

A high-angle photograph of a group of approximately ten children of diverse ethnicities standing on a staircase. They are all smiling and waving their hands towards the camera. The staircase has a metal handrail on the left and a wooden handrail on the right. The background is a plain wall with several horizontal metal bars.

Corporate Responsibility &  
Sustainable Development Report

11

**HALCOR**  
METAL WORKS S.A.



	<b>About the Report</b>	<b>02</b>
	<b>Message from the Chairman of the Board of Directors</b>	<b>04</b>
	<b>Message from the General Manager</b>	<b>05</b>
	<b>1. Company Profile</b>	<b>06</b>
	1.1 Presentation	10
	1.2 Corporate Responsibility Milestones in the history of HALCOR	12
	1.3 Participation in Organizations	12
	1.4 Distinctions - Awards	14
	1.5 HALCOR Corporate Responsibility	16
	<b>2. Economic Development and Corporate Governance</b>	<b>24</b>
	2.1 Key Financials	25
	2.2 Corporate Governance	26
	2.3 Risk Management	32
	<b>3. Marketplace</b>	<b>36</b>
	3.1 Market shares	37
	3.2 Products	37
	3.3 Product Quality	40
	3.4 Research and Development of New Technologies	41
	3.5 Customer Relations	41
	3.6 Complaint Management	42
	3.7 Responsible Communication	43
	3.8 Responsible Purchasing	43
	<b>4. Human Resources</b>	<b>48</b>
	4.1 Human Resources Data	49
	4.2 Responsible employment practices	51
	4.3 Additional Benefits	52
	4.4 Employee Assessment	53
	4.5 Training and Development	53
	4.6 Internal Communication	54
	<b>5. Occupational Health and Safety</b>	<b>58</b>
	5.1 Investment and Operational Spending on Health and Safety	59
	5.2 Occupational Health and Safety Management System	60
	5.3 Health and Safety Programmes	61
	5.2.3 5S System: Continuous improvement program	63
	Health & Safety and Environment Month	63
	5.6 Monitoring Health and Safety Performance	64
	<b>6. Environment</b>	<b>68</b>
	6.1 Environmental Protection Investments and Expenditure	69
	6.2 Environmental Management System	70
	6.3 Protection of the Environment at HALCOR	70
	6.4 HALCOR's Environmental Issues	71
	<b>7. Society</b>	<b>86</b>
	7.1 Copper and Health	87
	7.1.2 Copper and the Environment	91
	7.3 Enhancing Research and Training	92
	7.4 Supporting local communities	92
	7.5 Employee volunteer contribution	95
	<b>8. GRI G3.1 Indicators Table</b>	<b>98</b>
	<b>9. HALCOR SA 2011 GRI Application Level Check</b>	<b>107</b>
	<b>10. Communication Form</b>	<b>111</b>

## About the Report

The 2011 Corporate Responsibility and Sustainable Development Report is the fourth such report published by HALCOR. This report refers to the period 1/1/2011 – 31/12/2011. Corporate Responsibility reporting has been set by the company to be published on an annual basis. All of HALCOR's Corporate Responsibility and Sustainable Development Reports are available at the company's website <http://www.halcors.gr> (under the section Corporate Responsibility/Annual Corporate Responsibility Reports).

### Scope and Boundary

The goal of this Report is to describe the impact of HALCOR's business activities on the Economy, the Environment, Employees' Health and Safety and the Society in order to inform institutional investors, employees, other stakeholders any other party interested in the Company, as well as those who are interested in Corporate Responsibility and Sustainable Development issues.

This Report contains HALCOR's activities in relation to its production facilities in Greece. However, it does not include information on its subsidiaries, joint ventures, suppliers or any other third party related to the Company. Nevertheless, at certain points, specific data is presented which entail information at Group level. In addition, there are no significant changes in terms of the company's size, structure or ownership that could affect the contents of this Report. Where such changes have occurred, they are reported in the relevant sections of this Report. Expectations of stakeholders and the Global Reporting Initiative principles were taken into consideration in order to determine which issues should be included in the Report:

- Engagement
- Materiality
- Sustainability Framework
- Completeness

The importance of the issues as assessed by the company is presented in the individual Report Chapters and in the GRI table, separately for each indicator.

This Report presents the complete range of Economic, Environmental and Social issues that stem from the Company's activity, without limiting the scope and boundary of the Report. Since there is no information included in the Report concerning HALCOR's subsidiaries, acquisitions, divestitures, joint ventures and other activities, it is possible to compare data over the years.

This Report contains no significant changes in scope, boundary, calculation or estimation methods that are used. Any data revision has been noted, while the reasons for such a revision are clarified in the respective sections.

### Methodology

HALCOR's Corporate Responsibility and Sustainable Development Report for 2011, was prepared in accordance to the latest guidelines for CSR / Sustainability Reports by the international Organization, Global Reporting Initiative (GRI G3.1 edition).

The specialised Corporate Responsibility Team which is formed by managers from all Company's departments worked together in order to meet reporting requirements. The CR team's task was to collect all required data regarding various fields of HALCOR's Corporate Responsibility. Data and information presented in this Report were collected on the basis of existing Company monitoring procedures, as well as information database of various systems. In some areas, unedited non-primary data is presented.

Moreover, information on the calculation/estimation method is included, and all relevant GRI guidelines are also presented.

*The Corporate Responsibility and Sustainable Development Report 2011 was implemented with the specialised guidance (data collection, data assessment, drafting and editing of the report) of the «Sustainable Development Ltd» Consulting Company.*



[www.sdev.gr](http://www.sdev.gr)

## External Verification

HALCOR acknowledges the added value of external verification of the Report as it increases the quality and reliability of reporting to its stakeholders. For this reason, HALCOR assigned verification of the data and information included in the Human Resources and Health & Safety Report chapters to an independent external organisation. The Company will use the conclusions and comments arising from the external verification process to improve the quality of its Corporate Responsibility Reports. In this context, the company intends to extend the disclosure verification process to other chapters of the Report.

The GRI G3.1 application level check and the letter of the independent organization that completed the verification, are presented in pages 104-105.

## Contact

HALCOR looks forward to receiving any questions, enquiries, clarifications or improvement proposals, since the opinion of its stakeholders is of great significance to us.

### **HALCOR S.A.**

**George Mavraganis**

**Strategic Planning Director and Corporate Responsibility Manager**

**57th km Athens, Lamia National Road, GR 320 11 Oinofyta, Viotia, Greece**

**Tel: +30 22620 48632, Fax: +30 22620 48910**

**E-mail: [csr@halcor.vionet.gr](mailto:csr@halcor.vionet.gr)**

**[www.halcor.gr](http://www.halcor.gr)**

*In case of any discrepancy, the Greek text shall prevail.*



## Message from the Chairman of the Board of Directors

Last year marked the beginning of a period with strong financial and social turmoil characteristics and lack of trust towards global markets. In such a challenging business environment, HALCOR remained firm on its principles, values and priorities.

Human rights, the Health and Safety of employees, training, safeguarding jobs, equal opportunities, public health and coverage of the basic social needs, are all essential in building sustainable business relations with our customers, our suppliers and our employees.

We aim at continuously reducing the impact of our activities to the environment, determined to harmonise our industrial facilities with their natural and social environment by developing innovative technologies for the protection of natural resources in conjunction with integrated management of materials used in production.

Our ongoing engagement with stakeholders is focused on the needs of local societies, recognizing the important role they play for our Sustainable Development.

This report contains performance results with respect to the HALCOR 2011 Corporate Responsibility priorities as well as the actions planned for the coming years. The focal points of this report are inter alia, transparency, completeness, data monitoring indicators, acknowledgment of our advantages and challenges, clarity of information and for the first time this year, external validation of disclosed information.

HALCOR plots its course for the future through planning and investing in corporate responsibility programmes, aimed at innovation of procedures and products, reducing its carbon footprint, ensuring Health and Safety at the workplace while maintaining its social commitments at the same time.

It will take a long time of joint efforts to overcome this adverse economic phase. We are aware it is not possible to remain fixed to the previous state of affairs and we are intensifying our efforts to respond responsibly to each new challenge.

**Theodosios Papageorgopoulos,  
Chairman of the Board of Directors**

## Message from the General Manager

It is our pleasure to present our company's Corporate Responsibility and Sustainable Development Report, for the fourth consecutive year continuing our commitment for systematic disclosure of our actions. This report unfolds according to the G3.1 Guidelines of the Global Reporting Initiative and is based on the principles of the Global Compact, in order to provide comparable, objective information on each Corporate Responsibility priority, therefore proving our commitment to respect the globally accepted standards for Corporate Social Responsibility.

During a year where recession impacted almost upon the entire world, HALCOR managed to maintain its commitment for Sustainable Development by setting goals covering all sectors of its business activities. During periods of crisis, such as the one our country is experiencing, we at HALCOR never put aside how important it is to maintain quality relations with employees, our local community, the environment, our customers, suppliers and other stakeholders.

In 2011 HALCOR was recognised by ICAP as one of the "Strongest Companies in Greece", for the second consecutive year.

Our recognition as one of the strongest companies in Greece, confirms our corporate strategy and highlights the potential of HALCOR as one of the companies that can substantially contribute to the Greek economy as the company has considerable export activities, modern industrial facilities, and manufactures innovative, quality products, always with respect to the people and the environment.

Furthermore, during the evaluation of Greek participations in the European Business Awards 2011, HALCOR was distinguished as a Country Representative for Greece, together with nine other enterprises, receiving positive evaluation for the adoption of innovation and applications of good corporate practices and recognised as a reference point for corporate business activities in Greece.

We are aware that the most significant contribution our Company is making towards Sustainable Development is realised through our products and services and for this reason we continue to invest in research and technology, offering a wide range of products that save energy and respect the environment. Our best achievement in the past year was the production of one more innovative product, the bi metallic copper tube TALOS DUAL, for air conditioning and cooling applications.

As our Company ranks first in copper, brass and alloy recycling in Greece, we aim to increase each year the amount of scrap we recycle and then use as raw material. Specifically, in 2011, recycled scrap represented 46% of the total quantity of metals supplied, thus surpassing our initial goal, while we aim even higher in 2012.

HALCOR is always on the side of the local community, providing regular support to various organizations, schools and other institutions. Thus, in 2011, we supported programmes and actions aimed at society, the environment, disadvantaged groups, culture and health, and we are committed to continue as strongly over the coming years.

Our people are our greatest asset and ensuring a healthy and safe work environment is of key importance to all of us. The goals we had set for 2011 were achieved and we moving ahead with even more optimistic goals for 2012.

We insist on our commitment for Sustainable Development by pursuing our priorities, adopting to change, developing new solutions and seeking innovation without compromising our values.

**Dr. Periklis Sapountzis**  
General Manager

# 1. Company Profile



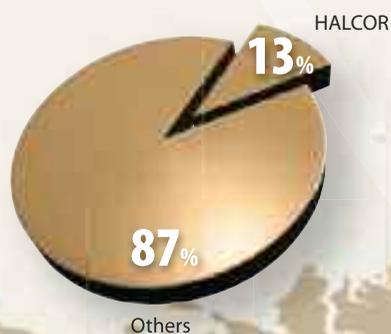
## HALCOR Group

The HALCOR Group is engaged in the copper processing and trade sector having a significant presence in the European and international markets. The Group is the sole manufacturer of copper tubes in Greece.

With its successful business presence of eight decades in the copper processing and trade sector, the HALCOR Group has a significant commercial presence in European, Asian, American and African countries. The Group's exports constitute an important contribution to the country's foreign trade balance.

## Group European Market Shares

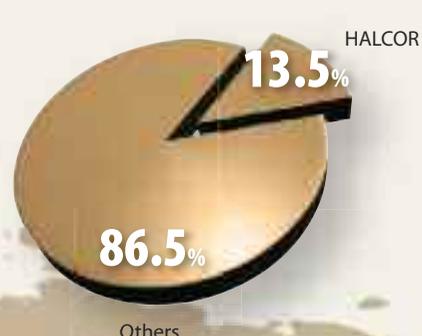
Rolled Copper (Roofing)



Copper Bars



Copper Tubes



### A strong force with:

- 19 companies
- 10 production units
- Euro 1,249 million in sales

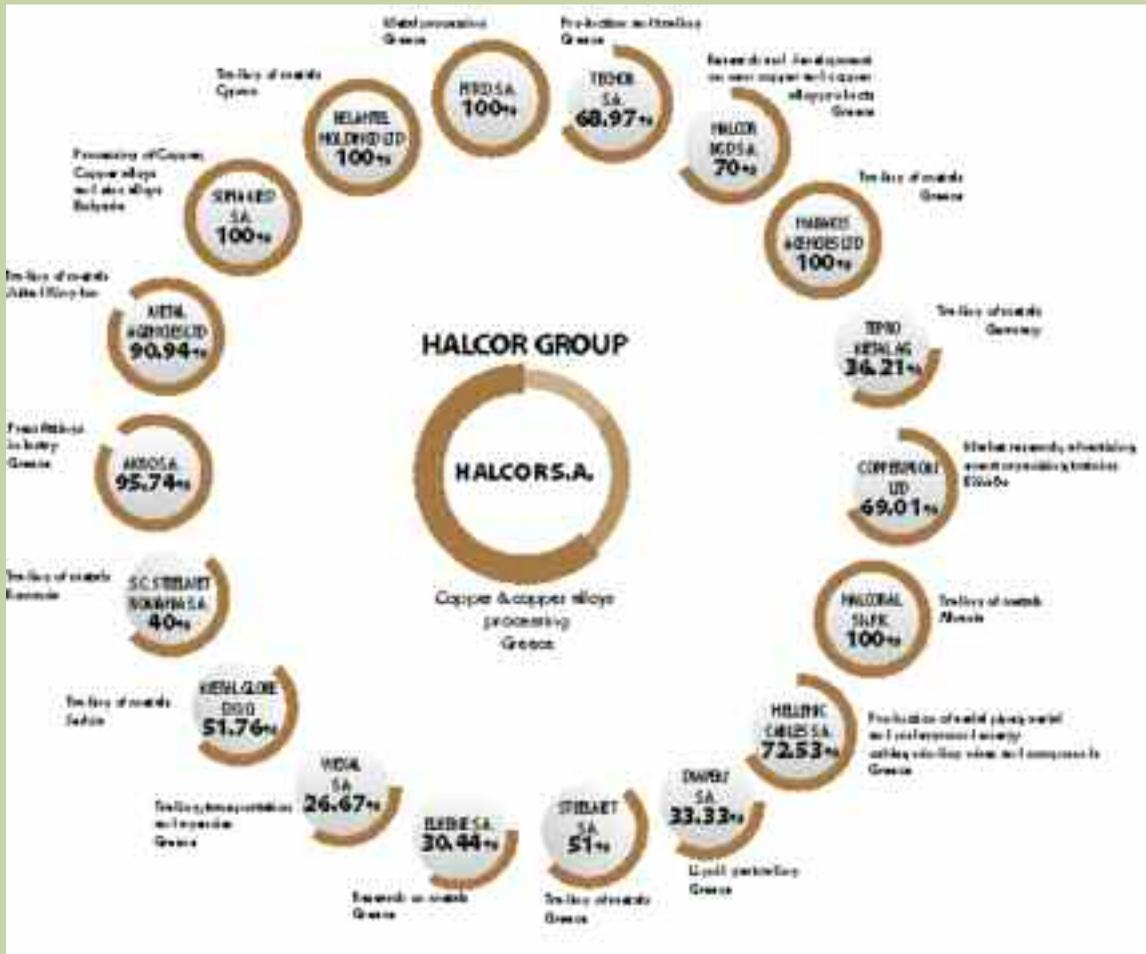
Combining its size, know-how, infrastructure and experience, the HALCOR Group utilises metal and is always focused on people and their needs.

**The total exports of the HALCOR Group during 2011 stood at euro 713.6 million, which approximately represents 4.5% of the total Greek exports for the year, not taking into account petroleum products.**



## 1. Company Profile

The companies comprising HALCOR group are the following:



HALCOR Group manufactures an extended group of products including copper tubes, sheets and strips, brass rods and bars, brass sheets and strips, special alloy products and cables.

The commercial success of the HALCOR Group in the markets where it operates is based upon developing its plants through investment plans, its focus on research and development of innovative products offering added value to end customers, maintaining top quality of the products manufactured and the adoption of a strong customer-oriented decision making process.

The production facilities of the HALCOR Group are one of its main competitive advantages. Today, HALCOR Group maintains 10 production facilities in Greece, Romania and Bulgaria, manufacturing a wide range of products.

*More information on the HALCOR Group production facilities and products is available at the Company's website [www.halcor.gr](http://www.halcor.gr) (section Group / Facilities) and in the Annual Report, chapter 6.*



Aiming to maintain and boost its competitive advantage on a domestic and international level, the HALCOR Group consistently makes strategic investments, which are focused on:

- upgrading and expansion of the facilities and infrastructure;
- research and development.

In 2011 the Group's investments amounted to euro 14 million.

**Total Investments (million euro)**



## 1. Company Profile



### HALCOR S.A.

#### 1.1 Presentation

The Company "HALCOR SA METAL PROCESSING COMPANY" with the distinctive title HALCOR SA, founded in 1976, has its headquarters on 2-4, Mesogion Avenue, 115 27, Athens, Greece, Tower B Building. The Company has been listed on the Athens Stock Exchange since 1996.

The Company's share capital, stands at euro 38,486,258 divided into 101,279,627 common unregistered shares, with a nominal value of euro 0.38 each.

HALCOR is included in the following stock market indices: ATHEX Index, FTSE/XA Liquid Mid Index, FTSE/XA Mid Cap., (31/12/2011), Sector Raw Materials – Non Ferrous Metals:

*Additional information on Halcor's stock is available in the 2011 Annual Report and at the company's website [www.halcor.gr](http://www.halcor.gr) (Investor's Relations / The share).*

HALCOR offers a wide range of copper products. Aimed at total satisfaction of all its customers, the Company is focused on fast and consistent response to demand and on providing full support for its products which are marketed in more than fifty countries around the world.

