experiences with “seeing and touching”, search for solutions against climate change together with the public and support the parties who are looking for solutions already. At the first stage of the project 11 cities were visited in 2010. Through setting up big tents in the centre and with the help of 2 high technology devices and one mobile planetarium and a spherical simulation device named “magic sphere”, it is intended to make the trainings effective and memorable. The target audience of the project is high school and university students. Students who have completed the training are given certificate of attendance. The first stage of the project started in Sivas on 27th of September and continued to Urfa, Van, Kars, Trabzon, Samsun, Kastamonu, Eskisehir, Antalya, Izmir and finished at Tekirdag. During 186 sessions, total of 4,058 students from 92 different schools were given climate change trainings.

The second stage of the project was completed in June 2011. During the 6-months long 2nd stage 11 more cities were visited via the “Sky Transporter”. In these cities 4,302 individuals, majority being high and primary school students, were given practical training seminars by experts from REC on the causes of climate change, damages caused by climate change and the precautions that needs to be taken. Along with the completion of the 2nd stage of the project, total of 8,360 individuals were reached at 21 different locations. As a result, in 2010 and 2011, 4,058 and 4,302 individuals were given 90 minutes long sessions of training, 5 days a week and 5 times a day totalling to 12,540 person\*hour worth of trainings given by REC experts.

Intensive communications activities run with the aim of raising awareness against climate change with the question of “How will the weather be like tomorrow?”, generated total of 365 news items published both in national and local media from the beginning date of the project;

September 2010 to 31st of December 2011. While 7 of national TV channels announced this activity, it appeared in the national print media 258 times. This project was announced 100 times via the Internet news portals. Press reflections show that 33,275,963 individuals were reached through 65 newspaper pages worth of news. The media campaign reached 25,000,000 individuals. Viewings of the project on Facebook, blogs and other social media platforms exceeded 30,000,000. Figure for Facebook page fans of the project reached 20,000.

As a result of the evaluation surveys conducted by REC experts, at the end of the 2nd stage, climate change awareness levels of the participants rose to 93%. Through internet website and various social media links it is made possible for 20,000 individuals, 78% being between 13-17 age group, to become followers of the project. All the information and images of the project can be found at the website; [www.yarinhavanasilolacak.org](http://www.yarinhavanasilolacak.org). The project will continue in 2012.



The on-going “What will the weather be like tomorrow?” project is much appreciated and awarded by many organisations. In the scope of the British Public Relations Association Awards for Excellence, the project won the Corporate Social Responsibility Grand Award. Other prizes rewarded for the project include, High Honour Award at International Stevie Awards in the category of Environmental Responsibility, International Public Relations Association’s Golden Globe Award in the Environment category and the Third Prize in the Roadshow category of the Direct Marketing and Communications Associations Awards. Aygaz competed with more than 400 applicants from 50 countries at the 20th Golden Globe Awards organised by the International Public Relations Association (IPRA) and won the award for the best campaign in the world with “What will the weather be like tomorrow?” project.

Also, at the Istanbul Chamber of Industry’s 2010 Sustainable Eco-friendly Product and Applications Awards Ceremony,

Aygaz received the first prize for Corporate Social Responsibility in the Large-scale Enterprise Environment category. ISO intends to award exemplary work in environmental management, efficient use of energy and raw materials, minimization and recycling of waste as well as raising environmental awareness and environmental training. Aygaz encourages the exemplary products and applications supporting sustainable development, developed by ISO members.





In 2010, Aygaz supported the Vehbi Koç Foundation with its contributions to scholarships in the field of education, Sadberk Hanım Museum in the field of culture- which is the first private museum of Turkey- and various education, culture and health projects.

### Aygaz and Vehbi Koç Foundation

Vehbi Koç Foundation (VKF), being supported by Aygaz since its establishment, strives to be the example of state of the art with its centers of excellence and programs in education, health and culture since 1969.

In 2010, Aygaz supported the Vehbi Koç Foundation with its contributions to scholarships in the field of education, Sadberk Hanım Museum in the field of culture- which is the first private museum of Turkey- and various education, culture and health projects. In 2011, Aygaz contributed to vocational training fund, teachers' housing in Van and projects of Sadberk Hanım Museum.

To date, VKF contacted more than 43,000 students thanks to its scholarship program. In the period

of 2011/2012 Foundation provided scholarships to approximately 10.000 students with its institutions and centrally governed scholarship programs. VKF aimed to reach more needing and successful students by increasing VKF Main Asset scholarship quota in 2011. Within this scope, the number of universities that are given scholarships by VKF has reached to 10. VKF Koç School and Koç University, embodied by VKF, continue their work to make positive contributions to quality of education in Turkey. VKF also works in the field of vocational training with the Vocational Training: Crucial Matter for Nation Project since 2006 in collaboration with Koç Holding and Ministry of National Education.

Vehbi Koç Foundation institutionalized its work in the field of art by



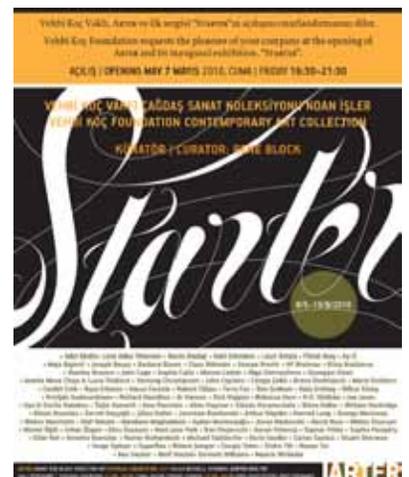
establishing Sadberk Hanım Museum in 1980 and accelerated ever since. Being the first private museum in Turkey, Sadberk Hanım Museum owns Ottoman era female clothing, textile and art work in addition to İznik ceramics and archeological artifacts collections. Following international standards, Sadberk Hanım Museum publishes high quality exhibition catalogues and academic papers. Museum also holds regular training sessions for children to educate them with Turkish cultural heritage, customs and traditions. Celebrating its 30th anniversary in 2010, Museum held “Female Clothing and İznik Ceramics” exhibition that shed light to last period of Ottoman era. In 2011, “Dynasty and Camera-Portraits from Ottoman Palace” exhibition was held. Sadberk Hanım Museum Publications with their visual richness and research

background help carry exhibitions to coming generations as permanent works of art.

Foundation’s activities in the field of culture gained momentum by the establishment of corporate contemporary art collection since 2007. Opened in Istanbul in 2010 ARTER aims to support new productions, exhibit them and to create new platform for artists and their work to make them more visible. VKF held a special training program for art teachers working for primary and high schools in Istanbul during 12th International Istanbul Biennale.

Taking active responsibility in the field of health, Vehbi Koç Foundation Nursing Fund supports nursing students’ education by providing them with scholarships. This fund

also supports vocational development projects conducted by nurses. Koç University School of Nursing, SANERC, Koç University School of Medicine, Koç University Center for First Aid (KUIYEM) are all pioneering investment of VKF in the field of health.



→ Performance Indicators 2009 2010 2011

**Operational Indicators**

Auto gas sales (thousand tons)	549.9	578	604
Cylinder gas sales (thousand tons)	437.2	409	393
Bulk gas sales (thousand tons)	91	59	60
LPG storage capacity (1000m <sup>3</sup> )	165	170	218

**Financial Indicators**

Operating profit (million TL)	293	217	149
Profit before tax (million TL)	374	283	419
Total tax paid (million TL)	41,927	40,336	50,994
Investment expenditure (thousand TL)	128,566	87,203	202,171
Donations and financial support (thousand TL)	4,792	4,755	5,686
Dividend payment (thousand TL)	30,316	100.00	125.00
Employee salaries (thousand TL)	102,514	108,216	125,917
Sales revenue (thousand TL)	3,786,758	4,657,688	5,455,670
Net assets (thousand TL)	2,608,092	2,803,648	2,712,123

**Social Indicators**

Total number of employees	1,024	1,056	970
Total training (hours)	17,063	23,364	23,732
Total training (person/hour)	16.7	23.89	26.9
Accident frequency rate	7.53	16.24	21.94
Accident severity rate	0.04	0.21	0.25
Turnover (%)	White collar: 0.9 Blue collar: 7.7	White collar: 2.5 Blue collar: 3.9	White collar: 2.3 Blue collar: 1.84
Local supplier rate (%)	95	93	94
Local supplier budget (TL)	967,777,000	986,650,000	1,145,000
Auto gas dealer satisfaction (%)	83	82	84
Cylinder gas dealer satisfaction (%)	75	77	77
Auto gas customer satisfaction (%)	73	77	78
Cylinder gas consumer satisfaction (%)	81	76	81

**Environmental Indicators**

Total water consumption (tons)	112,557	75,887	84,536
Electricity consumption (kwh)	18,734,875	9,576,551	10,347,149
LPG consumption (kg)	609,103	619,689	751,263
Natural gas consumption (m <sup>3</sup> )	1,387,596	1,600,549	2,201,397