*More information on the HALCOR products can be found under the Chapter Market of this report and in the 2011 Annual Report, section 5.*

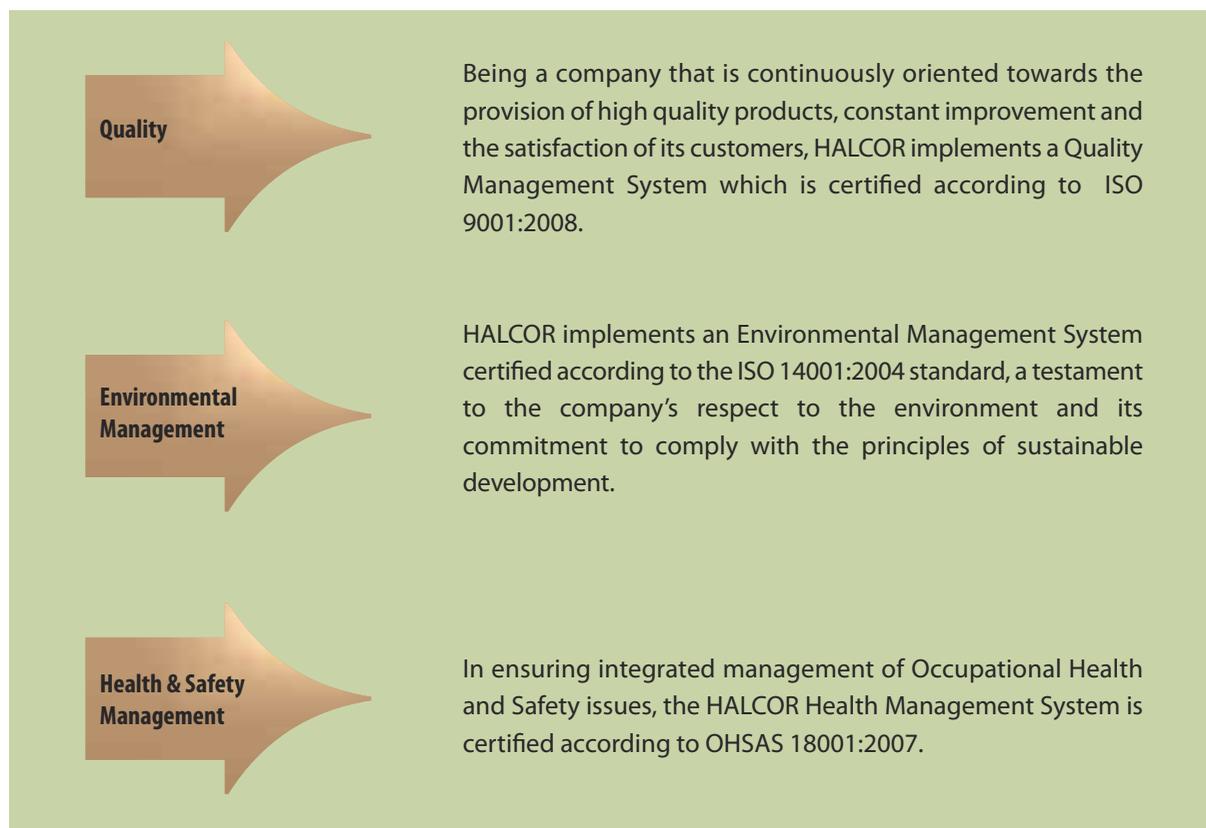
#### Significant Changes in 2011

- HALCOR founded the limited company HALCORAL Sh.P.K., which is in Tirana, Albania. The new company is a wholly-owned subsidiary of HALCOR.
- HELLENIC CABLES S.A. increased its share capital and shareholders waived their entitlement. HALCOR holding in HELLENIC CABLES S.A. now stands at 72.53% from the 78.71% holding before the capital share increase.

**HALCOR Shareholder Structure (31.12.2011)**



## Compliance / Certification



## Business Strategy

HALCOR implements a long-term development plan, in line with following strategic priorities:

1. Development of new, innovative, high added value products in order to further strengthen the Group's commercial presence;
2. Further reduction of production cost and improvement of operating efficiency by containing fixed costs, adopting automation systems, improving returns, optimizing production planning, turning to higher added value products and increasing scrap consumption.
3. Creation of strategic alliances with international firms in order to expand the Group's presence beyond Greek borders.
4. Further development of synergies among the Group's subsidiaries both at a production and at a commercial level.
5. Maintain the leading position in Greece and Southeast Europe.
6. Strengthen the Group's position in the EU markets.
7. Maintain the top quality of manufactured products.
8. Protection of and respect to the natural and social environment.
9. Ensuring a safe and efficient work environment, that will allow and encourage employees to advance and progress together with the Company.

## 1. Company Profile

### 1.2 Corporate Responsibility Milestones in the history of HALCOR

HALCOR was founded in 1976 and continued the operations of the copper processing sector of VIOHALCO SA (which was founded in 1937 and its production unit was located on Pireos Avenue in Tavros). Up to present, HALCOR has attained significant accomplishments with respect to all Corporate Responsibility and Sustainable Development priorities.

• The Quality Assurance System of the copper tubes plant was certified according to standards EN 29002 and ISO 9002.

• The Recycling / Melting plant was certified according to standard ISO 9002.

• The Company Tubes Plant was certified per ISO 9001.

1992

1994

1995

1996

1998

2001

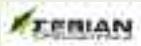
• Rolled products were certified according to standard ISO 9002.

• The Hellenic Copper Development Institute was founded at the initiative of HALCOR, which is a founding member.

• The SAP business data processing system was put into operation, confirming HALCOR's decision to introduce the internationally acclaimed ERP business tools in its organisation.

### 1.3 Participation in Organizations

HALCOR participates in several Unions and Associations of sectoral interest, but also in other organizations, aiming at promoting the concept of Sustainable Development and Corporate Responsibility.

Organization Name	Status
 Hellenic Network for Corporate Social Responsibility (CSR HELLAS)	HALCOR is a main member of this network since 2009.
 Federation of Hellenic Recycling and Energy Recovery Industries (SEVIAN)	HALCOR is a founding member of SEVIAN since 2010.
 Athens Chamber of Commerce and Industry (ACCI)	HALCOR is a member of ACCI.
 Hellenic Federation of Enterprises (SEV)	HALCOR is an active member of SEV since 1977.
 Federation of Sterea Ellada Industries (SBSE)	HALCOR is a founding member of SBSE and also a member of the Board of Directors since 1982.
 Hellenic Copper Development Institute (HCDI)	HALCOR is a founding member of the Hellenic Copper Development Institute since 1996.
 International Copper Association (ICA)	HALCOR is a member of the International Copper Association since 1996.
 International Wrought Copper Council (IWCC)	HALCOR is a member of the International Wrought Copper Council.
 European Committee for Standardization (CEN)	HALCOR participates as member in the committees formulating CEN specifications.
 Hellenic Marine Environment Protection Association (HELMEPA)	HALCOR has been a member since 2011.

• An investment project worth approximately euro 13.5 million was completed in the Tube Plant, its salient feature being the purchase and installation of a new 4,000 ton extrusion press.

• HALCOR was presented awards as EXPORT LEADER in the "Exporting Turnover" subcategory by HELEXPO and STATBANK, in September 2009.

• In 2011 HALCOR was recognised by ICAP as one of the "Strongest Companies in Greece", for the second consecutive year.  
• HALCOR was distinguished as Country Representative for Greece during the evaluation of Greek participations in the European Business Awards 2011.

2002

2008

2009

2010

2011

• First "Corporate Responsibility and Sustainable Development Report" publication, according to Global Reporting Initiative guidelines, G3 edition

• HALCOR was awarded an honorary distinction for the 2009 Corporate Responsibility and Sustainable Development Report by the University of the Aegean.

## Objectives of Organisation

HALCOR is one of the main members of this network and actively participates in actions, working groups and network events. CSR Hellas was established in 2000; its mission is to promote the concept of Sustainable Development, Corporate Social Responsibility and Social Cohesion in Greece, as well as to develop communication, synergies and coordination mechanisms between the companies which are members of the network, for the joined implementation of programmes and the exchange of good practices.

SEVIAN's establishment was completed in early 2010. The companies that are members of SEVIAN operate in Greece and exercise industrial operations in the recycling and utilization of waste, by-products and secondary raw materials sector. SEVIAN's mission is to enforce Sustainable Development through actions that are related to recycling and energy recovery.

The Athens Chamber of Commerce and Industry was founded in 1914. One of its main goals is to promote the principles of Corporate Social Responsibility and support environment-friendly business activities.

HALCOR has adopted the ACCI Council Code for Sustainable Development.

The primary role of SBSE is to promote the needs of the industry and to ensure the appropriate means to achieve sustainable development responsibly. SBSE aims at supporting its members by promoting entrepreneurship, competitiveness, Sustainable Development and the environmental protection of the Sterea Ellada region.

HCDI was founded in 1996 and is a non-profit organization that aims to promote the responsible application and offer updates on the uses of copper and its alloys, to specialised users and the general public. HALCOR is a founding member of the Hellenic Copper Development Institute. Together, they participate in the programs of the European Copper Institute (ECI), which is a non-profit organization and belongs to the International Copper Association (ICA). HCDI is funded and supported by the non-profit organization ICA, a global network of 27 Copper Centres.

ICA is a global non-profit organization and its goal is promote the use of copper.

The IWCC, which was founded in 1953, is a trade association for the copper fabricating industry. It operates in a large number of countries in Europe, as well as in Japan, Australia, China, Iran, India, Mexico, Malaysia, South Africa, South Korea, Taiwan and USA.

The CEN is a non-profit organization which was founded in 1961. The main objective of CEN is to create a single standardization system that meets the current needs of all EU member countries. CEN aims at drafting the European Standards (EN), which will advance the competitiveness of the European industry in global markets, as well as help shape the internal European market.

HELMPEPA is a non-profit organization established in 1982. The goal of HELMEPA is to promote the elimination of marine pollution, safety at sea and information on the environment.

## 1. Company Profile

### 1.4 Distinctions - Awards

For HALCOR, the distinctions / awards it receives constitute an important incentive for further improvement across all business sectors. Below are the important distinctions HALCOR received in 2011.



In 2011 HALCOR was recognised by ICAP as one of the **“Strongest Companies in Greece”**, for the second consecutive year. The strongest companies in Greece are the community of enterprises operating with high credit worthiness based on the ICAP Score (rating AA, A and BB). ICAP Group has been recognised by the Central Bank of Greece as an External Credit Assessment Institution (ECAI) and by the European Central Bank as an Accepted Rating Tool Source. It should be noted that only one out of ten enterprises in Greece are recognised by ICAP as the strongest with respect to credit worthiness.

Our recognition by the ICAP Group with a high rating score, confirms our credit worthiness and the company’s potential to continue its operations as one for the most important metal processing industry globally. This distinction will facilitate further the HALCOR domestic and international transactions, providing to associates and customers the assurance that they are transacting with a reliable, strong Company.

*Our recognition as one of the strongest companies in Greece, confirms our corporate strategy and highlights the potential of HALCOR as one of the companies that can substantially contribute to the Greek economy since the company has considerable export activities, modern industrial facilities, manufactures innovative, quality products, always with respect to the people and the environment.*

*General Manager, HALCOR*

*“This distinction for the HALCOR Corporate Responsibility and Sustainable Development Report constitutes an important incentive for us to continue improving our Corporate Responsibility, while at the same time it represents a HALCOR commitment to act as a sound and responsible partner that invests in modern entrepreneurial practices aiming at sustainable development”.*



*Strategic Planning and  
Corporate Responsibility Manager*

HALCOR was distinguished as Country Representative for Greece during the evaluation of Greek participations in the **European Business Awards 2011 along with nine other Greek companies**. HALCOR positive evaluation for the adoption of innovations and applications of good corporate practices and recognised as a reference point for corporate business activities in Greece.



Since 2007, the European Business Awards have been awarded to European businesses distinguished for their work environment, the high level of services to customers, their integrated Sustainability and Corporate Responsibility policy, constant focus on bolstering exports and imports, their efforts to expand in the global market and for their overall innovative approach. Businesses from 31 European countries were the winners in this year's European Business Awards, recognised as the leaders in their countries in promoting innovations and the promotion and application of good practices in the sectors above.

The HALCOR distinction as a Country Representative for Greece represents a significant reward for its strategy and operation, which over the last years is focused on strengthening its competitive advantage at a Greek and international level, through innovative, quality products and an emphasis on compliance with the Sustainable Development and Corporate Responsibility principles.

*“HALCOR's recognition as a Greek company that stands out and is distinguished for good corporate practices, under such an adverse economic environment, makes us particularly happy and creates a feeling of additional responsibility to attain the goals we have set and go beyond”.*

*General Manager, HALCOR*

## 1. Company Profile

### 1.5 HALCOR Corporate Responsibility

Corporate Responsibility is an operating method and a vehicle to achieving Sustainable Development. HALCOR has integrated the principles of Corporate Responsibility in its entrepreneurial philosophy, aiming to operate in an ethical context, in partnership with the community within which it operates.

#### Corporate Responsibility principles in compliance with ISO 26000, the International Standard on Social Responsibility

##### Cooperation with Local Communities

HALCOR supports the local communities aiming to return value in the areas it operates. In this context, hiring human resources from the local community is a company priority. Furthermore, the company supports local business by using local suppliers where this is possible.

##### Corporate Governance

HALCOR seeks maximum possible transparency in all its activities and ongoing, two-way collaboration with stakeholders associated with its operations. Respect to the legal and regulatory framework and ethical behaviour constitute non-negotiable principles for HALCOR.

##### Human Rights

Respect and compliance with human rights is a non-negotiable principle of HALCOR. The Company ensures equal opportunities to all employees and avoids any kind of discrimination. Up to present there has not been any discrimination incident or complaint.

##### Consumer Issues

The quality of products and services is a strategic objective for HALCOR. The Company aims at maximum satisfaction of its customers and applies complaint recording procedures for their resolution. Communication with customers is encouraged in order to identify and record possible complaints and take the appropriate corrective and preventive actions. HALCOR complies fully with all requirements regarding the information that must be disclosed on its products and services. As was the case in previous years, there were no incidents of non-compliance with the law and regulations in 2011, regarding the effect of its products, information the company must disclose to its customers and the markings that must accompany its products. In contrast, use of copper is extremely beneficial due to its antibacterial properties.

##### Fair Operating Practices

##### Fair Operating Practices

Ethical conduct and responsibility characterises HALCOR across all its operations. Even though the risk for incidents of corruption is low, the Company takes all necessary measures to control and identify such potential incidents. Up to present there has not been any corruption incident at HALCOR. Moreover, the Company respects property rights, fully (material or intellectual). HALCOR participates as a member to various initiatives and organizations aimed at promoting the principles of social responsibility.

##### Environment

##### Environment

HALCOR respects the natural environment and is committed to protect it through application of an Environmental Management System that is certified per international standard ISO 14001:2004. HALCOR strives for continuous reduction of its carbon footprint and takes preventive actions to avoid any environmental risk.

##### Employment Practices

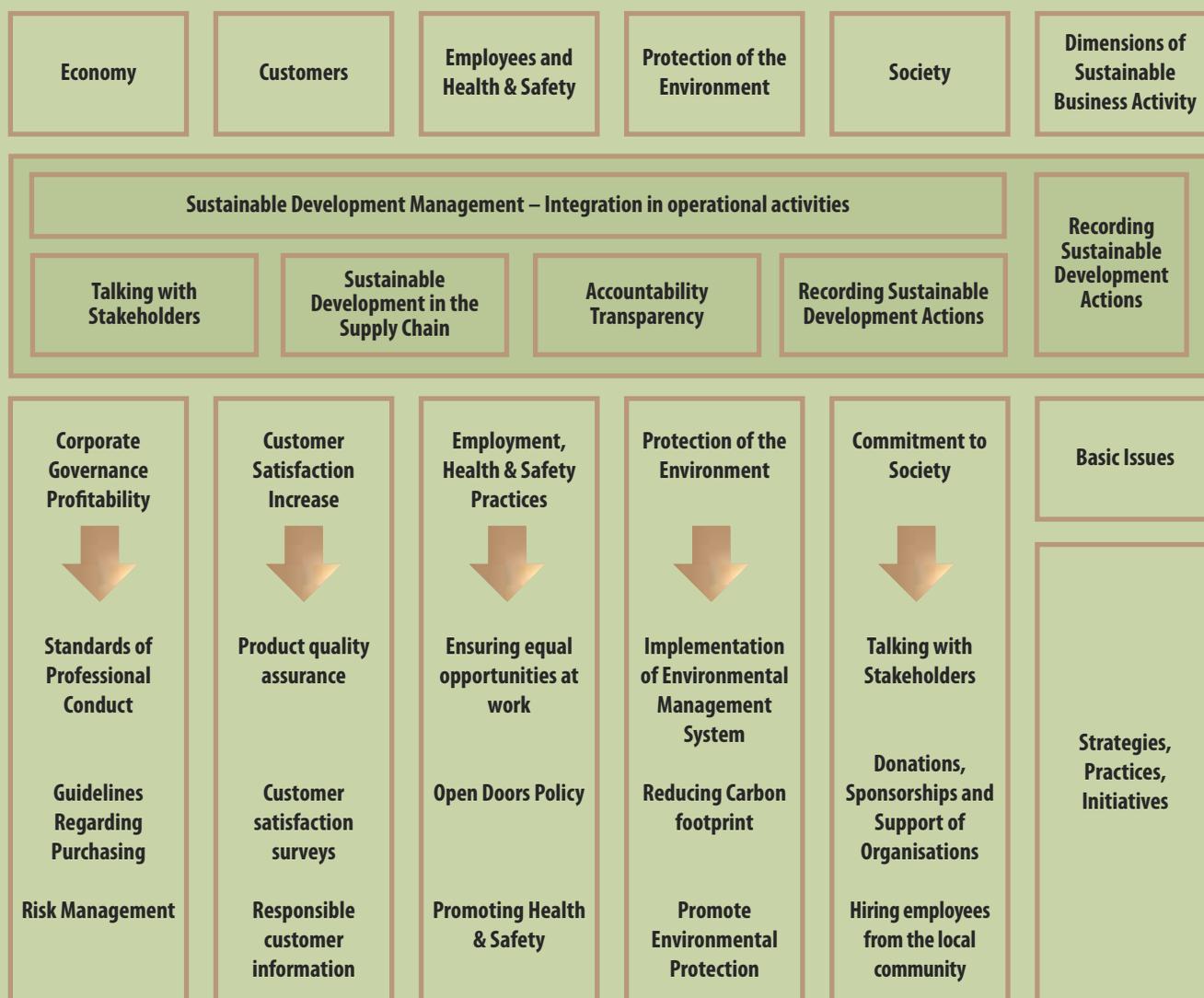
HALCOR invests on its people as they are driving force for its success in business. The Company has established and applies a code of values and conduct for employees and its application is mandatory for all employees across all its operations. At the same time, HALCOR provides significant opportunities for personal and professional progress, through a series of training programmes addressed to its employees. Ensuring the Health and Safety of its employees is a key priority for HALCOR. The Company has created all the necessary administrative and organizational structures to manage Health & Safety issues and takes all necessary measures for ongoing improvement in this sector.



Corporate Responsibility is an integral part of HALCOR's corporate strategy and is applied on all sectors of its business operation. The result is expressed through systematic communication with its stakeholders, through monitoring and management of its carbon footprint, through collaboration with local communities on various levels and through the formation of a safe and healthy work environment. HALCOR is committed to a development planned in accordance with the following:

- responsible operation, with strict compliance with all rules of conduct across all Company activities;
- the obligation to provide a healthy and safe work environment for its employees;
- correct and prudent use of natural resources in an effort to minimize the environmental impact of its operations.

### Sustainable Development is an integral part of the HALCOR corporate strategy



For better and concentrated management of Corporate Responsibility issues, HALCOR has established a Corporate Responsibility Team since 2009; the team examines the issues that arise regularly and plans its actions on an annual basis.

*For more information regarding the composition and powers of the HALCOR Corporate Responsibility Team, please refer to the Chapter Corporate Governance.*

# 1. Company Profile

## Stakeholder Priority Diagram





### **Code of Conduct for Sustainable Development**

HALCOR S.A. has adopted the Code of Conduct of the SEV Council for Sustainable Development and in doing so:

1. Respects the principles of Sustainable Development and incorporates them in its decision making processes.
2. Promotes the adoption of environmentally friendly and scientifically established methods of designing its activities
3. Focuses on manufacturing products and rendering services with positive environmental impact.
4. Promotes production methods that emphasize recycling, conservation of natural resources and proper management of waste products
5. Trains and orientates suitably its workforce and invests in natural, technological and financial resources aimed at sustainable development
6. Engages in continuous improvement of its performance in the fields of health, safety and environmental protection
7. Provides accurate information to Authorities and Society about its activities and aims at a sincere dialogue with all involved stakeholders
8. Contributes to the social, cultural and overall economic development of the communities in which it is active
9. Adopts modern practices of corporate governance
10. Meets its institutional obligations in a spirit of transparency and business ethics

### **Communication with Stakeholders**

HALCOR, communicates regularly and cooperates with the groups of stakeholders associated with its business activities. Communication with stakeholders brings multiple benefits to the Company and each stakeholder group as it improves the Company's ability to identify important issues and take the appropriate actions to improve its performance.

Through a procedure that is carried out annually by the Corporate Responsibility Team, HALCOR has recognised two groups of stakeholders that are influenced by its operations:

- the primary stakeholders that are of utmost importance for the Company
- the secondary stakeholders that are affected by the Company's decisions and operations.

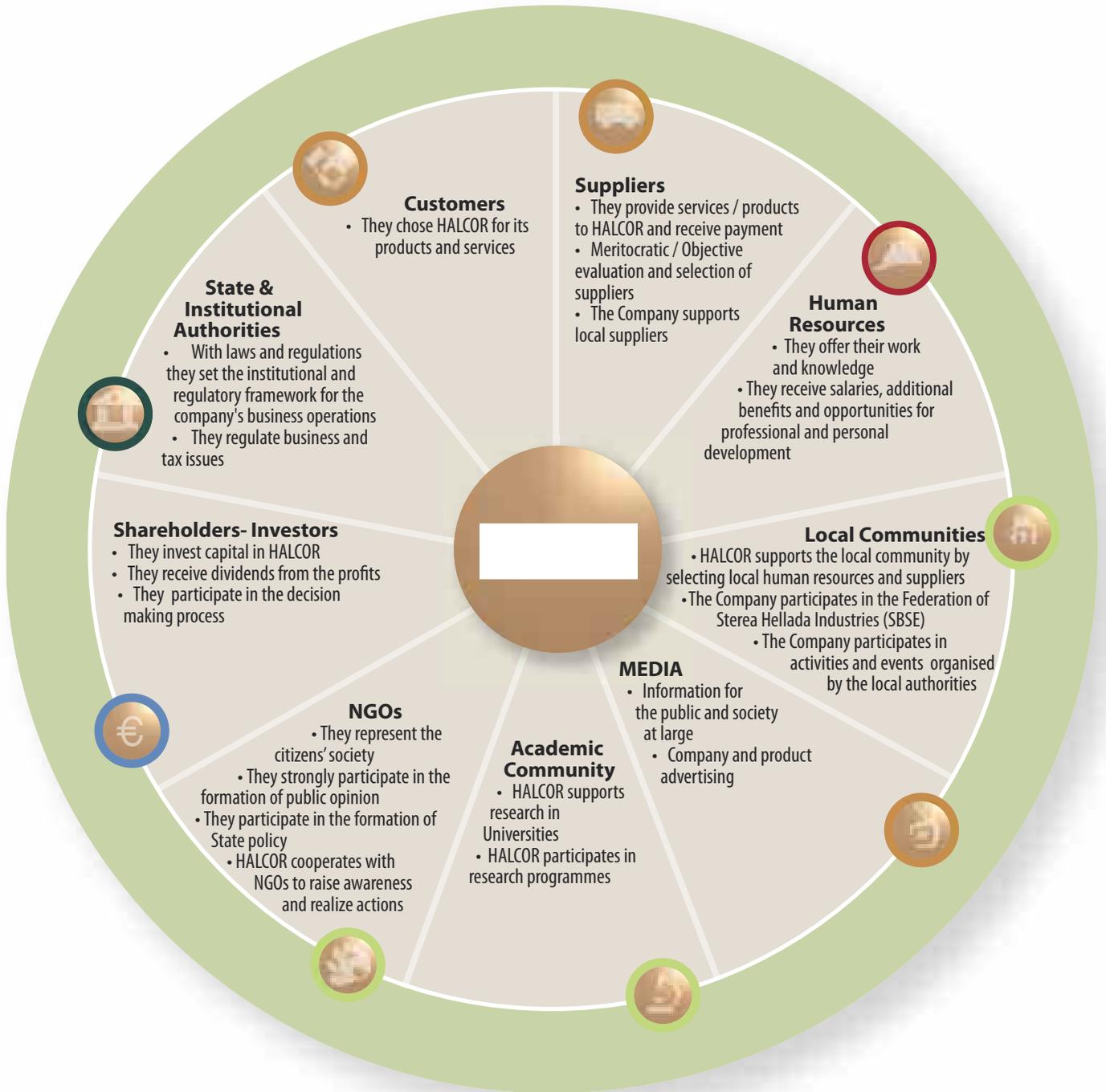
## 1. Company Profile

### Main issues / stakeholder expectations

<b>SHAREHOLDERS- INVESTORS</b>	<ul style="list-style-type: none"> <li>• Enhancing the Company's competitiveness</li> <li>• Transparency in dealing with stakeholders</li> <li>• Sound Corporate Governance</li> </ul>	
<b>CUSTOMERS</b>	<ul style="list-style-type: none"> <li>• High quality of services / products</li> <li>• After sales support</li> <li>• Supplier update on market developments and on Company products</li> </ul>	
<b>HUMAN RESOURCES</b>	<ul style="list-style-type: none"> <li>• Employment and insurance issues</li> <li>• Personnel evaluation issues</li> <li>• Advancement and development of human resources</li> <li>• Details of Company's objectives and means of achieving them</li> </ul>	
<b>SUPPLIERS</b>	<ul style="list-style-type: none"> <li>• Objective and meritocratic evaluation</li> <li>• Support of local suppliers</li> <li>• Supplier update on market developments</li> <li>• Enhancement of communications and updates</li> </ul>	
<b>LOCAL COMMUNITIES</b>	<ul style="list-style-type: none"> <li>• Response to local community issues and needs</li> <li>• Supports the local community by employing locals</li> <li>• Enhancement of local entrepreneurship</li> </ul>	
<b>NGOs</b>	<ul style="list-style-type: none"> <li>• Support to NGO initiatives and cooperation</li> </ul>	
<b>ACADEMIC COMMUNITY</b>	<ul style="list-style-type: none"> <li>• Copper applications</li> <li>• The effects of copper and metals on the human body and the environment</li> </ul>	
<b>MEDIA</b>	<ul style="list-style-type: none"> <li>• Improvement through advertising and publications</li> <li>• Enhancement of communications and updates</li> </ul>	
<b>STATE &amp; INSTITUTIONAL AUTHORITIES</b>	<ul style="list-style-type: none"> <li>• Compliance with the laws and regulations</li> <li>• Support State actions and programmes</li> </ul>	

HALCOR communicates with each stakeholder group through the various means and channels it has developed. It aims at regular communication with all its stakeholder groups, in order to take note of the main issues related to each group and to cooperate with them for achieving goals with mutual benefits and generate value for all associated directly or indirectly with HALCOR. Below is a presentation of the manner and frequency with which HALCOR communicates with each stakeholder group.

**Relationship - Interaction Framework**



# 1. Company Profile

## Stakeholder Groups HALCOR Channels of Communication & Stakeholders

### Shareholders- Investors



- Annual Shareholders General Assembly
- Investor Relations' Division
- The Board informs shareholders on any changes in HALCOR
- Regular press releases, announcements and reports are issued, providing information on new investments in the Group
- Presentation of the financial results to the BoD on a quarterly, 9-month and annual basis
- Constant communication of analysts and investors with Company executives
- Investor Relations Officer
- Presentation in the Union of Institutional Investors
- Publication of Annual Financial Report
- Publication of annual Corporate Responsibility and Sustainable Development Report

### Customers



- Customer Satisfaction Survey
- Regular physical and telephone communication
- Company website

### Human Resources



- Ongoing communication between Management and Employees The company applies an Open Door Policy
- Communication and updating through the Company's intranet (internal network)
- Information via e-mail and informative leaflets on notice boards
- Information through the Company's website

### Suppliers



- Participation in supplier events and exhibitions
- The company updates its suppliers on market developments
- Constant contact with suppliers through the Company's Purchasing Department

### Local Communities



- Constant communication with Local Authorities and Associations
- Participation in activities and events organised by local authorities and associations

### Non-profit Organisations (NGOs)



- Exchange of views on common interest issues (e.g. quality of life improvement, environmental protection)
- HALCOR participates in the Hellenic Network for Corporate Social Responsibility (CSR Hellas) as a main member
- HALCOR is a member of HELMEPA

### Academic Community



- Exchange of views on issues of common interest
- HALCOR is a founding member of the Hellenic Copper Development Institute
- In 2010 HALCOR created HALCOR R&D for research and development on new copper and copper alloy products

### Media



- Direct, ongoing contact and cooperation
- Updates
- Advertising
- Press releases

### State & Institutional Authorities



- Participation in sectoral or business conferences and events
- Consultation with state and institutional representatives on a national and/or regional level

Communication with stakeholders helps identify issues of concern of each group. HALCOR records these issues and plans its actions aimed at optimum response and constant improvement in each sector. This Corporate Responsibility and Sustainable Development Report is a consolidated record of all issues relating to HALCOR's various stakeholder groups and also to the manner by which the Company responds to these issues. A detailed presentation on the Company's response to the various issues and the actions it undertakes in the scope of Corporate Responsibility, can be found in the relevant chapters of this Corporate Responsibility and Sustainable Development Report. HALCOR monitors and measures its Corporate Responsibility performance on an annual basis and sets goals per Corporate Responsibility priority, as presented in the relevant chapters of this Report.





## 2. Economic Development and Corporate Governance

**We operate with integrity, respect and transparency in all our business activities.**

*"We believe that sound governance and compliance at all levels is key for a responsible business operation. Transparency in our business activities is necessary to ensure healthy and shared collaboration with our shareholders, customers, human resources and all our stakeholders.*

*Compliance with the legislative and regulatory framework and applicable standards is not always sufficient to achieve the appropriate risk management. Each business must set and implement practices above and beyond the law, acting with integrity and full transparency at any given moment.*

*In the context of the HALCOR Corporate Governance, transparency and effectiveness are key factors in planning its developmental actions. At the same time, Corporate Responsibility is for HALCOR a concept that is integrated in its operational method".*

*Strategic Planning Director  
and Corporate Responsibility Manager*

### 2011 Target performance

What we said	Performance	What we did
Systemisation of Corporate Responsibility issues that will be forwarded to the Company's Board of Directors.		The Board receives feedback and information through consolidated bi-quarterly reports, which include detailed Corporate Social Governance issues such as Health and Safety and Environmental key performance indicators. The Company's department managers participate in Board meetings, in order to inform the members and present relevant issues.
Inclusion in the FTSE4GOOD index.		The sharp decline in the Greek Stock Market does not allow inclusion in International Indexes. Therefore, during 2011, when the decline in the stock market was great, it was not possible for HALCOR to be included in the FTSE4GOOD index.

## 2.1 Key Financials

The aftershocks from the adverse economic conditions in 2011, on a national and European level, had a significant effect on HALCOR as well. In 2011, the Company's turnover amounted to euro 586 million. Gross profit was formed at euro 22.4 million, compared to euro 12.4 million in 2010, while EBITDA showed a 55% increase, at euro 12.3 million from euro 7.9 million in 2010. Despite the adverse economic situation, HALCOR succeeded in improving its financial performance again in 2011.

Even though the prevailing financial conditions, both domestically and internationally, constituted a challenge HALCOR achieved a reduction of operational and administrative costs.

*More information on HALCOR's financial figures is available in the 2011 Financial Report, in the 2011 Annual Report and at the Company's website [www.halcors.gr](http://www.halcors.gr) (section Investor Relations / The Share).*

### Social Product

It is HALCOR's goal to create value for the stakeholder groups it associated with, including its shareholders, employees, customers and the society at large. HALCOR's operation creates important direct and indirect benefits for society as a whole through:

- its significant contribution to the national economy
- support of local communities and their economies
- increased employment opportunities
- enhancement of technical and other knowledge of its workforce
- the creation of value for shareholders and investors
- the rewarding representation of the Greek Industry in the international markets.

**2011 Social Product Distribution**



The social product resulting from HALCOR operations in 2011 amounts to euro 75.9 million.

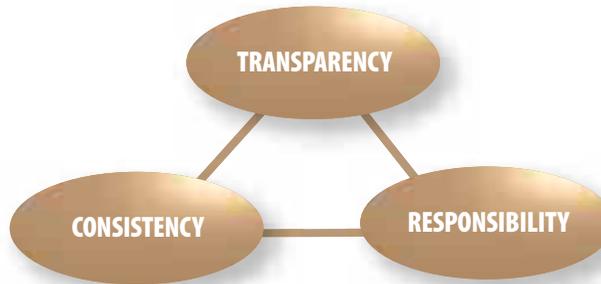
HALCOR implements significant investments each year which contribute to improving the country's economic fundamentals by creating additional secondary and tertiary revenue through the development of new activities. In addition, it also contributes to the improvement of the country's economic fundamentals through the inflow of capital from abroad, generation of jobs and upgrading of human resources.