## > General Breakdown of Employees

	Aygaz Employees	Average Age	Average Seniority Years	Number of Employees	%	Number of Blue Collar Employees	%	Number of White Collar Employees	%
2009	Male	38	10.77	924	90.2%	559	95.6%	365	83.1%
	Female	36	10.83	100	9.8%	26	4.4%	74	16.9%
	<b>Total</b>	<b>38</b>	<b>10.77</b>	<b>1024</b>	<b>100.0%</b>	<b>585</b>	<b>100.0%</b>	<b>439</b>	<b>100.0%</b>
2010	Male	38.53	10.26	940	89.0%	560	95.1%	380	81.4%
	Female	37.00	10.53	116	11.0%	29	4.9%	87	18.6%
	<b>Total</b>	<b>38.36</b>	<b>10.29</b>	<b>1056</b>	<b>100.0%</b>	<b>589</b>	<b>100.0%</b>	<b>467</b>	<b>100.0%</b>
2011	Male	37.27	8.98	865	89.2%	467	95.7%	398	82.6%
	Female	35.40	8.93	105	10.8%	21	4.3%	84	17.4%
	<b>Total</b>	<b>37.06</b>	<b>8.97</b>	<b>970</b>	<b>100.0%</b>	<b>488</b>	<b>100.0%</b>	<b>482</b>	<b>100.0%</b>

## > Managers<sup>10</sup>

	Aygaz Employees	Number of Employees	%
2009	Female	9	4.60%
	Male	65	95.40%
	<b>Total</b>	<b>74</b>	<b>100.00%</b>
2010	Female	9	10.11%
	Male	80	89.89%
	<b>Total</b>	<b>89</b>	<b>100.00%</b>
2011	Female	10	10.87%
	Male	82	89.13%
	<b>Total</b>	<b>92</b>	<b>100.00%</b>

<sup>10</sup> HAY methodology is adopted in job evaluation processes. First-tier and mid-level management positions are categorised as "director" and "manager", respectively.

## > Employees by education category

	Educational Status	Number of Employees	%
2009	Primary School	150	15%
	High School	441	45%
	Two-year degree	53	5%
	Undergraduate	283	29%
	Post-graduate	59	6%
	<b>Total</b>	<b>986</b>	<b>100%</b>
2010	Primary School	164	16%
	High School	481	46%
	Two-year degree	50	5%
	Undergraduate	296	28%
	Post-graduate	65	6%
	<b>Total</b>	<b>1056</b>	<b>100%</b>
2011	Primary School	113	12%
	High School	441	45%
	Two-year degree	68	7%
	Undergraduate	279	29%
	Post-graduate	69	7%
	<b>Total</b>	<b>970</b>	<b>100%</b>

## PERFORMANCE INDICATORS

### High-level management by age breakdown

	Age Breakdown	Number of Employees	%
2009	20-29	0	0.00%
	30-39	0	0.00%
	40-49	5	71.43%
	50 and over	2	28.57%
	<b>Total</b>	<b>7</b>	<b>100.00%</b>
2010	20-29	0	0.00%
	30-39	0	0.00%
	40-49	8	88.89%
	50 and over	1	11.11%
	<b>Total</b>	<b>9</b>	<b>100.00%</b>
2011	20-29	0	0.00%
	30-39	0	0.00%
	40-49	8	88.89%
	50 and over	1	11.11%
	<b>Total</b>	<b>9</b>	<b>100.00%</b>

### Educational status of high-level management

	Educational Status	Number of Employees	%
2009	Undergraduate	2	28.6%
	Postgraduate	5	71.4%
	<b>Total</b>	<b>7</b>	<b>100.00%</b>
2010	Undergraduate	5	55.6%
	Postgraduate	4	44.4%
	<b>Total</b>	<b>9</b>	<b>100.00%</b>
2011	Undergraduate	5	55.6%
	Postgraduate	4	44.4%
	<b>Total</b>	<b>9</b>	<b>100.00%</b>

### Average training hours per employee

	White Collar	Blue Collar
2009	14.4	18.33
2010	19.36	24.32
2011	31.2	20.4

### Employee breakdown by age

	Age Breakdown	Number of Employees	%
2009	20-29	112	11.40%
	30-39	482	48.90%
	40-49	347	35.20%
	50 and over	45	4.60%
	<b>Total</b>	<b>986</b>	<b>100.00%</b>
2010	20-29	118	11.17%
	30-39	436	41.29%
	40-49	443	41.95%
	50 and over	59	5.59%
	<b>Total</b>	<b>1056</b>	<b>100.00%</b>
2011	20-29	183	19%
	30-39	454	47%
	40-49	304	31%
	50 and over	29	3%
	<b>Total</b>	<b>970</b>	<b>100.00%</b>

### Active occupational health and safety committees according to region

	Total Number of Members	Employee Representatives
Aliağa	7	3
Ambarlı	6	2
Bursa	7	2
Diyarbakır	5	1
Dört Yol	6	2
Eskişehir	5	2
Gebze	11	2
Isparta	5	1
Işıkent	7	2
Kırkkale	9	3
Safranbolu	6	1
Samsun	6	1
Yarımca	10	3
<b>Total</b>	<b>90</b>	<b>25</b>

> Managers

	Foreigner	TC	Total	Ratio
2009	1	81	82	1.22%
2010	1	96	97	1.03%
2011	1	99	100	1.00%

> Provinces that achieved more than 5% of the total LPG (Cylinder-Bulk-Auto) sales

	Cylinder	Bulk	Auto	Total	%
İstanbul	47,880	3,085	80,542	131,507	15.7%
Ankara	11,719	1,678	72,116	85,513	10.2%
İzmir	29,075	3,092	34,697	66,865	8.0%

> Percentage of union member employees according to contract

		Number of Employees		%
2010	White Collar	Union member	0	0%
		Non-union member	467	100%
		Total	467	
Blue Collar	Union member	383	65%	
	Non-union member	206	35%	
	Total	589		
		Number of Employees		%
2011	White Collar	Union member	0	0%
		Non-union member	482	100%
		Total	482	
Blue Collar	Union member	284	58%	
	Non-union member	204	42%	
	Total	488		

## Stakeholders

Stakeholder groups	Method of communication	Aim of communication
<b>Employees</b>	Intranet, Training, Communication Meetings, Satisfaction Surveys, Awards, Suggestion Systems, Dealer Meetings, Facility Visits, Inspections, Reports, Sub-industrial Days, Dealer Portals, Reputational Surveys, Fairs and Seminars	To increase efficiency and quality in business operations, look for innovations to create competitive advantage, increase the benefits provided to customers, establish mutually beneficial relationships, increase job quality and corporate development of all parties
<b>Customers</b>	Advertisements, Website, Social Networking Platforms, Call Centres, Special Offers, Training, Research, Focus Group Studies, Satisfaction Surveys, Customer Portal, Visitations, Projects, Press Releases, PR Activities, Domestic and International Fairs	Aygaz abides by the principles of corporate governance and transparency. Aygaz carries out simultaneous dissemination of complete, correct and timely information to all our stakeholders. All Aygaz customers are fairly and equally treated and strict security procedures are followed while storing confidential information. In order to understand customers' needs and expectations Aygaz effectively uses communications channels and uses this information while developing new products and services. Aygaz uses the required labelling and marking for products and services so that the consumers can give conscious decisions about their purchases
<b>Customers</b>	Special Situation Disclosures, Investor Meetings, Annual General Meetings, Reports, Website, Newsletters, Open Door Meetings, Face to Face Discussions, Conference Attendance, Facility Outings, Road Shows	One of the most important strategic objectives for Aygaz is to create value for its shareholders. Aygaz disseminates timely, correct, complete, clear and accessible information to its all shareholders,
<b>Investors/ Shareholders</b>	Intranet, Fairs and Seminars, Supplier Days, Meetings, Subsidiary Industry Days, Inspections, Invitations to Social Activities	Aygaz aims for partnership in solution-finding to increase the quality. Aygaz cooperates with its suppliers to run their business operations within the sustainability framework just like Aygaz. Aygaz encourages its suppliers to respect the law, the environment and its' stakeholders while they convey their products and services...
<b>Suppliers</b>	Regulatory Commissions, Reports, Inspections, Trainings, Official Visits, Seminars	Aygaz aims to create an ethical commerce environment. Aygaz actively contributes to the process of drafting laws through the NGOs and commerce associations that represent Aygaz. Aygaz finds International examples for benchmarking exercises, takes part in international NGOs and works towards an efficient information and expertise flow into Turkey from countries with further developed legislations.
<b>Government and Regulatory Bodies</b>	Regulatory Commissions, Reports, Inspections, Trainings, Official Visits, Seminars	Aygaz aims to create an ethical commerce environment. Aygaz actively contributes to the process of drafting laws through the NGOs and commerce associations that represent Aygaz. Aygaz finds International examples for benchmarking exercises, takes part in international NGOs and works towards an efficient information and expertise flow into Turkey from countries with further developed legislations.
<b>NGOs</b>	Reports, Announcements, Advisory Panels, Inspections, Press Conferences, Conventions, Focus Group Studies, Joint Projects, Reputation Surveys	Aygaz aims for a solution partnership in order to contribute to the social and sector-based development.
<b>Media</b>	Press Releases, Press Conferences, Press Meetings, Special Interviews, Reputation Surveys, Report Sharing, Visitations, Press Outings, e-Newsletters, Conferences, Presentations, Social Responsibility Projects	As a company that respects communication and freedom of information, Aygaz aims to present itself to the public in the best way possible by disseminating corporate news to its stakeholders from the first hand and in a timely manner.
<b>Opinion Leaders</b>	Advisory Panels , Research, Reports, Invitations to meetings, Opinion Sharing Meetings, Workshops, Reputation Surveys	Aygaz persistently consults independent experts in their subject areas in order to improve business operations and realize its mission of becoming a self-restoring company.
<b>Competitors</b>	Industry Association Memberships, Fairs, Reports, Joint Projects, Conferences, Conventions	For the development of the sector, we aim to develop a common understanding about the necessary changes in the law.
<b>Financial Actors</b>	Investor Meeting, e-Briefings, Newsletters, Research Results, Road shows, AGM Conferences, Financial Bulletins, Development Reports	Aygaz disseminates information on its corporate operations based on the transparency principles. Aygaz engages in mutually beneficial relationships.
<b>International Organisations</b>	Fairs and Conventions, Conferences, Corporate Memberships	Aygaz aims to create value through sharing within the industry, to reach new customers along with the existing ones, to find out about opportunities to cooperate with other organisations and institutions, to develop vision of Aygaz further, to do benchmarking studies and to be up to date with the current agenda
<b>Local People</b>	Local Media, Communication Meetings, Joint Councils, Booklets, Projects, Education Bus, Training, Reputation Surveys, Open Business Meetings, Facility Outings, Public Conventions, Local Activities, Road Shows, Social Responsibility Projects Websites, Special Offers	Aygaz desires to be good neighbours.
<b>Community</b>	Facility Outings, Website, Reputation Surveys, Newsletters, Social Responsibility Projects	As a good corporate citizen Aygaz does its share for sustainable development.