## 2. Economic Development and Corporate Governance

### 2.2 Corporate Governance

Sound, transparent, responsible and effective management maximises the value of the enterprise. For HALCOR, sound corporate governance is a choice of corporate culture and respect towards its shareholders. The objective of HALCOR's corporate governance system is to apply across the entire company, a series of principles and operating practices which serve three key priorities:

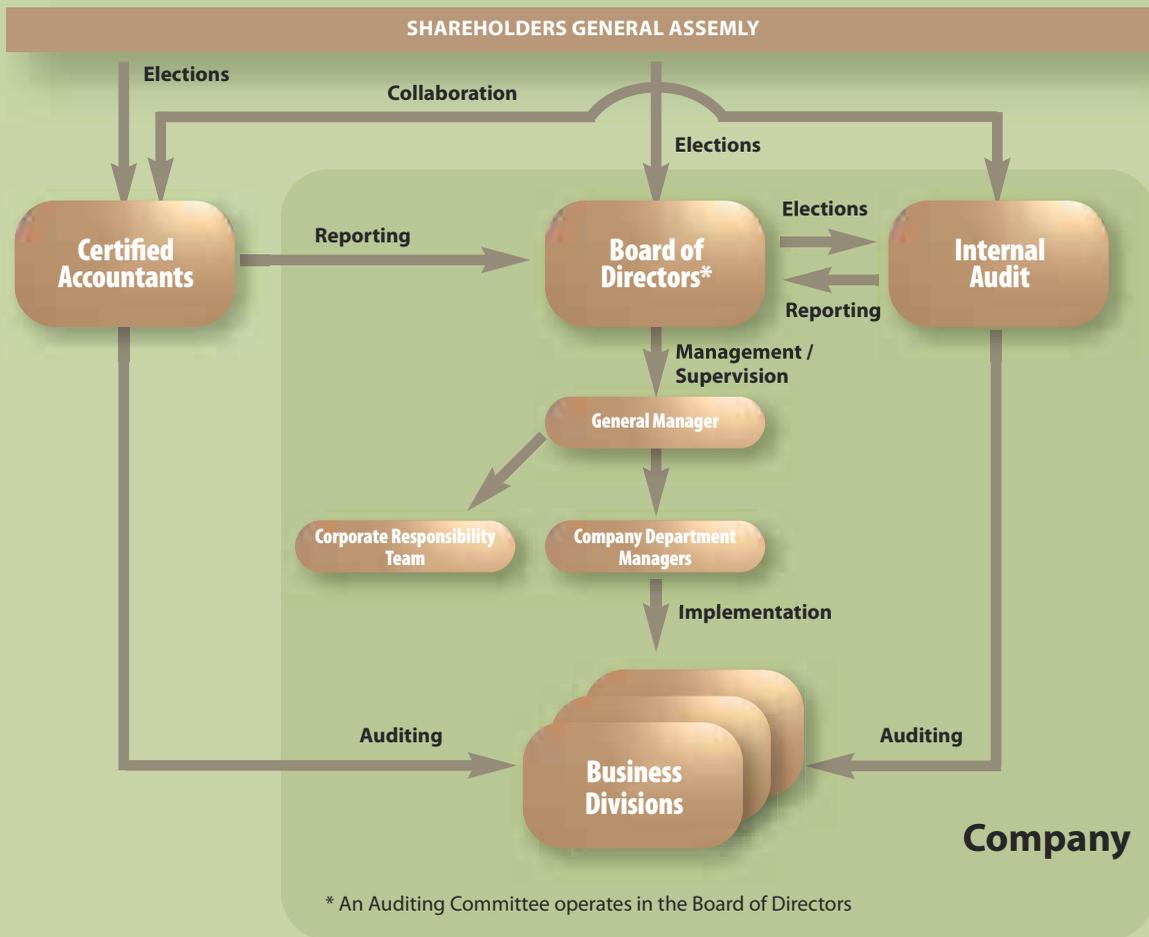


HALCOR has adopted the practices of Corporate Governance in its management and operations, as specified in the applicable institutional framework for companies listed in the Athens Stock Exchange (Law 3016/2002 and the provisions of Law 3873/2010).

As of March 2011 HALCOR has adopted the SEV Code of Corporate Governance and during preparation of the Board of Directors' Annual Report, the Company carried out a review in order to record in detail any divergence from its guidelines.

The HALCOR Corporate Governance framework includes the Board of Directors, the Auditing Committee and the Company's administration which includes the special Health, Safety and Environment Council. The diagram presents the Corporate Governance system applied.

### CORPORATE GOVERNANCE DIAGRAM





## 2. Economic Development and Corporate Governance

### Governing Bodies

#### Board of Directors

- The Board consists of 11 members, distinguished as executive, non-executive and independent<sup>(1)</sup>, as stipulated by Law 3016/2002, for incorporated companies listed in the Athens Stock Exchange.
- The members of the Board are elected by the HALCOR General Assembly<sup>(2)</sup>. The Board member selection criteria include experience, specialization, academic titles, job-related awards/distinctions, administrative skills, creative ability, composition and analysis skills, social recognition, fairness.
- The Board meets regularly and is responsible for providing direction and making decisions related to the Company's activities.
- The Board receives feedback and information through consolidated semi-annual or quarterly reports, which include detailed Health and Safety issues and performance indicators and key Environmental issues. The Company's department managers participate in Board meetings, in order to inform the members and present relevant issues.

#### Audit Committee

- The Audit Committee consists of at least two non-executive members and one independent member of the Company's Board of Directors.
- The Committee is elected and acts in compliance with Law 3693/2008.
- The main task of the Committee is to support the Company's Board of Directors while its objective is to implement the principles of Financial Reporting, the Principles of Corporate Governance and Internal Auditing, maintain on an on-going basis the effectiveness, independence and objectivity of External Auditors both with respect to the Company and its subsidiaries and related companies.

#### Internal Audit Department

- The Department updates the Board of Directors regularly on the implementation of the Company's internal operation regulation.
- Internal Audit Inspections examine issues related to the Environment, Health and Safety and Human Resources and the results of these inspections are forwarded to the members of the Board.
- Internal audits include a special, independent Auditing Team, which carries out internal audit activities in the Company and is supervised by three non-executive members of the Board. The auditors in this team are not members of the hierarchy of any other HALCOR department and they exercise their duties independently and impartially.

#### Internal Operational Regulation

- Its purpose is to enhance corporate transparency and control mechanisms.
- Application of the regulation is binding for all HALCOR employees.
- The regulation lists the responsibilities, duties and obligation of each institutional instrument, service or department as stipulated by the Company's Articles of Association and legislation in force.
- The regulation has been approved by the Company's Board of Directors and covers the legal requirements pertaining mainly to the obligations of companies listed in the Stock Exchange.

*(1) The independent and non-executive members of the Board do not hold HALCOR shares (or they hold a very small percentage) and do not have a dependent relationship with the Company or with persons connected to it. Non-executive members are persons who don't exercise daily duties for the Company.*

*(2) Minority shareholders are provided the opportunity to participate, express their views and communicate with the members of the Board of Directors of the Company during the Shareholders General Assembly. The Company complies fully with the provisions of Law 2190/1920 on the mechanisms for expression and participation of minority shareholders. The remuneration of the members of the Board of Directors is linked with the Company's overall performance, including issues of responsible operation; however, until today, there is no separate procedure for monitoring the Board's performance in corporate responsibility and sustainability issues.*

The Shareholders General Assembly serves as a direct communication channel between the Company's shareholders and administration. The HALCOR Board of Directors is evaluated by the Company's

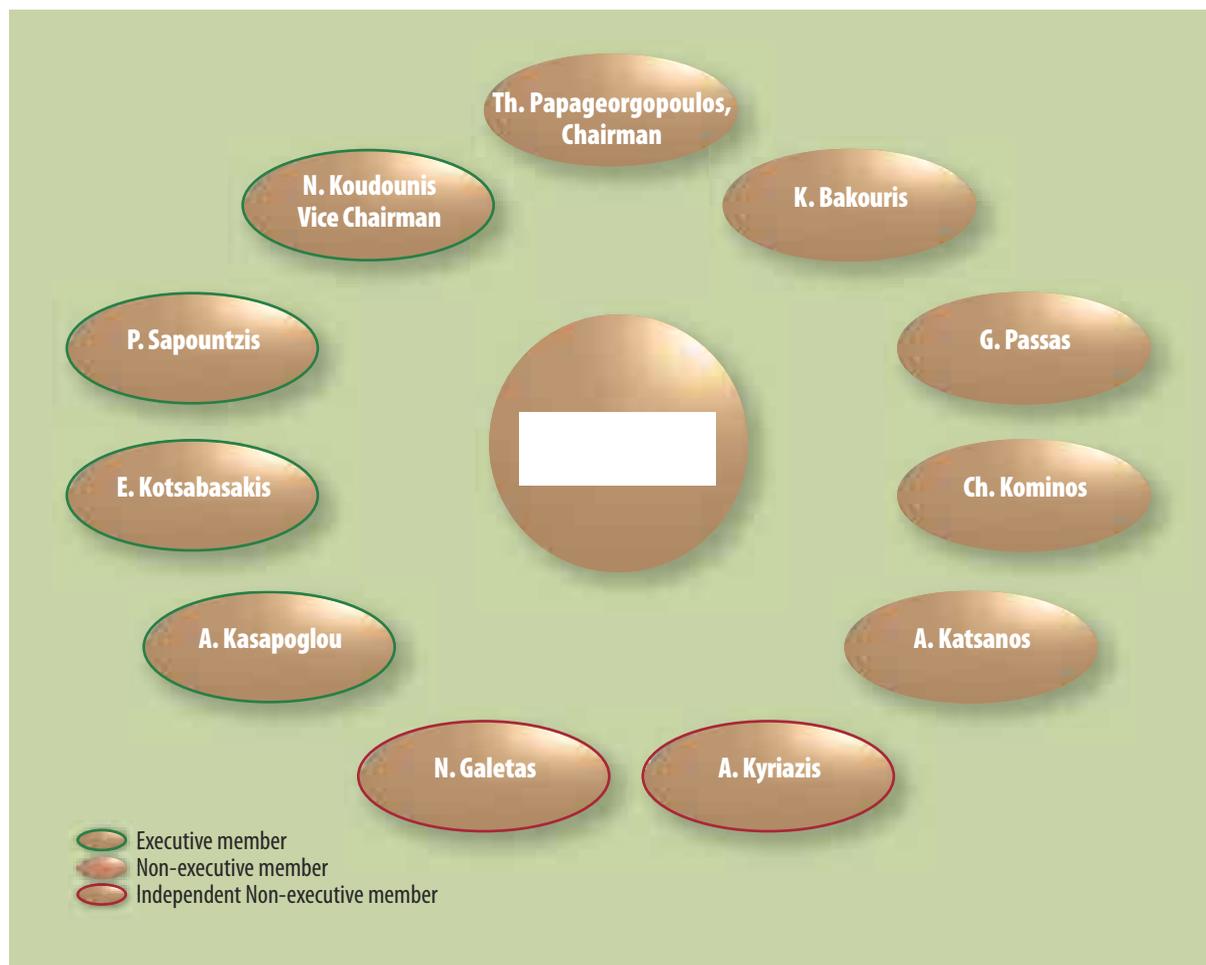
shareholders once a year, during the Annual Shareholders Assembly. The evaluation criteria concern the activity displayed over the past year based on information submitted to the General Assembly in the relevant management report.

The HALCOR Ordinary General Assembly convened on 16 June 2011 and elected the new Board of Directors. The term on office of the new Board of Directors is set at one year, according to the Company's Articles of Association. The following table presents the compositions of the Board.

#### Board of Directors:

- 5/11 Executive members
- 4/11 Non-executive members
- 2/11 Independent non-executive members

#### HALCOR's Board of Directors



*More information on the members of the Board of Directors of HALCOR is included in the 2011 Annual Report, section 9, which also includes the short curriculum vitae of members.*

The Company has a procedure in place where the Quality, Environment, Health & Safety and Human Resources Managers can update the Board directly on issues related to their departments.

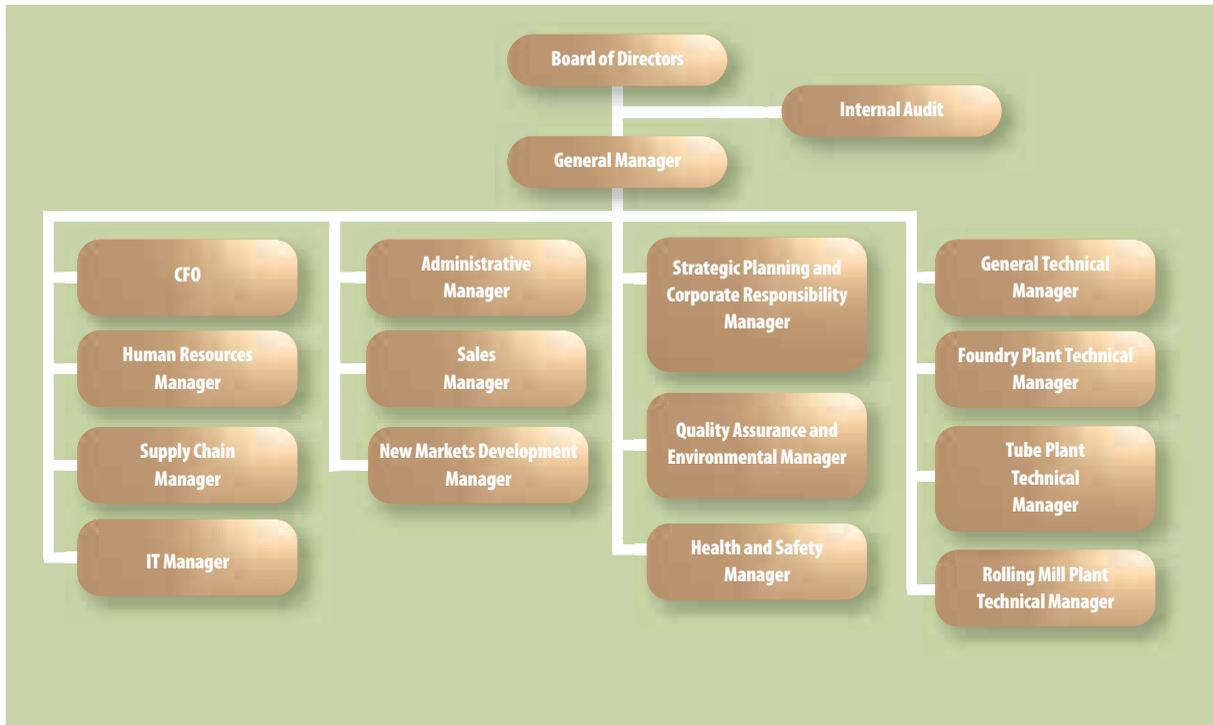
#### 2.2.1 Organizational Structure

The production, financial and administrative operations of HALCOR report to General Management. The organizational structure of HALCOR is presented in the following organizational chart.



## 2. Economic Development and Corporate Governance

### Organizational Chart



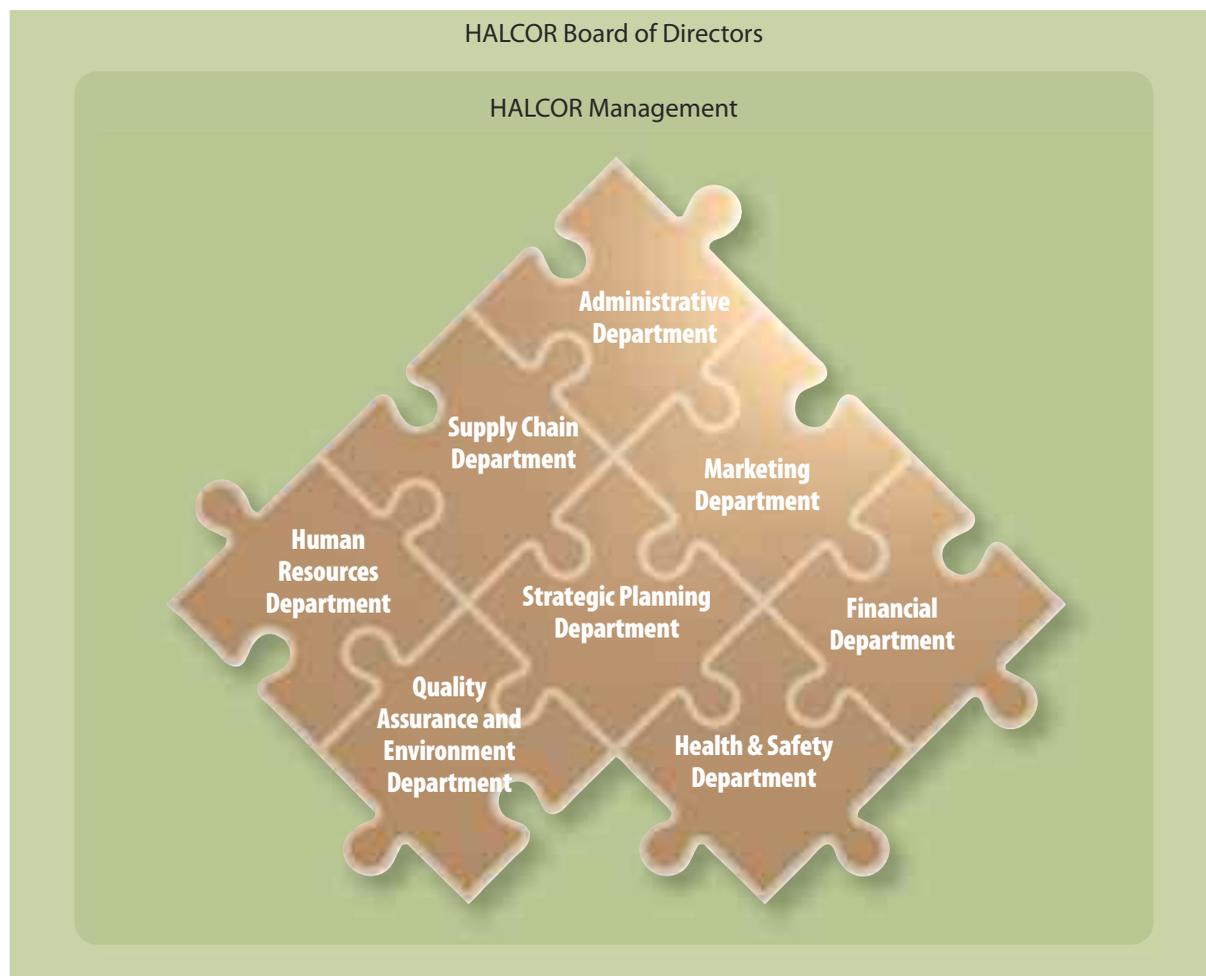
#### 2.2.2 Corporate Responsibility Management

Corporate Responsibility of HALCOR embodies the philosophy of the company, which is taken into consideration during daily decision making. For this reason, HALCOR has established since 2009 a Corporate Responsibility Team, comprising representatives from various departments of the Company and is coordinated by the Strategic Planning Department and reports to the General Manager.

The HALCOR Corporate Responsibility Team convenes every month to examine the issues that arise and plan its actions.