## Awards received during the reporting period

- Aygaz received the “Company Aiming Customer Satisfaction” award in the 14th Traditional Consumer Awards by the Ministry of Industry of Turkey.
- Aygaz was chosen one of the four best brands in Turkey and the best brand in LPG sector in the “Best Brands” study conducted by an independent research company.
- Aygaz received the first Prize in the “Performance Management” category of the 2010 Personnel Management Awards organised by Personnel Management Association of Turkey (PERYON).
- At the Istanbul Chamber of Industry's 2010 Sustainable Eco-friendly Product and Applications Awards, Aygaz received the first prize for Corporate Social Responsibility in the Large-scale Enterprise in the environment field.
- In the British Public Relations Association Awards for Excellence, the “What will the weather be like tomorrow?” project won the Corporate Social Responsibility Grand Award. Other prizes rewarded for the project include, High Honour Award at International Stevie Awards in the category of Environmental Responsibility, International Public Relations Association's Golden Globe Award in the Environment category and the Third Prize in the Roadshow category of the Direct Marketing and Communications Associations Awards. Aygaz competed with 400 applicants from 50 countries at the 20th Golden Globe Awards organised by the International Public Relations Association (IPRA) and won the award for the best campaign in the world with “What will the weather be like tomorrow?” project. Also, at the Istanbul Chamber of Industry's 2010 Sustainable Eco-friendly Product and Applications Awards Ceremony, Aygaz received the first prize for Corporate Social Responsibility in the Large-scale Enterprise Environment category.
- With its corporate annual report, Aygaz won the Gold Award in “Overall Assessment” category and the Bronze Award in “Inside Design” category of the 2011 ARC Awards (Annual Report Competition). ARC Awards that evaluates annual reports is considered to be one of the most prestigious international competitions.
- Aygaz won the Platinum Award in Print: Magazine, Newsletter category at (League of American Communications Professionals) LACP's 2010 Spotlight Awards with its internal communication magazine; World of Aygaz.
- Aygaz's Awakening of Sagalassos project competed with 15 other projects and won the TUHID Public Relations Association's 10th Gold Compass Awards in Activity Management category.
- The Improved Formula Aygaz Euro LPG + advertisement campaign won the “Silver Effie” award in Effie Turkey Advertising Activity organized by Advertising Agencies and Advertisers Associations.
- In 2011, Aygaz has been granted the Environment Award by the Karabük Province due to the positive initiatives that Aygaz adopted in the area of Aygaz Safranbolu Filling Facility and also for being the first company that obtained the Environmental Permission in Karabük Province.
- Aygaz's “Cylinders in Space” advertisement film was awarded in ‘Humour in Advertising’ category in 6th Humour Awards organized by the Association of Humour Producers.
- Successful HR activities brought Aygaz the “HR Team of the Year” award at the international competition organised by The Stevie Awards in 2011.

GRI INDICATORS	SECTION	PAGE	EXPLANATION	REPORTING LEVEL
1.1	Message from the General Manager	2,3		FULLY
1.2	Message from the General Manager	2,3		FULLY
	Risk Management at Aygaz	14		FULLY
2.1	GRI Table	95		FULLY
2.2	Product responsibility, Aygaz products	37	Corporate Web site <a href="http://www.aygaz.com.tr/en-US/Products/">http://www.aygaz.com.tr/en-US/Products/</a>	FULLY
2.3	Aygaz and the Energy Sector	6		FULLY
2.4		95		FULLY
2.5	Aygaz and the Energy Sector	6	Aygaz operates in Turkey alone.	FULLY
2.6	Aygaz and the Energy Sector	6	Corporate Website <a href="http://www.aygaz.com.tr/en-US/InvestorRelations/Shareholders/">http://www.aygaz.com.tr/en-US/InvestorRelations/Shareholders/</a> ; 2011 Annual Report, <a href="http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf">http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf</a> p. 54,55	FULLY
2.7	Aygaz and the Energy Sector	6		FULLY
2.8	Aygaz and the Energy Sector	6	Annual report 2010 <a href="http://www.aygaz.com.tr/NR/rdonlyres/3EBAA2CE-B39A-4BFC-89E6-D2C63A9A60E5/5731/fr_2010.pdf">http://www.aygaz.com.tr/NR/rdonlyres/3EBAA2CE-B39A-4BFC-89E6-D2C63A9A60E5/5731/fr_2010.pdf</a> and Annual report 2011 <a href="http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf">http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf</a>	FULLY
	Performance Indicators	84,86		
2.9	Message from the General Manager	2,3	Annual report 2010 <a href="http://www.aygaz.com.tr/NR/rdonlyres/3EBAA2CE-B39A-4BFC-89E6-D2C63A9A60E5/5731/fr_2010.pdf">http://www.aygaz.com.tr/NR/rdonlyres/3EBAA2CE-B39A-4BFC-89E6-D2C63A9A60E5/5731/fr_2010.pdf</a> p.10,11 and Annual report 2011 <a href="http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf">http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf</a> , p.10,11	FULLY
2.10	Awards received during the reporting period	89		FULLY
3.1	Sustainability Journey of Aygaz	1		FULLY
3.2			Sustainability Report 2008-2009 was published in 17 October 2011 in Turkish and 27 October 2011 in English.	FULLY
3.3	Sustainability Journey of Aygaz	1		FULLY
3.4		1		FULLY
3.5	Material Issues	16		FULLY
3.6	Sustainability Journey of Aygaz	1		FULLY
3.7	Sustainability Journey of Aygaz	1		FULLY
3.8	Sustainability Journey of Aygaz	1		FULLY
3.9	Sustainability Journey of Aygaz	1	In performance measurement, Aygaz uses reliable and standardized system and information technology infrastructure. All the measurement parameters used in this report were provided by methodologies accepted in field and methods set by GRI performance indicators were abided.	FULLY
3.10	GRI Table		No re-statements are used in this report	FULLY
3.11	Sustainability Journey of Aygaz	1		FULLY
	Human Rights, footnote	55		FULLY
3.12	GRI Table			FULLY
3.13	GRI Table		The information disclosed in this report did not receive independent audit within the scope of this study.	FULLY
4.1	Sustainability Journey of Aygaz	14,15		FULLY

GRI INDICATORS	SECTION	PAGE	EXPLANATION	REPORTING LEVEL
4.2	GRI Table		Aygaz's Chairman of the Board and Chief Executive Officer tasks are carried out by different people	FULLY
4.3	GRI Table		There is no independent member in the Governance Body. All the members of the Governance Body are non-executive. Members of the governance body who represent the main shareholder, may work outside Aygaz, in the governance bodies in Koç Group companies.	FULLY
4.4	Stakeholders	17		FULLY
4.4	Communication with Stakeholders, internal communication	88		FULLY
4.5	Sustainability Management at Aygaz	14,15		FULLY
	Compensation and Fringe Benefits	51,52		
4.6	Annual Report 2010 <a href="http://www.aygaz.com.tr/NR/rdonlyres/3EBAA2CE-B39A-4BFC-89E6-D2C63A9A60E5/5731/fr_2010.pdf">http://www.aygaz.com.tr/NR/rdonlyres/3EBAA2CE-B39A-4BFC-89E6-D2C63A9A60E5/5731/fr_2010.pdf</a> , p. 52			FULLY
	Annual Report 2011 <a href="http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf">http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf</a> , p. 58			
4.7	Annual Report 2010 <a href="http://www.aygaz.com.tr/NR/rdonlyres/3EBAA2CE-B39A-4BFC-89E6-D2C63A9A60E5/5731/fr_2010.pdf">http://www.aygaz.com.tr/NR/rdonlyres/3EBAA2CE-B39A-4BFC-89E6-D2C63A9A60E5/5731/fr_2010.pdf</a> , p.8,9,12,13			FULLY
	Annual Report 2011 <a href="http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf">http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf</a> , p. 8,9,12,13			FULLY
4.8	Aygaz's vision and mission	14	Corporate website, vision and mission: <a href="http://www.aygaz.com.tr/tr-TR/Kurumsal/Tanitim/UfkumuzveAnagorevimiz/">http://www.aygaz.com.tr/tr-TR/Kurumsal/Tanitim/UfkumuzveAnagorevimiz/</a> and corporate values: <a href="http://www.aygaz.com.tr/tr-TR/InsanKaynaklari/KocTopluluguDegerlerimiz/">http://www.aygaz.com.tr/tr-TR/InsanKaynaklari/KocTopluluguDegerlerimiz/</a>	FULLY
	Ethical Principles and Internal Audit at Aygaz	12,13		
4.9	Sustainability Management at Aygaz	14,15		FULLY
4.10	Sustainability Management at Aygaz	14,15		FULLY
4.11	Risk Management at Aygaz	14		FULLY
4.12	Ethical Principles and Internal Audit at Aygaz	12,13	More detailed information on risk management can be obtained from our annual reports published on investor relations section on <a href="http://www.aygaz.com.tr">www.aygaz.com.tr</a>	FULLY
	Sustainability Management at Aygaz	14,15	Signed by Koç Holding on 30 March 2006, Koç Holding and Group companies- in all country operations- provide compliance to the United Nations Global Compact.	
4.13	Stakeholders	17		FULLY
	Corporate memberships of Aygaz	16		
4.14	Stakeholders	16,17		FULLY
	Stakeholders- communication method table	85		
4.15	Stakeholders	16,17		FULLY
4.16	Stakeholders- communication method table	88		FULLY
4.17	Stakeholders	16,17		FULLY
	Stakeholders- communication method table	88		