## HALCOR Corporate Responsibility Team



Corporate Responsibility in HALCOR is not restricted to certain sectors of its operation but covers the entire range of its corporate activities. HALCOR implements a consolidated Management System, through which it is possible to achieve the integrated management of issues regarding responsible operations and decision making towards Sustainable Development. The integrated Management System, implemented at HALCOR includes the following three certified systems:

- The Quality Management System which is certified per ISO 9001:2008 which is under the Quality Assurance and Environmental Department.
- The Quality Management System which is certified per ISO 14001:2004 which is under the Quality Assurance and Environmental Department.
- The Health and Safety System, which is under the Health and Safety Department.

Thanks to this structure, the Company's Administration ensures its best possible information, control and responsible management of all issues related to the financial, environmental and social dimension of its operations.

### 2.2.3 Avoiding conflicts of interest

In order to avoid any conflict of interest, HALCOR implements a series of procedures which ensure the prevention of conflicts between the interests of Board members, executives as well as other employees and the Company. Furthermore, aiming at ensuring transparency, HALCOR has incorporated conditions and commitments in the Company's Articles of Association and in the Internal Operation Regulation, which are



## 2. Economic Development and Corporate Governance

followed and implemented by all members of the Board of Directors or the Directors involved in the management of the Company, in order to avoid conflicts of interest.

Furthermore, in order to ensure the principle of independent decision-making by HALCOR executives in the various fields of its activities, the company has a policy in place whereby recruitment of persons whose spouse or second degree relative by blood or marriage, is already employed by the Company, is prohibited.

### 2.3 Risk Management

The Company has mechanisms in place to monitor, assess and manage risks, based on fundamental information regarding its business and the current economic environment. HALCOR's risk management policies are based on the principle of Prevention and are implemented in order to recognise and analyze all possible risk that the Company faces and to set the limits for risk taking and its effective control. Risk management policies and the relevant systems are periodically monitored, in order to take into consideration all changes observed in market conditions and the Company's operations. HALCOR's Board of Directors monitors and controls all issues relating to the Company's Sustainable Development and the risk management procedure.

Risk Category	Relevant Information
<b>Industrial Risk</b>	<p>In order to fully accomplish the goals set for industrial risks, HALCOR applies very strict operational and safety criteria, in full compliance with Greek legislation and the European SEVESO II Directive. In addition:</p> <ul style="list-style-type: none"> <li>• the Company has created a detailed emergency response plan, covering all possible situations,</li> <li>• is in close cooperation with the Fire Department for the immediate and effective response in the event of any potential incident.</li> </ul>
<b>Environmental &amp; Occupational Risk</b>	<p>In addressing its potential environmental impact and occupational health and safety issues, HALCOR:</p> <ul style="list-style-type: none"> <li>• implements policies and systems and continuously invests in technology, research and development, aiming at Sustainable Development;</li> <li>• has completed all the risk assessment studies required by law;</li> <li>• takes preventive measures and initiatives, by monitoring the relevant performance indicators (Quality, Environment, Health and Safety, Human Resources) it has set.</li> </ul>
<b>Financial risk and uncertainties</b>	<p>The main categories of financial risk related to HALCOR's operation are:</p> <ul style="list-style-type: none"> <li>• Market risk</li> <li>• Liquidity risk</li> <li>• Exchange rate risk</li> <li>• Interest rate risk</li> <li>• Risk of Raw Metal Price Fluctuations</li> </ul>

*More information on HALCOR's Corporate Governance, the detailed financial results and management of financial risk can be found in the Annual Report of the Board of Directors, included the 2011 Annual Report of HALCOR, in section D (Main Risks and Uncertainties), which is available at the Company's website, [www.halcor.gr](http://www.halcor.gr) (Investor Relations / Financial Statements).*

### 2.3.1 Main Impact, Risks and Opportunities

More specifically, risks and opportunities can arise from fluctuations of metal prices at the London Metal Exchange (LME) and fluctuations in foreign currency, as well as from the impact of the Company's business operation on the Environment and Society.

HALCOR hires employees and uses raw materials in order to provide its products and services to its customers. HALCOR's operation has significant a significant impact and benefits on society, the economy and on local communities.

At the same time, like with every business operation, there are specific risks and opportunities. HALCOR has established methods and practices to prevent the risks associated with its operations, and to exploit opportunities, ensuring an environmentally friendly industrial activity, where applicable.

### 2.3.2 Impact Management and Issue and Action Scaling

As an active member of the society, HALCOR, communicates regularly and cooperates with the groups of stakeholders who are affected or influenced by its operation. HALCOR, takes into account the most significant impact that its operation has onto its stakeholders based on the systematic risk management the company implements and takes all necessary measures to deal with this impact.

The most significant of HALCOR operations onto stakeholders are identified in relation to the main groups with which it interacts. The key identified groups are Company employees, shareholders, customers and suppliers, which are the stakeholder groups mostly affected by HALCOR's activities. In this context, HALCOR seeks further engagement with these stakeholders which can assist in establishing the right priorities for continuous improvement.

Aiming at the constant improvement across the entire range of impacts arising from its operation, HALCOR has incorporated the following priorities in its corporate strategy:

- continuous reduction of the Company's carbon footprint through implementation of its Environmental Management System;
- further improvement of the Occupational Health and Safety Management System;
- further product development in order to meet the needs of its customers and of the market in which it operates;
- cooperation and harmonious interaction with the local community;
- economic development and production of value for the Company's shareholders and the public at large.

### Targets for 2012

	Targets 2012	Responsible for implementation
	Continue the procedure for inclusion in the FTSE4GOOD index.	Strategic Planning Department
	Training of executive staff on transparency and corporate governance issues.	Strategic Planning Department
	Training of Corporate Responsibility Team members on corporate governance issues.	Strategic Planning Department



## 2. Economic Development and Corporate Governance

### Economic Growth Our overall performance

<b>Financials</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Net Sales (in thousand euro)	343,547	517,613	585,705
Other Revenues (in thousand euro)	5,112	5,267	5,177
Revenues from financial investments (in thousand euro)	1,185	713	42
Total Revenues (in thousand euro)	349,844	523,593	590,924
Operating Costs (in thousand euro)	(327,930)	(499,040)*	(564,182)
Employee salaries and benefits (in thousand euro)	(28,186)	(26,556)	(22,147)
Payments to capital providers (in thousand euro)	(6,979)	(9,691)	(15,875)
Net losses before tax (in thousand euro)	(13,251)	(11,694)	(11,281)
Net losses after tax (in thousand euro)	(11,188)	(7,771)	(13,728)
Net earnings per share (in euro)	(0.1105)	(0.0767)	(0.1355)
Total payments to government agencies (in thousand euro (taxes paid))	-	-	-
Investments (in thousand euro)	10,003	2,551	2,537
Total Capitalization (in thousand euro)	137,740	70,895	50,639
Equity (in thousand euro)	162,527	143,605	134,497
Total Liabilities (in thousand euro)	256,434	306,373	288,110
Total Assets (in thousand euro)	418,961	449,979	422,607

\* In the table above the Operating Cost amount for 2010 has been revised due to a printing error.

### Annual Contribution to Social Development - Social Product

<b>(in thousand euro)</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Payments to suppliers (excl. materials and inter-company transactions)	45,248	46,931	35,386
Employee salaries and benefits (including insurance contributions)	28,186	26,556	22,147
Payments to capital providers	(6,979)	(9,691)	15,875
Investments (in thousand euro)	10,003	2,551	2,537
<b>Total</b>	<b>76,458</b>	<b>66,347</b>	<b>75,945</b>

Note: Numbers in parenthesis in the table above numbers in the parenthesis have a minus sign.



### 3. Marketplace

**Having set customers as our priority, all cooperations are characterized by consistency, respect and the quality of products and services.**

*"The significant drop in complaints by 20% in relation to the increased volume of sales and increased use of scrap in production were the result product quality assurance procedures implemented in 2011. Another factor for HALCOR's improvement as regards quality in 2011 is the increase of the index describing the degree of customer satisfaction with respect to the quality of products. At the same time, the Company expanded the quality of markings on its products addressed to the European and American markets, which a significant condition for the promotion of our products in these markets".*

*Quality Assurance Manager*

*"In 2011 we incorporated corporate responsibility criteria in our purchasing procedures, while at the same time we started implementing procedures to in turn promote Corporate Responsibility throughout our supply chain.*

*We all know that the benefits from copper recycling are of a financial and an environmental nature. HALCOR is the largest recycler of copper, zinc and their alloys in Greece. Specifically, the scrap we recycled and used as raw material amounted to 46% of the total quantity of metals purchased, surpassing our initial target".*

*Supply Chain Manager*

*"The latest scientific developments show that copper has very strong anti-bacterial properties. This makes copper and copper alloy products suitable and ideal for use in health, heating, water supply, ventilation, air conditioning and food processing applications. It is a well-known fact that the development of new technologies leads to great benefits for man, mainly due to the anti-bacterial properties of copper. For this reason, HALCOR actively promotes research in this sector by supporting and participating in the programmes of relevant research institutions".*

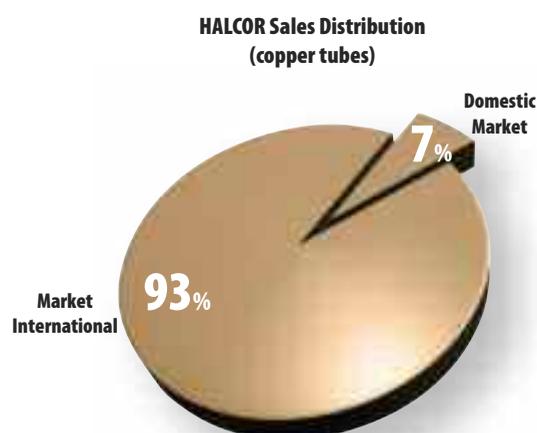
*Marketing Department Manager*

## 2011 Target performance

What we said	Performance	What we did
Integration of Corporate Responsibility issues in the annual customer satisfaction survey.		We included questions regarding Corporate Responsibility in our Customer Satisfaction Survey questionnaire.
Increase the percentage of scrap in supplied metals to 40%.		The percentage of scrap in supplied metals amounted to 46%.
Integrate Corporate Responsibility criteria in the evaluation procedure of its suppliers.		We incorporated Corporate Responsibility criteria in our supplier evaluation procedure.
Further improvement of customer satisfaction in all areas by 5%.		There was improvement of customer equal or greater than 5% in certain customer categories.
New copper and copper alloys products.		We promoted the new product TALOS DUAL in the domestic, European and American markets. We also expanded the range of HALCOR products.

### 3.1 Market shares

HALCOR, with over seventy years of experience, is one of the world's leading companies in the copper and copper alloy processing sector and the largest copper producing company in Southeastern Europe. In 2011, 93% of the sales volume to HALCOR tubes was realised in foreign markets, which was a significant contribution to the country's trade balance. HALCOR holds a leader position in the Greek market.

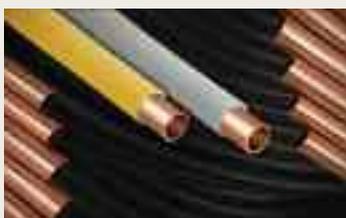
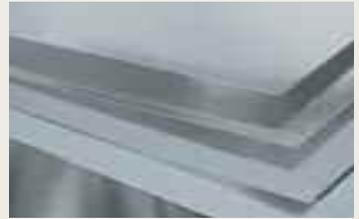


### 3.2 Products

By investing in research and technology, HALCOR offers a wide range of products that save energy and respect the environment. The company breaks new ground and demonstrates its leading position in metal processing by developing advanced technology products for various construction and industrial applications.



### 3. Marketplace



The HALCOR products are distinguished for their excellent quality, high reliability, special innovative properties and the added value they provide to end customers. The extended range of HALCOR products includes mainly copper, brass products and a range of related alloy products. The products manufactured and traded by HALCOR and its main subsidiaries are:

<b>Company</b>	<b>HALCOR Group products</b>
<b>HALCOR SA</b>	<p><b>Produces</b> Copper Tubes (TALOS &amp; CUSMART) 8mm copper wire</p> <p><b>Trades</b> Copper and Titanium-Zinc gutters (DOMA)</p>
<b>SOFIA MED SA</b>	<p><b>Produces</b> Copper products: sheets and strips (DOMA), discs and bars Brass Products: sheets and strips (DOMA), discs Titanium-Zinc products: sheets and strips Special alloy products: cups, coins</p> <p><b>Trades</b> Copper Tubes (TALOS &amp; CUSMART)</p>
<b>HELLENIC CABLES SA - CABLEL</b>	<p><b>Produces</b> Power and Telecommunication Cables Enamelled wires Plastic &amp; Rubber Compounds Copper &amp; Aluminium Conductors</p>
<b>FITCO SA</b>	<p><b>Produces</b> Brass Products: tubes, bars and rods</p> <p><b>Trades</b> Copper products: sheets and strips (DOMA), discs and bars Brass Products: sheets and strips (DOMA), discs Titanium-Zinc products: sheets and strips</p>

In addition, HALCOR is one of the few companies in Europe that has the ability to produce inner grooved copper tubes (ACR) with a minimum wall thickness of 0.25mm. These tubes are a product of advanced technology and efficiency and are widely used in the industry of air conditioning devices.

*Additional analytical data and technical specifications regarding every product category, can be found on the Company's website [www.halcor.gr](http://www.halcor.gr), (Products).*

## 3. Marketplace

### 3.3 Product Quality

For HALCOR, the provision of top quality products is a strategic choice, a competitive advantage and a corporate responsibility issue. For this reason the company implements a Quality Management System that is certified according to the international standard ISO 9001:2008.

HALCOR ensures the high quality of its products through strict quality control performed on all product manufacturing phases. In this context, the Company has developed internal procedures that ensure monitoring and control of raw materials regarding quality and the safety of products. The quality control systems and procedures applied, are monitored and verified through frequent audits by clients and by Greek and international Certification Auditors.

#### Product monitoring and control

- HALCOR carries out continuous checks that aim to ensure compliance with the specifications of orders and the requirements of customers.
- All incoming materials are checked as to quality and quantity (the control aims to ensure that the material complies with the order specifications and the corresponding customer requirements).
- There are various checks during production based on specific procedures with detailed instructions to ensure compliance of products with the performance criteria, as these are specified by international standards and the requirements of customers.
- All related checks are recorded in appropriate measurement and test forms and records are kept in order to provide reference to the quality/reliability checks of products even after a long period has elapsed.

#### Product Safety during Application

- HALCOR issues a relevant Material Safety Data Sheet that informs the recipients of its products that contact with these products is safe.
- In addition, fact sheets are also issued, which include all necessary information on the optimal operational conditions of its products.
- With reference to water and natural gas pipes, special manuals are distributed, which include an operational guarantee provided by HALCOR.
- Furthermore, HALCOR regularly checks the interaction of its products with the Health and Safety of users, since in many occasions the Company's products are used in critical applications such as water pipes. In any case, copper's natural properties contribute to the health protection of end users, since copper possesses significant antimicrobial properties.

### Quality markings on HALCOR products

The quality of HALCOR products and their suitability regarding the applications and the markets they are addressed to, is certified by the relevant approved Certification Bodies.



### 3.4 Research and Development of New Technologies

Innovation of HALCOR products is achieved through research and development of new technologies. The Company makes significant investments in this direction every year. Aimed at research and development of new technologies in the copper sector, improvement of its products and covering contemporary requirements, HALCOR established the HALCOR Research and Development SA, which among other products, has developed the TALOS DUAL range of products. HALCOR participates in and cooperates with the Hellenic Research Centre for Metals (ELKEME); the centre's significant input regarding upgrading of the quality and cooperation for the development of innovative products and production procedures, has contributed to the competitiveness of our products.

#### Copper Bimetallic Tubes

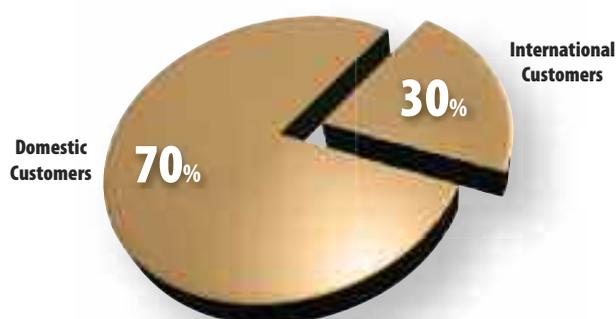
HALCOR innovates and widens its product range for air-conditioning and cooling applications, by introducing a new product of pioneering technology, the bimetallic copper tube TALOS DUAL. This innovation utilises all the advantages of copper, achieving at the same time optimum technical solutions at competitive prices. TALOS DUAL tube is made of a copper tube with an external seamless aluminium layer that acts as a homogeneous tube with unique properties. The metallurgic bonding of the two materials combines the strength and reliability of copper with the low weight and flexibility of aluminium.



### 3.5 Customer Relations

Cultivating relations of trust with its customers through long, successful relationships is a basic concern of HALCOR. 70% of HALCOR customers are from Greece and 30% are customers from abroad.

HALCOR Customer Base Distribution  
(Product: Tubes)



Total HALCOR Customer Satisfaction



### 3. Marketplace

**Degree of Satisfaction Domestic Customers**



**Degree of Satisfaction International Customers**



#### Customer Satisfaction

HALCOR aims to the best possible customer satisfaction. For this reason, the company initiates a dialogue with customers and takes into account their comments and suggestions. HALCOR sends questionnaires to its customers and then evaluates the findings and implements the appropriate corrective actions when necessary in order to further improve its products and services. Through the Quality Management System it implements, HALCOR records and analyses and evaluates the views and complaints of customers.

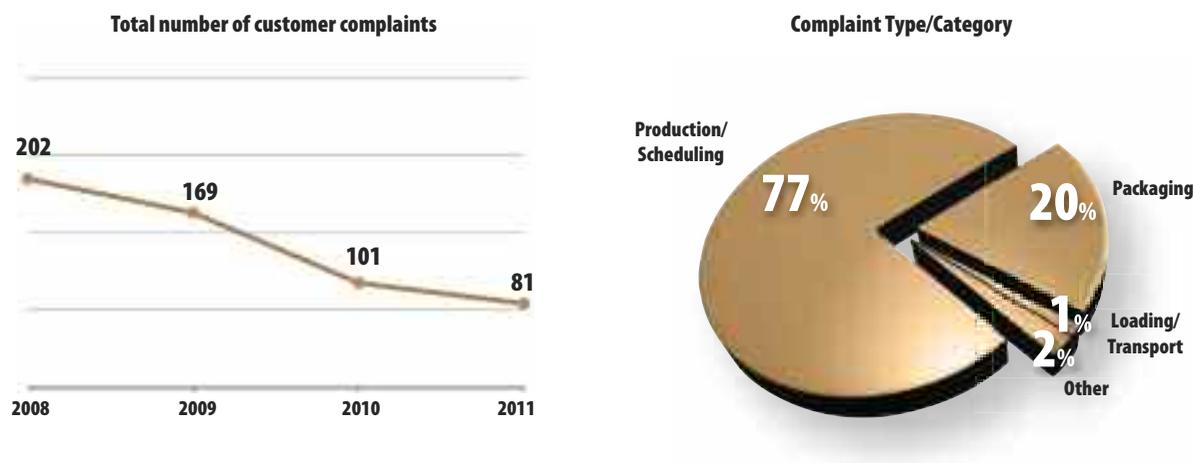
In 2011, the overall HALCOR customer satisfaction showed significant improvement both with respect to domestic and international customers.

In 2011, HALCOR included questions related to Corporate Responsibility in its Customer Satisfaction questionnaire. In this manner, HALCOR aims to expand the communication with its customers to issues associated with Corporate Responsibility. The results of the Customer Satisfaction survey are taken into consideration and utilised under the scope of Strategic Planning on Corporate Responsibility issues.

#### 3.6 Complaint Management

Any complaints from the Company's customers are regarded as an opportunity to improve the services and products offered. The Quality Assurance Departments of the Company's manufacturing Plants, record the complaints and make every possible effort to improve upon the reasons that led to them.

The total number of complaints HALCOR received in 2011, showed a 20% drop in relation to 2010, which reflects the company efforts towards improvement and providing better service to customers. This drop,



in relation to the increased volume of sales and the increased use of scrap during 2011 resulted mainly from the improvement of product quality control procedures.

Out of the 81 complaints the company received in 2011, all were answered by the respective Company departments.

### 3.7 Responsible Communication

HALCOR ensures that all its promotional actions and advertising regarding its products are in full compliance with national legislation. Furthermore, the Company does not distribute products that are the subject of public consultation or debate.

HALCOR is voluntarily committed to provide complete and clear information adopting the Hellenic Code of Advertising and Communication:

- This Code was written by the Hellenic Association of Advertising and Communication Agencies as well as all radio and TV stations and governs all advertisement for every type of products and services and types of commercial and social communication.
- Furthermore, the Code of Advertising and Communication specifies the rules of professional ethics and moral behaviour that must be observed towards citizens/customers, by every party involved in the advertising sector, i.e. advertisers, advertising agencies, advertising media, as well as the assignors and assignees of all the above mentioned forms of communication.

### 3.8 Responsible Purchasing

The HALCOR suppliers are valuable associates, as the quality of materials they supply is directly related to its products. Management of suppliers is a crucial development factor for HALCOR and for this reason the Company implements specific procedures to manage its suppliers. HALCOR cooperates with more

### 3. Marketplace

than 1,400 suppliers and contractors. Wherever possible, HALCOR tries to cooperate with suppliers and contractors for the local community.

#### Supplier evaluation and selection

HALCOR follows a specific purchasing process, aimed at ensuring compliance to all related specifications and the required quality standards of the supplies and of the final products. Furthermore, HALCOR applies specification control policies for the materials it assigns and receives, and in the event these are not complied with it communicates the results to the suppliers in the form of a complaint, expecting compliance. In certain cases the company participates in trial production at the facilities of suppliers and evaluates the results.

The principles set as a basis for the Company's relationship with its suppliers are:

- Equal treatment
- Objective Evaluation
- Absolute Transparency
- Confidentiality
- Integrity
- Honesty
- Sincerity
- Respect

The evaluation criteria based on which selection of suppliers is carried out, include environmental criteria and corporate responsibility criteria, among others.

#### Suppliers and environmental management

HALCOR promotes Corporate Responsibility throughout its supply chain. Indicatively, with respect to certain categories of materials (such as solvents used to degrease tubes), the Company policy is to exclusively select suppliers who have an Environmental Management System certified per standard ISO 14001:2004. In this manner, the Company ensures that its supply chain operates in responsible manner, with respect to the environment. Furthermore, the purchasing procedure for certain materials requires compliance with the REACH Regulation and dispatch of the corresponding Material Safety Data Sheet (MSDS).

#### Health and Safety Provisions

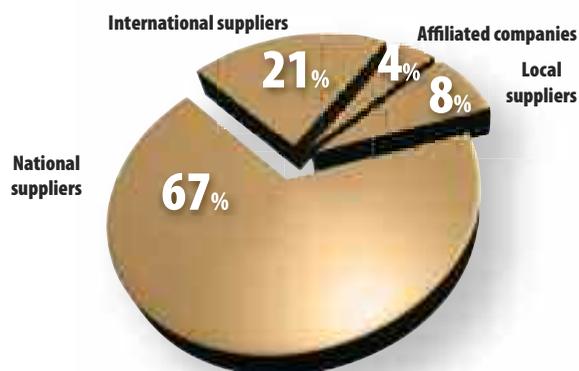
Aiming at ensuring Occupational Health and Safety, HALCOR acknowledges the potential risks to health and safety by the goods, equipment and services purchased and/or used and communicates its requirements and relevant applied procedures to its suppliers and trade partners.

Recognizing the incalculable value of human life, HALCOR ensures that the Safety rules that apply its employees, apply also to contractors who undertake work at its facilities. A necessary condition for starting cooperation with contractors is that they must fill and sign the special form whereby they commit to the following:

- That their human resources are insured by the relevant insurance organisations (HALCOR carries out a detailed inspection to ensure that all contractor employees working at HALCOR facilities are insured).
- Take all necessary safety measures which correspond to the specific project, as stipulated by legislation.
- Comply with all provided by HALCOR regulations regarding Occupational Health and Safety.

Moreover, with respect to supplies associated with personnel food supplies (meals etc.), potential suppliers are required to implement a Food Safety Management System that is certified according to the ISO 22000 / HACCP (Hazard Analysis and Critical Control Points) requirements. In addition, an inspection is carried out at the facilities of suppliers under this category and the results are evaluated. In the event that inspection finds insufficient compliance with the regulations relating to food safety management, the potential supplier is eliminated. In this manner, the Company ensures that the health of its employees as well as the health of visitors and contractors is protected.

**Distribution of Suppliers by category / origin**



### Supporting local suppliers

HALCOR wishes to return value to the areas where it operates, by selecting local suppliers where possible (as for example service contractors, packaging material suppliers, etc.). In this manner it helps strengthen the economy of local communities and their development. During 2011, 5.5% of purchasing was realised from local suppliers. It should be noted that the majority of HALCOR supplies is raw materials (metals) from abroad.

### Purchasing Recyclables (scrap)

HALCOR, combining financial efficiency with environmental management (reduction of generated waste) and the preservation of natural resources is focused on progressively using greater quantities of recyclables (scrap) as raw materials. HALCOR is the largest recycler of copper, zinc and their alloys, in Greece.

#### Terms and concept

The term scrap is used for describing recyclable materials, which are left over from all kinds of production processes and product consumption, such as vehicle components, building equipment and other materials.

Although scrap is frequently mistaken as waste, in reality it is a very useful secondary raw material of significant monetary value. Globally, the scrap industry processes more than 145,000,000 tons of recyclables every year for the production of raw material for industrial use. In 2011, HALCOR purchased a significantly larger quantity of scrap than in 2010, a quantity representing 46% of all metal purchases.

**Scrap proportion to total metal purchases**



### 3. Marketplace

#### Targets for 2012

Target 2012	Responsible for implementation
 Further reduction of customer complaints by at least 5%.	Quality Assurance Department
 Improve the customer complaints Monitoring and Management System.	Quality Assurance Department
 Increase purchased scrap to at least 48% of total metal purchases	Supply Chain Department
 Maintain the high rate of domestic customer satisfaction and increase the international customer satisfaction rate by at least 5%.	Quality Assurance Department Sales Department
 Expand the range of existing products.	HALCOR RESEARCH AND DEVELOPMENT S.A.
 Further certification of new and existing products.	Quality Assurance Department
 Maintain and expand customer list in new markets.	Sales Department New Markets Development Department

#### Marketplace: Our overall performance

Customer Distribution per product category (2011)		
	Number of Customers	Percentage
Domestic Customers	774	70%
International Customers	336	30%
Total	1,110	100%

Customer Satisfaction	2009		2010		2011	
	Customers Domestic	Customers International	Customers Domestic	Customers International	Customers Domestic	Customers International
Total Customer Satisfaction	77%	66%	77%	67%	82%	69%
Customer Service Satisfaction	82%	67%	84%	69%	85%	67%
Product Satisfaction	71%	64%	69%	65%	77%	71%
Trust	88%	68%	86%	67%	90%	68%

Customer complaints	2008	2009	2010	2011
Number of Complaints	202	169	101	81

## Purchased materials

Category	Type of material	Measurement unit	2010	2011
Raw materials*	Metals	kg	n/a	n/a
	Metals	pieces	n/a	n/a
	Plastics	kg	n/a	n/a
	Plastics	pieces	n/a	n/a
	Plastics	m	n/a	n/a
	Plastics	m <sup>2</sup>	n/a	n/a
Production related materials	Consumables	kg	1,153,031.44	880,503.08
	Consumables	Litres	118,403.70	174,546.30
	Consumables	m <sup>3</sup>	4,942,501.20	4,670,568.07
	Consumables	pieces	1,735.00	72.00
	Fuel	Litres	260,204.00	250,069.00
	Fuel	m <sup>3</sup>	10.00	-
	Fuel	NM <sup>3</sup>	7,031,422.00	6,817,937.00
	Fuel	kg	105,555.00	27.00
Supporting materials and spare parts	Spare parts	kg	139,620.61	102,256.00
	Spare parts	m	10,063.54	17,051.68
	Spare parts	m <sup>2</sup>	193.40	4.00
	Spare parts	set	232.00	247.00
	Spare parts	carton boxes	10.00	20.00
	Spare parts	pair	2	4.00
	Spare parts	pieces	93,827.00	90,582.00
Packaging materials	Metal	pieces	15,900.00	5,400.00
	Metal	m	-	58,550.00
	Metal	kg	26,943.49	29,150.90
	Wood	pieces	68,804.00	220,828.01
	Wood	m <sup>3</sup>	1,525.28	-
	Paper	kg	15,951.00	22,785.00
	Paper	set	-	-
	Paper	pieces	1,210,917.00	1,507,999.00
	Belts	pieces	262,317.00	261,697.00
	Plastic	kg	193,782.15	207,334.15
	Plastic	m	737,100.00	59,438.00
	Plastic	Km	-	618.00
	Plastic	pieces	-	1,752.00
	Plastic	m <sup>2</sup>	103,348.00	-
Plastic plugs	pieces	6,749,524.00	7,314,443.00	

\* The Company does not publish this information.

## Distribution of Purchased Raw Materials and Scrap

	2009	2010	2011
Metals	75%	67%	54%
Scrap	25%	33%	46%

## Number of Suppliers per category / origin

Supplier Category	2009	2010	2011
Local suppliers	78	161	118
National suppliers	773	1,116	990
International suppliers	249	404	313
Affiliated companies	8	34	52
Total	1,108	1,715	1,473
Suppliers from the local community	7%	9.4%	8%

## 4. Human Resources



### Human Resources are regarded as our main competitive advantage

*"Maintaining a work environment with fair reward, respect for human rights and diversity and providing equal opportunities to all employees is key a priority for HALCOR.*

*We systematically invest on our people, laying emphasis to their on-going training and progress.*

*We would not have been able to attain our corporate goals without the support and commitment of our people. For this reason, HALCOR management would like to thank its employees for their devotion and enthusiasm throughout all these years".*

*Human Resources Manager*

### 2011 Target performance

What we said	Performance	What we did
Completion and operation of the new HALCOR corporate website.		The new HALCOR corporate website, <a href="http://www.halcor.gr">http://www.halcor.gr</a> , is completed and includes a special Corporate Governance section.
Pilot implementation of the Personnel Evaluation System (Evaluation 360°).		Not implemented due to the current adverse economic conjuncture; it was decided to postpone for later.

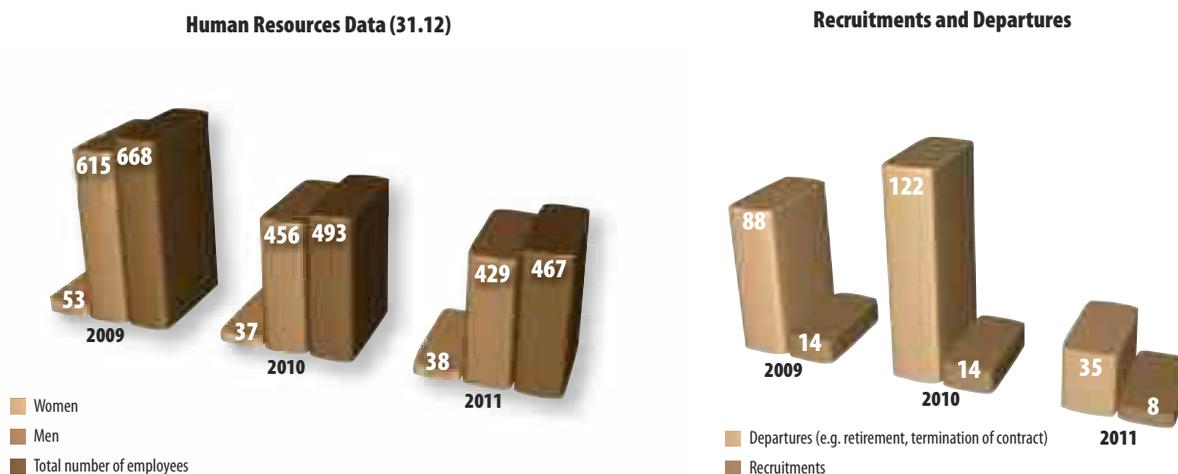
## Our Commitment

For HALCOR, formulation of a uniform responsible conduct culture among its people is of particular importance. To this end, the company has established the code of values and conduct for employees and its application is mandatory for all employees across all its operations. The general principles of the Code of Employee Values and Conduct are:

- Team spirit, respect towards colleagues
- Support / cooperate with the local community
- Protect the environment and culture heritage of the local community
- Respect the environment
- Responsibility, honesty and respect towards the customer
- Protect human rights
- Respect for human values: no form of discrimination
- Confidentiality of personal data
- Appropriate behaviour with customers and associates
- Protect the company's interests, reputation and property

## 4.1 Human Resources Data

On 31/12/2011, HALCOR's total number of employees was 467. There is a 5.3% drop compared to the previous year.

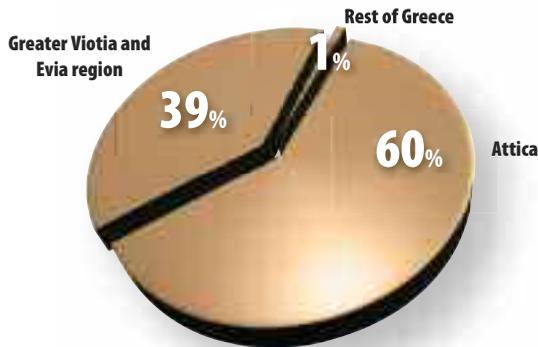


Communication and cooperation with the local communities is very important for HALCOR. In 2011, 39% of HALCOR human resources were from local communities. And 15% of all Company executive staff (Managers and senior staff) are from the local region (greater Viotia and Evia region).

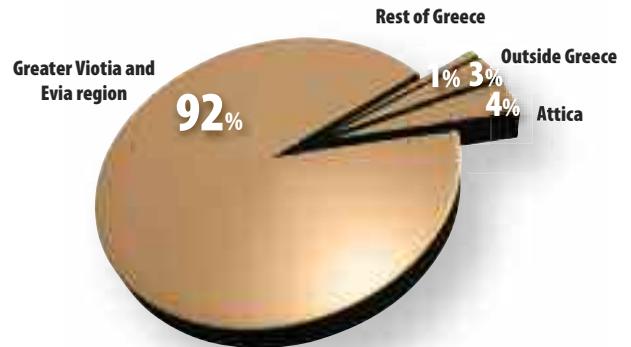
Apart from the obvious economic benefits for the local communities which stem from the employment of locals, there are also environmental benefits, especially the reduced impact on the environment due to the reduced transportation requirements and consequently the reduction of greenhouse gases.

## 4. Human Resources

**Distribution of Human Resources per geographical area of origin**



**Distribution of Human Resources per geographical area of employment**



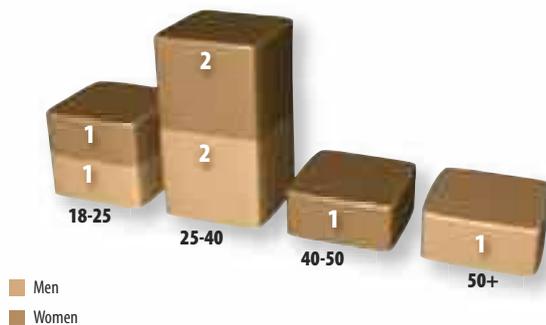
As can be seen in the diagram, the majority of Company employees are in the 35-55 age group. HALCOR never employed persons under 18 years of age. During the hiring procedure, the Company checks the age of employees in order to ensure that they are above 18 years of age. In 2011, as in previous years, there were no incidents of child or compulsory labour, nor is there the possibility of such incidents to occur, as a result of the Company's control mechanisms. The Company is against child and compulsory labour and is in full compliance with existing national and European legislation on the protection of human rights.