GRI INDICATORS	SECTION	PAGE	EXPLANATION	REPORTING LEVEL
PERFORMANCE INDICATORS				
EC1	Performance indicators	84	Annual report 2010 <a href="http://www.aygaz.com.tr/NR/rdonlyres/3EBAA2CE-B39A-4BFC-89E6-D2C63A9A60E5/5731/fr_2010.pdf">http://www.aygaz.com.tr/NR/rdonlyres/3EBAA2CE-B39A-4BFC-89E6-D2C63A9A60E5/5731/fr_2010.pdf</a> p.1	FULLY
	Annual report 2011 <a href="http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf">http://www.aygaz.com.tr/NR/rdonlyres/9F689A4F-BB22-4646-A0E3-2446D0665FAA/6060/22032012.pdf</a> , p.2,3			FULLY
EC2	Message from the General Manager	2,3		PARTIALLY
	Aygaz Euro LPG+	45		
EC3	Compensation and Fringe Benefits	51,52		FULLY
EC4	R&D Practices	43,44,45	Government is not present in shareholding structure.	FULLY
EC5	Compensation and Fringe Benefits	51,52	Aygaz only operates in Turkey, everyone in Aygaz compensated above minimum wage.	FULLY
EC6	Supply chain Management	27,28,29	Local sourcing for Aygaz is domestic procurement.	FULLY
EC7	Aygaz facilities	21,22,23		FULLY
	Performance Indicators	84		
EC8	Safe Motherhood Project	73,74		PARTIALLY
	"Vocational Education: A Crucial Matter for the Nation" (MLMM) project	75		
	Supporting earthquake victims in Van	75		
	Aygaz Environmental Awareness Trainings	63		
EC9	Message from the General Manager	2,3		PARTIALLY
	Aygaz Dealers	30,31,32		
	SupplyChain Management	27,28,29		
	"Vocational Education: A Crucial Matter for the Nation" (MLMM) project	75		
EN2	Recycling hydrostatic test water	67		PARTIALLY
	Water consumption and waste water management	67		
	Material use and waste management	68		
	Scrap and waste management systems	68,69		
EN5	Energy efficiency in production	61,62,63		FULLY
EN6	Emission reductions through products	63		FULLY
EN7	Energy efficiency in production	61,62,63		PARTIALLY
	Information systems	33		
EN8	Water consumption and waste water management	67,68		FULLY
EN9	Water consumption and waste water management	67,68	There is no water body significantly affected by Aygaz water use.	FULLY
EN10	Water consumption and waste water management	67,68		FULLY
EN11	Biological diversity and environmental development practices	62		FULLY
EN13	Biological diversity and environmental development practices	62		PARTIALLY

GRI INDICATORS	SECTION	PAGE	EXPLANATION	REPORTING LEVEL
EN18	Amount of energy and emissions saved due to conservation and efficiency improvements in 2010-2011	61		FULLY
EN19	GRI Table		Aygaz produces no such emissions.	FULLY
EN 21	Water consumption and waste water management	67,68		PARTIALLY
EN22	Scrap and waste management systems	68,69		FULLY
EN23	GRI table		No spilling incident occurred during the reporting period.	FULLY
EN24	Scrap and waste management systems	68,69		PARTIALLY
EN25	Biological diversity and environmental development practices	62		FULLY
	Water consumption and waste water management	67,68		
EN26	Material use and waste management	68		FULLY
	Aygaz Euro LPG+	45		
EN27	Material use and waste management	68		PARTIALLY
	Scrap and waste management systems	68,69		
	Aygaz minimizes packaging material	69		
EN28	GRI table		No fines and sanctions occurred during the reporting period for non-compliance with environmental laws and regulations.	FULLY
EN30	Environmental investments of Aygaz	22		PARTIALLY
LA1	Aygaz employees	49,50		FULLY
	Performance Indicators	84		
LA2	Aygaz employees	49,50		PARTIALLY
	Performance Indicators	84		
LA3	Compensation and Fringe Benefits	51,52		FULLY
LA4	FU	55		FULLY
LA5	Human Rights, footnote	55		FULLY
LA6	Occupational health and safety	55,56,57		FULLY
	Key performance indicators	86,84		
LA7	Accident statistics table	56		FULLY
LA8	Occupational health and safety	56,57		PARTIALLY
	Occupational health and safety	57		
LA9	Occupational health and safety	56,57		FULLY
LA9	Health and safety issues in collective bargaining contracts	57		FULLY
LA10	Average training hour per employee	51, 56, 86		FULLY
LA11	Trainings provided for employees	51,56		PARTIALLY
LA12	Performance evaluation system	50		FULLY
LA13	Performance indicators	85,87		FULLY
LA14	Compensation and Fringe Benefits	51,52	Any personal characteristic of employees can not be the reason of different treatment, like all processes of Aygaz, in remuneration process. For this reason, as long as they perform the same job, all employees are paid equal wages. Equality of women and men wages may vary only in seniority status, overtime, performance bonus and similar payment cases.	FULLY
HR1	LPG supply security	21		PARTIALLY

GRI INDICATORS	REFERENCE	PAGE	NOTES	RESPONSE
HR1	LPG supply security	21		PARTIALLY
HR2	Supply chain Management	27,28,29		PARTIALLY
HR4	Social diversity and equal opportunities	49,50	No incidents of discrimination occurred in reporting period.	FULLY
HR5	GRI table		There is no activities in areas where the right to collective bargaining is at risk.	FULLY
HR6	Human Rights	55		PARTIALLY
HR7	Human Rights	55		FULLY
HR8	Human Rights	55		FULLY
HR9	GRI table		No incident of violations involving rihgts of indigenous people or actions taken during the reporting period.	FULLY
S01	<a href="http://www.aygaz.com.tr/tr-TR/SosyalSorumluluk/">http://www.aygaz.com.tr/tr-TR/SosyalSorumluluk/</a>			PARTIALLY
S02	Ethical Principles and Internal Audit at Aygaz	12,13		FULLY
S03	GRI table		Internal audit departments employees are trained about corruption policies (2 employees)	PARTIALLY
S04	Ethical Principles and Internal Audit at Aygaz	12,13		PARTIALLY
S05	Stakeholders	17		FULLY
S06	GRI table		Contribution to political parties, politicians and related institutions is zero, Aygaz manages its relations to state organs with transparency.	FULLY
S07	GRI table		No concluded legal cases exist for reporting period for anti-competitive behaviour, anti-trust and monopoly practices.	FULLY
S08	GRI table		During the reporting period, There are 4 legal procedures leading to a total of 973,177TL payment.	FULLY
PR1	R&D Practices	43,44,45		PARTIALLY
PR2	GRI table		There is no case of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, during the reporting period.	FULLY
PR3	Product Information	40,41		FULLY
PR4	GRI table		There is no case of non-compliance with regulations and voluntary codes concerning product and service information and labelling during the reporting period.	FULLY
PR5	Customer Satisfaction	42,43		FULLY
PR6	Responsible Advertisements	39		PARTIALLY
PR7	GRI table		There is no case of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship during the reporting period.	FULLY
PR8	GRI table		There is no case of substantiated complaints regarding breaches of customer privacy and losses of customer data during the reporting period.	FULLY
PR9	GRI table		There is no case of non-compliance with laws and regulations concerning the provision and use of products and services during the reporting period.	FULLY



## Disclaimer

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Aygaz 2010-2011 Sustainability Report is prepared for the stakeholders.

Please contact Aygaz Corporate Relations Directorate for your opinions and suggestions.





**Aygaz Head Office**  
Büyükdere Caddesi No: 145-1  
Zincirlikuyu 34394 İstanbul - Turkey  
T: +90 0212 354 15 15  
skr@aygaz.com.tr

**Aygaz Corporate Relations**  
Devrim Çubukçu, Manager  
T: +90 0212 354 15 95  
devrim.cubukcu@aygaz.com.tr

Asu Ege, Specialist  
T: +90 0212 354 15 78  
asu.ege@aygaz.com.tr

**Reporting Consultant**  
Kıymet-i Harbiye Yönetim  
Danışmanlık Ticaret A.Ş.  
info@kiymetharbiye.com

**Design:** Demirbağ Publishing  
info@demirbag.net

**Print:** Gezegen Tanıtım Hizmetleri  
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**AYGAZ**  
www.aygaz.com.tr