**Age distribution of human resources**



Total recruitments and departures for 2011 per age group, gender and geographical region are presented below. In 2011, 3 of 8 new employees were from the local community (greater Viotia and Evia region).

**Total recruitments by gender and age**

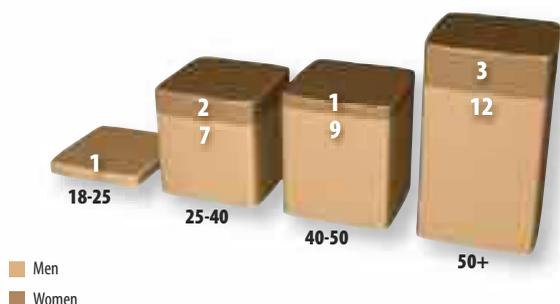


**Total recruitments by region and age**

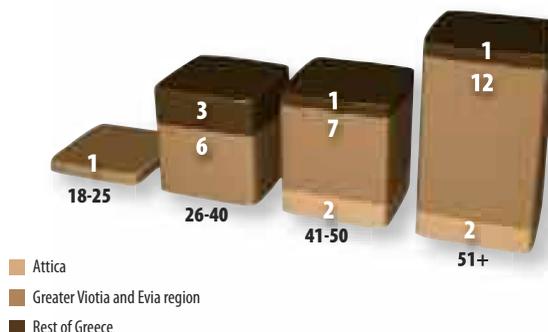


In 2011, there were 35 departures from the Company, due to contract termination, resignation, discharge or retirement.

**Total departures by gender and age**



**Total departures by region and age**



## 4.2 Responsible employment practices

HALCOR acknowledges the contribution of its employees to its business success. The Company ensure a work environment of fair reward, equal opportunity and respect of human rights, as internationally acknowledged.

### 4.2.1 Diversity and Equal Opportunities

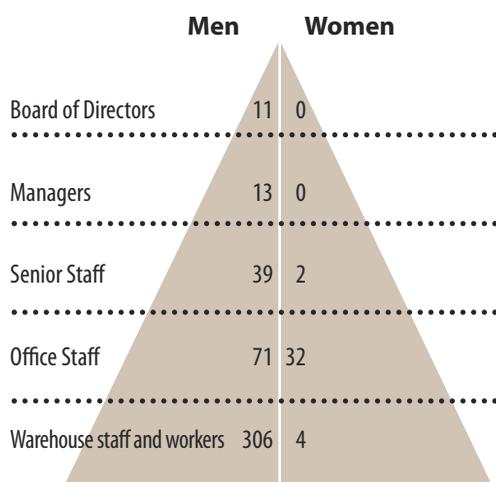
Providing equal opportunities to all employees in a non-negotiable principle of HALCOR. All procedures, actions and policies related to human resources are based on the equal opportunity principle, excluding any kind of discrimination based on gender, nationality, physical

**Human Resources Departures per type**



**8,1%**  
of HALCOR Human Resources  
are women

**Employee gender proportion per category / hierarchical level**



ability, age, sexual orientation, religion and any other such criterion. The only employee hiring and evaluation criterion is their personal skills.

HALCOR encourages the participation of women in its workforce. However, the participation of women as a percentage of the total workforce is reduced, due to the nature of its industrial operations. An additional deterrent for women is the distance between the Company's production facilities and major urban centres.

## 4. Human Resources

### 4.2.2 Discrimination and Human Rights

HALCOR opposes any discrimination, unequal treatment and violation of human rights. In this context, there is no salary discrimination or gender discrimination for the same job position, across all Company operations. Additionally, HALCOR has included a special provision in its Code of Employee Values and Conduct, prohibiting all discrimination (based on gender, colour, religion, national origin, citizenship, age, disability, marital status, sexual orientation, financial position or any other feature protected by the globally recognised Human Rights). In 2011, HALCOR employed 31 persons of different nationalities.

*There has never been a discrimination incident or related complaint at HALCOR.*

### 4.3 Additional Benefits

Beyond the statutory benefits HALCOR offers a range of additional benefits as reward to its employees.

Indicative list of additional benefits:

- private insurance coverage for life and health risks for all employees
- meals for all employees
- loans and financial benefits, in accordance with corporate policy
- company car and mobile phone, in accordance with Company policy
- free transportation of employees with corporate vehicles
- employee housing in accordance with Company policy

In addition to the above, HALCOR has a group insurance policy (healthcare and compensation), maintains a blood bank and provides preventive medical check-ups to all employees. And also financial assistance in cases of urgent need, according to Company policy.

#### **Support to employees and their families:**

- Christmas party with gift (voucher) for employee's children (up to 12 years old)
- free accommodation at a summer camp, for all employee's children (up to 14 years old), for a period of three weeks during the summer months
- financial assistance in cases of urgent need (mainly health reasons) beyond the amount covered by insurance

### Collective Bargaining Agreements

All HALCOR employees (100%) are covered by collective bargaining agreements. All HALCOR employees (100%) are under a full-time employment status.

### 4.4 Employee Assessment

Employee evaluation helps promote equal opportunities in the Company, enhances meritocracy and improves the performance of employees. HALCOR implements an employee professional evaluation system where the criterion is their performance on the duties and goals assigned to each, through procedures based on collaboration and participation. The HALCOR evaluation system aims to:

- reward good performance
- encourage performance improvement through training and development programmes
- harness the skills and abilities of employee by connecting individual and business goals
- foster personnel progress through career planning and promoting competition within the organization
- improve communication and cooperation between the evaluated employee and his/her assessor.

In 2011 there were 41 company employee evaluations (35 men and 6 women). The restricted number of evaluations is due to the current adverse economic situation and the fact that there was priority given to more crucial human resources issues. Since the main goal of evaluations is to provide feedback to employees so they can improve their professional performance, all employees have access to the results of their personal evaluation.

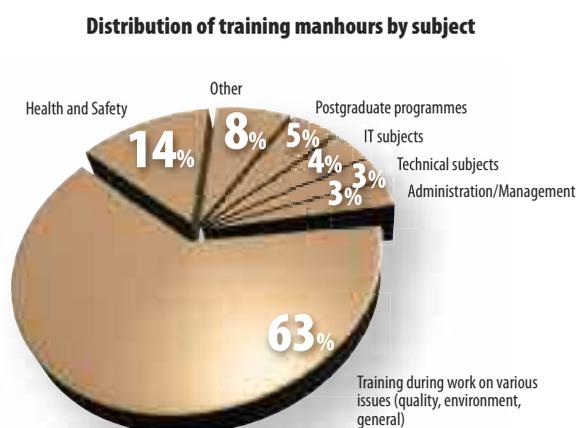
The Company goal for 2011 was to implement a pilot 360° Evaluation system for its staff. According to this system, the staff under evaluation, receive feedback on all sectors (Basic principles, Leadership, Behaviour, Communication, Efficiency, Innovation), from the entire range of relationships he/she has developed within the Company, i.e. supervisors, subordinates and colleagues. Due to the existing adverse economical situation in the country, the Company decided to postpone implementation of this evaluation system.

### 4.5 Training and Development

Continuous training, education and information constitutes a significant parameter for high professional performance. HALCOR offers its employees significant opportunities for training, further education and lifelong learning. Several seminars and training programs are organised and implemented on an annual basis, while training needs are identified and defined in accordance with:

- the employee assessment, where specific gaps in know-how are identified and improvement plans are set
- departmental targets to attain corporate objectives which therefore promote the acquisition of new skills and capabilities

Apart from the seminars and training sessions organised internally, the Company also provides to employees the opportunity to attend external training programmes. A total of 114 internal and external training sessions were implemented in 2011, with 988 attendees. Total training man-hours were 4,642 in 2011.



## 4. Human Resources

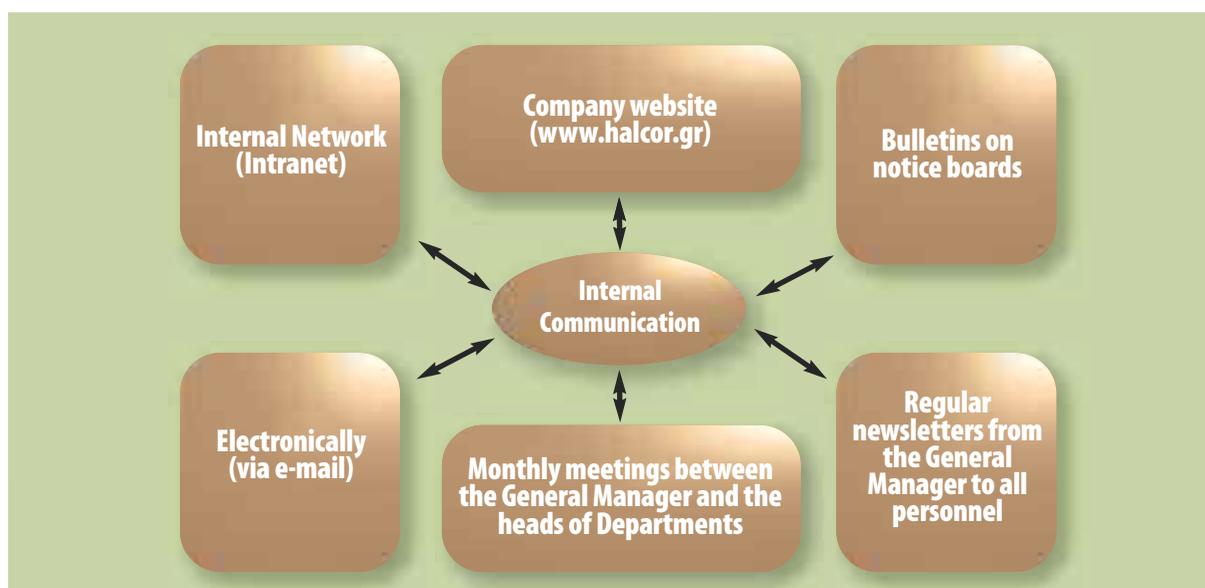
### Postgraduate programmes

In 2011 three HALCOR employees attended postgraduate programmes. The postgraduate studies were on the following subjects:

- Business Administration (Professional MBA).
- Executive Business Administration

### 4.6 Internal Communication

Internal communication helps increase the degree of cooperation between employees, provides information on important issues and enhances trust between employees and Management. Internal communication at HALCOR is achieved with a series of different communication channels:



HALCOR applies an "open door policy", to encourage communication between employees and Management. Management is always willing to accept and discuss issues that concern its employees.

### Targets for 2012

	Target 2012	Responsible for implementation
	Increase personnel evaluations by 20%.	Human Resources Department
	Executive staff training on human rights and the current challenges.	Human Resources Department
	Continue the student internship programme, aimed at acquiring work experience at the HALCOR facilities.	Human Resources Department

## Human Resources: Our overall performance

### HALCOR Human Resources data

As of 31/12	2009	2010	2011
Men	615	456	429
Women	53	37	38
<b>Total number of employees</b>	<b>668</b>	<b>493</b>	<b>467</b>
Departures (e.g. retirement, termination of contract)	88	122	35
Recruitments	14	14	8
Third-party employees	48	56	57
Ethnic minority employees	63	38	31

### Employee Distribution by Geographic Area of Origin

Geographic Region	2009	2010	2011
Attica	429	297	279
Greater Viotia and Evia Region	227	190	182
Rest of Greece	12	6	6
<b>Total</b>	<b>668</b>	<b>493</b>	<b>467</b>

### Employee Distribution by Geographic Area of Origin and gender

Geographic Region	Men	Women
Attica	252	27
Greater Viotia and Evia Region	172	10
Rest of Greece	5	1
<b>Total</b>	<b>429</b>	<b>38</b>

### Employee Distribution by Geographic Area of Employment

Geographic Region	2009	2010	2011
Attica	574	50	18
Greater Viotia and Evia Region		429	431
Rest of Greece	87	6	6
Other (relocation abroad)	7	8	12
<b>Total</b>	<b>668</b>	<b>493</b>	<b>467</b>

### Employee Distribution per Hierarchical Level and Gender

Hierarchical Level	2009			2010			2011		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Board of Directors	11	0	11	9	0	9	11	0	11
Managers	21	0	21	14	0	14	13	0	13
Senior Staff	57	4	61	40	2	42	39	2	41
Office Staff	101	42	143	80	31	111	71	32	103
Warehouse staff and workers	436	7	443	322	4	326	306	4	310
<b>Total</b>	<b>615</b>	<b>53</b>	<b>668</b>	<b>456</b>	<b>37</b>	<b>493</b>	<b>429</b>	<b>38</b>	<b>467</b>

\*Members of the Board of Directors are not counted in the HALCOR human resources total.

## 4. Human Resources

### Employee mobility

<b>Employee Mobility Average</b>	<b>2011</b>
Recruitments (Total recruitments / total employees)	1.71%
Departures (Total recruitments / total employees)	7.49%

### Breakdown of Departures

<b>Category</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Discharges	52	98	23
Contract termination	4	3	-
Resignations	14	9	4
Retirements	18	12	8
<b>Total</b>	<b>88</b>	<b>122</b>	<b>35</b>

### Human resources per type of employment and employment agreement

<b>Type of Employment &amp; Employment Agreement Categories</b>	<b>2011</b>		<b>Total</b>
	<b>Men</b>	<b>Women</b>	
Total number of employees	429	38	467
Collective bargaining agreement	429 (100%)	38 (100%)	467 (100%)
No collective bargaining agreement	0	0	0
Open-end employment agreement	428 (100%)	38 (100%)	466 (100%)
Fixed-term employment agreement	1	0	1
Full-time employment	429 (100%)	38 (100%)	467 (100%)
Part-time employment	0	0	0
Seasonal employment	1	0	1

### Personnel Training by position / hierarchical level (2011)

<b>Position / Hierarchical Level</b>	<b>Total training hours</b>			<b>Average training hours per category</b>		
	<b>Men</b>	<b>Women</b>	<b>Total</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
	Managers	74	0	74	5.7	0
Senior Staff	54	66	120	1.4	33	2.9
Office Staff	480	179	659	6.8	5.6	6.4
Foremen & workers	3,773	16	3,789	12.3	4	12.2
<b>Total</b>	<b>4,381</b>	<b>261</b>	<b>4,642</b>	<b>10.2</b>	<b>6.9</b>	<b>9.9</b>

### Employee Postgraduate Programmes

	<b>2009</b>	<b>2010</b>	<b>2011</b>
Number of Postgraduate Programmes	7	6	3



## 5. Occupational Health and Safety



**The health and safety of our employees is a priority and a commitment for us.**

*“For HALCOR, the provision of a healthy and safe work environment for its employees, contractors and visitors is always a priority.*

*Our commitment to ensure a healthy and safe work environment is reflected in our Health and Safety Policy and is proven in practice through the OHSAS 18001:2007 Occupational Health and Safety System implemented at HALCOR. Our Company’s successful performance in this field is to a great extent due to the participation of all employees and the responsibility exhibited on Health and Safety issues.*

*At HALCOR, we have created all necessary administrative and organizational structures to monitor the employee Health and Safety performance and we take all necessary measures for continuous improvement in this field”.*

*Health & Safety Manager*

### 2011 Target performance

What we said	Performance	What we did
Provide at least 1 hour of training / production employee.		In 2011, training time per production employee was 1.8 hours.
Medical check-ups on 60% of production employees (blood work and X-rays).		In 2011, medical check-ups covered 65% of production employees.
Participation of 25% of employees in Emergency Drills.		28% of production employees participated in Emergency Drills.
Realize 10 Health & Safety inspections per plant each year.		There were 23 inspections at the Copper Tubes Plant and 13 at the Recycling/Melting plant.

**HALCOR's commitment**

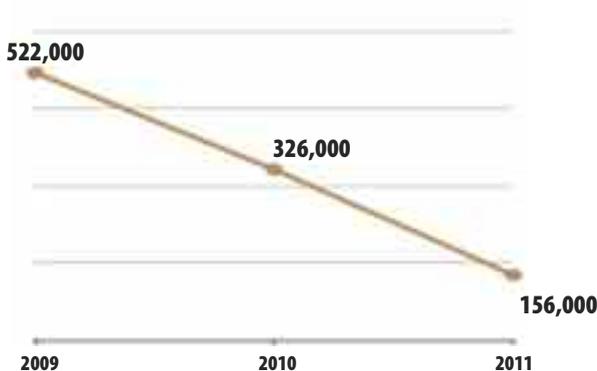
- Achieving the highest possible health and safety standards for its employees, contractors and visitors is set as a priority and an ongoing target.
- Provides all necessary resources (financial, human, organizational, etc), in order to achieve such standards.
- Recognises that promoting health and safety at work is a best business practice and is committed to continuous improvement
- Committed to comply with relevant legislation and to implement the highest health and safety standards.
- Recognises health and safety as a key criterion for any business assessment and decision.
- Assigns absolute priority to accident prevention and controlling hazardous situations before they occur.
- Recognises the key role the human factor plays in health and safety issues and ensures constant update and training of its employees on this subject.
- Supports active participation of its entire workforce, regardless hierarchy and position, in improving health and safety.
- Pursues the promotion of a safety culture throughout its activities, including affiliate companies, contractors, suppliers, etc.

**5.1 Investment and Operational Spending on Health and Safety**

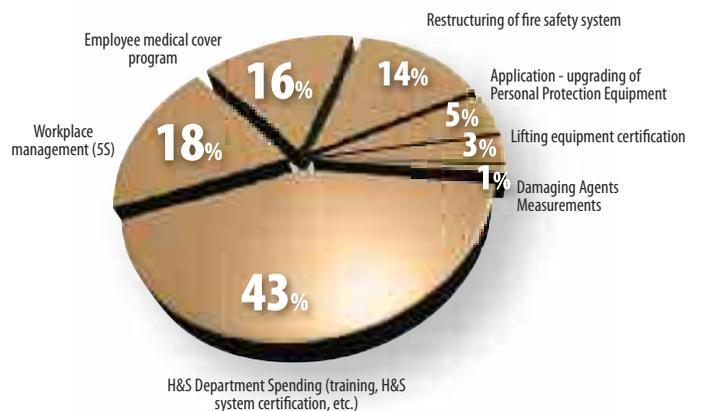
HALCOR invests every year on infrastructure and means that enhance Health & Safety at the workplace, aiming to improve its performance in this field. During 2011, 156,000 euro were spent on Health and Safety programmes such as: The drop in spending in 2011 is the result of investments/improvements in Health and Safety that were already completed in previous years.

**Investment & Operational Spending on Health and Safety**

Spending on Health and Safety (in euro)



**Breakdown of investments and spending on Health & Safety (2011)**



## 5. Occupational Health and Safety

### 5.2 Occupational Health and Safety Management System

Focused on integrated management of Occupational Health and Safety, HALCOR applies an OHSAS 18001:2007 certified Occupational Health and Safety System. The scope of this System covers all HALCOR production units (Copper Tubes plant, Recycling/Melting plant).

#### Excerpt from HALCOR's Health and Safety Policy

HALCOR SA is committed to provide all the means for full compliance with the legal and other requirements governing its operation. It is committed to continuously work towards the prevention of all occupational accidents and diseases, as well as minimizing the risks that could potentially occur from its operation.

Management is immediately informed on any Health and Safety related issues and pursues an unhindered implementation of the Health and Safety Policy and of the relevant national legal requirements. HALCOR's Health and Safety Principles upon which the Health and Safety Policy is based on, are:

#### HALCOR Health and Safety Principles

- All accidents and occupational diseases can be avoided by the use of proper means of prevention
- Heads of departments are responsible for the prevention of accidents.
- Working safely is a condition for employment and cooperation with the company.
- Training of employees and contractors in safety issues is essential and necessary
- The main duty of heads of departments is to monitor compliance with the rules of occupational safety with on-site audits
- All accidents and near-miss accidents must be investigated immediately and in depth
- Prevention of accidents and occupational diseases is a benefit for the Company and all that cooperate with it.
- All employees and contractors should be involved in the effort to promote health and safety.

**CONTINUOUS TARGET**



**ZERO ACCIDENTS**

### 5.3 Health and Safety Programmes

In the context of the Occupational Health and Safety Management System, implementation of which aims at constant improvement in this field, HALCOR implements the following programmes:

- Occupational Health and Safety Management Programme
- Occupational Safety Prevention Programme
- Health and Safety Training

#### H&S Programme    Actions / Activities

<b>Occupational Health and Safety Management Programme</b>	<ul style="list-style-type: none"> <li>• Installation, maintenance and regular cleaning of the required amenities and equipment (locker rooms, toilets, personal lockers) in all areas.</li> <li>• Implementation of personal hygiene rules (washing and/or showering after work).</li> <li>• Operation of a well-equipped infirmary in each plant and scheduled visits by the Occupational Doctor.</li> <li>• Personal medical file kept for each employee.</li> <li>• First-aid kits are available in each department and replenishment of medicines is carried out at the responsibility of heads of departments.</li> <li>• Employee medical examination by the Occupational Doctor after any reported accident.</li> <li>• Medical checkups for all employees to ensure their good health.</li> <li>• First-aid seminars carried out by the Red Cross.</li> <li>• Voluntary blood donation programmes and a Blood Bank for employees and their families. In 2011, in cooperation with the Laiko General Hospital of Athens, a blood donation event took place in the company's infirmary and a total of 30 units of blood were collected.</li> <li>• Conducting appropriate measurements for Damaging Agents to validate that working conditions meet all required criteria.</li> </ul>
<b>Occupational Safety Prevention Programme</b>	<ul style="list-style-type: none"> <li>• A Specialist Management team assigned to monitor continuous compliance with Safety standards and, using their specialised knowledge on Health &amp; Safety, advise all employees accordingly.</li> <li>• Scheduled Health and Safety inspections with the participation of senior management and employees to identify hazardous activities and situations and take all corrective and preventive actions, in order to prevent accidents from occurring.</li> <li>• Analysis of accidents and incidents to identify the root causes and take appropriate corrective and preventive actions to avoid recurrence.</li> <li>• A Health and Safety Manual is published and has been distributed to employees containing the Company's Health and Safety Principles and relevant rules aiming to help change their attitude towards safer practices at work.</li> <li>• A 5S Manual has been published and distributed.</li> <li>• Implementation of a training program in collaboration with external specialists, aimed to providing continuous information and training of employees of Health and Safety issues.</li> <li>• With the participation of employees, the risks associated with various tasks are redefined regularly in order to take the necessary measures and continuously reduce risks.</li> </ul>

## 5. Occupational Health and Safety

- Improvements are carried out where necessary and action plans and budgets are prepared for their implementation.
- Market Research, purchase and use of the latest and most advanced Personal Protective Equipment (PPEs) according to the requirements of each job.
- Emergency drills to ensure equipment integrity and employee readiness
- Certification of lifting machinery (cranes, forklifts) and reservoirs.

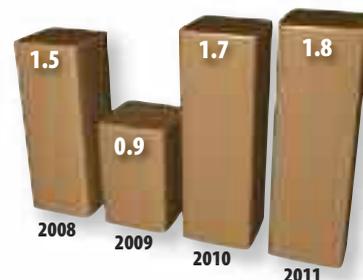
### Health and Safety Training

- Continuous personnel training on Health and Safety issues through in-house training seminars including:
  - Occupational Health and Safety
  - Electrical checks and Safety for electricians
  - 5S Methodology
- All employees have the opportunity to attend short (30 - 90 min) training sessions on various subjects.
- Training focused on special, high-risk technical issues (e.g. management of chemical substances)
- Monthly audits in all factory departments by a team of engineers (assigned per responsibility sector), to ensure compliance of all safety rules and the use of PPEs
- Monthly audits by the Health and Safety and Environmental Supervisors, with the participation of the engineers and supervisors from all departments. Audits are conducted according to the 5S methodology and the action plan for continuous improvements is updated.
- Risk Analysis and assessment, using established tools and techniques to calculate risk with the active participation of employees.

Health and Safety Training indicators Number of attendances & Total training hours



Health and Safety Training indicators Average training hours per production employee trained



\*2008-2010 data include the participation of FITCO SA employees; the company spun-off on 30/6/2010.

### 5.4 5S System: Continuous improvement program

Application of the 5S System is an important tool in HALCOR's efforts towards constant improvement on Occupational Health and Safety issues and the efficient management of its resources and equipment. The philosophy of this system is based on five implementations stages (Sort, Straighten, Sanitize, Standardize, Sustain). In implementing the 5S System HALCOR has set targets aiming to continuous improvement in the Occupational Health and Safety sector.

Targets of the HALCOR 5S System:

- Improvements in Occupational Health and Safety
- Zero accidents
- Improvement of working conditions and ergonomics
- Improve shopfloor morale
- Clean and tidy workplace at all times
- Improve productivity
- Recycling, respect towards the environment
- Energy consumption reduction
- Participation of all staff, gradual culture change.

### 5.5 Health & Safety and Environment Month

For the second consecutive year, HALCOR organised and implemented the Health & Safety and Environment Month at its facilities which is now planned to take place every year. During this month, there is an intensive training programme with information aiming at changing the culture, raising the awareness of personnel on Occupational Health and Safety issues and on environmental management issues. During this month:

- 57 office staff members participated in the Building Evacuation Drill, fire extinction with the use of a fire extinguisher and a fire blanket.
- 208 production employees participated in a fire extinction drill with the use of a fire extinguisher, hose and fire blanket. They also received information on the use of a breathing device.
- 11 employees attended a seminar on the topic: Safe use of cranes.
- 146 employees attended a seminar on the topic: Musculoskeletal disorders - prevention and treatment.
- 33 received theoretical training by the Oinofyta Fire Brigade on fire prevention and fire fighting.



## 5. Occupational Health and Safety

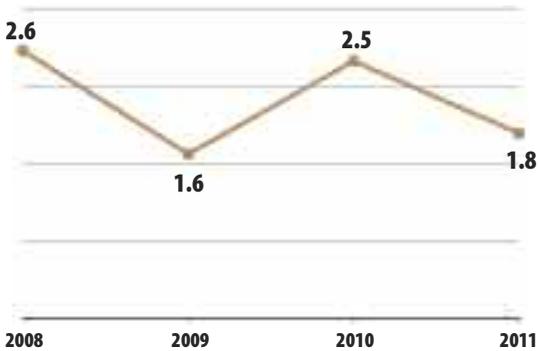
### 5.6 Monitoring Health and Safety Performance

In order to successfully manage Health and Safety issues and improve its performance, HALCOR implements constant checks and inspections to the various departments in its facilities. The Health and Safety Manager, in collaboration with the Manager of each plant and the Safety Officers, hold monthly meetings with the heads of departments. In parallel, the supervisors conduct regular inspections of their Departments on a monthly basis. In this context, employees are encouraged to exchange views and submit proposals in order to improve Health and Safety issues. The Company's Health and Safety Team ensures employee Health, the safe conduct of operations and their continuous improvement, aiming at the elimination of accidents.

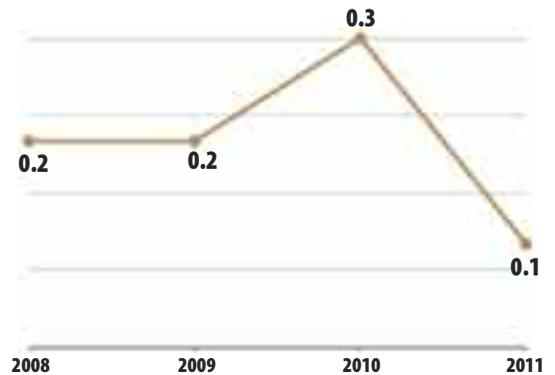
*No occupational diseases have ever occurred in the Company, up to now.*

Both the investment programme and the intensive training programme on Health and Safety applied by HALCOR over the last years, have brought significant improvements to this field. The result of all preventive actions and targeted H&S training in 2011, is a significant improvement of the Accident Frequency Index by 60% and of the Accident Severity Index by 65%.

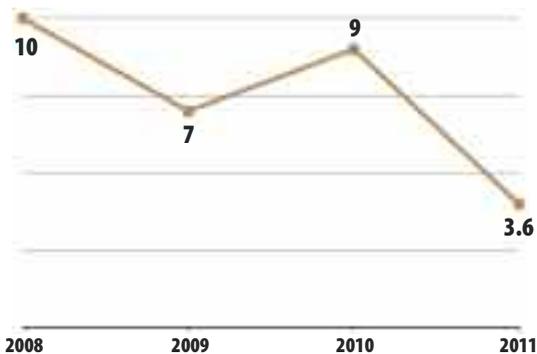
**Rate of injuries or accidents over total personnel (%)**



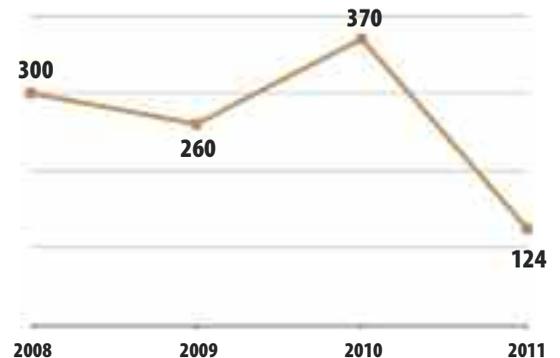
**Rate of days lost due to occupational injury or accident over personnel total (days lost/total work days %)**



**Accident Frequency Index**



**Accident Severity Index**



*NOTE: To calculate lost days, counting begins on the day after the accident, including minor accidents requiring first-aid only.*

Frequency Index =	$\frac{\text{incidents (LTI)} \times 10^6}{\text{number of manhours worked}}$	Severity Index =	$\frac{\text{absence days due to incidents} \times 10^6}{\text{number of manhours worked}}$
-------------------	---	------------------	---

HALCOR complies fully with legislation regarding practices for recording, investigation and disclosure of possible accidents to the competent authorities. Specifically, accidents are communicated to the competent Centre for the Prevention of Occupational Risks (KEPEK) and the Insurance agency. Accidents are recorded in the Accidents Log and there is an investigation on the conditions of the accident, aiming at finding the root of causes that led to the accident. The Company then plans and implements Corrective and Preventive actions.

	2009	2010	2011
Lost days index (LDR)	52	74	25
Absence index (AR)	418	592	199

Lost days index = (LDR)	$\frac{\text{absence days due to accidents} \times 200,000}{\text{number of manhours worked}}$	Absence index = (AR)	$\frac{\text{absence days due to accidents} \times 200,000}{\text{number of mandays worked}}$
-------------------------	--	----------------------	---

## Targets for 2012

	Target 2012	Responsible for implementation
	Zero accidents.	Management and Human Resources
	Review of Risk Assessment Studies.	Health and Safety Manager Heads of Departments
	10 H&S inspections by each supervisor in all plants.	Heads of Departments
	Provide at least 2 hour of training / production employee.	Health and Safety Manager
	Medical checkups on the remaining 25% of production employees (blood work and X-rays) who did not receive a check-up during 2011.	Occupational Doctor
	Participation of 25% of more employees in relation to the previous year, in emergency drills.	Health and Safety Manager
	Participation of at least 70% of production employees/contractors in H&S training.	Health and Safety Manager Heads of Departments
	Hold 10 monthly H&S meetings at each plant.	Plant Manager, Health and Safety Manager
	Application of awareness programme on reporting near misses.	Health and Safety Manager

## 5. Occupational Health and Safety

### Occupational Health and Safety: Our overall performance

#### Health and Safety Indicators by production unit

##### Number of Accidents

Plant	2009	2010	2011
Copper tubes	5	6	1
Recycling - Milling	6	3	3
Titanium-zinc Rolling Plant	0	2	0
FITCO*	0	2	-
<b>Total</b>	<b>11</b>	<b>13</b>	<b>4</b>

##### Accident Frequency Index

Plant	2009	2010	2011
Copper tubes	6	7	1.1
Recycling - Milling	28	15	16.8
Titanium-zinc Rolling Plant	0	20	0
FITCO*	0	26	-
<b>Total</b>	<b>7</b>	<b>9</b>	<b>3.6</b>

##### Accident Severity Index

Plant	2009	2010	2011
Copper tubes	150	205	3.4
Recycling - Milling	1,320	1,235	397
Titanium-zinc Rolling Plant	0	760	2,965
FITCO*	240	415	-
<b>Total</b>	<b>260</b>	<b>360</b>	<b>124</b>

##### Days Lost

Plant	2009	2010	2011
Copper tubes	118	182	3
Recycling - Milling	279	256	71
Titanium-zinc Rolling Plant	0	77	64
FITCO*	0	32	-
<b>Total</b>	<b>397</b>	<b>547</b>	<b>138</b>

##### Manhours

Plant	2009	2010	2011
Copper tubes	780,447	887,729	878,755
Recycling - Milling	211,567	207,145	178,807
Titanium-zinc Rolling Plant	111,583	101,491	55,214
FITCO*	150,351	76,845	-
<b>Total</b>	<b>1,520,632</b>	<b>1,477,712</b>	<b>1,112,776</b>

\* 2011 data does not include FITCO SA data; the company spun-off from HALCOR on 30/6/2010.

**ΧΑΛΚΟΡ**

Προφύλαξε  
τον εαυτό σου!  
Φόρα τα **Μέσα**  
**Προστασίας**

ΜΗΝΑΣ ΥΓΕΙΑΣ & ΑΣΦΑΛΕΙΑΣ, ΠΕΡΙΒΑΛΛΟΝΤΟΣ 2011

**ΧΑΛΚΟΡ**

Σκεφτείτε  
την ασφάλεια!  
Σκεφθείτε εκείνους που  
σας αγαπούν...

ΜΗΝΑΣ ΥΓΕΙΑΣ & ΑΣΦΑΛΕΙΑΣ, ΠΕΡΙΒΑΛΛΟΝΤΟΣ 2011

## 6. Environment



**It is the responsibility of all of us to respect the environment.**

*“Responsibility towards the environment is a goal of key importance for HALCOR. Through its Environmental Policy, the company is committed to business growth that is environmentally responsible and its operations are always aimed at preventing pollution, compliance with the legal and regulatory framework, continuously improve its performance with respect to environmental management issues.*

*For HALCOR, protection of the environment is the result of its Management’s commitment. At HALCOR, the Environmental Management System that is applied on all production units is certified according to the requirements of standard ISO 14001:2004.*

*Proving in practice our commitment for constant improvement in this sector, we invest in new infrastructure, we monitor our performance and implement environmental management programmes in order to attain our goal to continuously reduce our carbon footprint”.*

*Quality Assurance  
and Environmental Manager*

## 2011 Target performance

What we said	Performance	What we did
Certification of the Environmental Management System for the PVC production line at the Plastic and Rubber Compound plant production line in accordance to ISO 14001		Certification of the Environmental Management System of the PVC production line at the Plastic and Rubber Compound plant was completed successfully
Extend training to all personnel, upgrade training material for environmental compliance, awareness and recycling		The Environment Month was successfully completed for the second consecutive year Implementation of the employee environmental training programme was completed
In 2011, HALCOR aims to expand the tree-planting program at the Copper Tubes plant.		Extension of green area implemented

### HALCOR's commitment

As an environmentally responsible Company, HALCOR will not jeopardize the development and quality of life of future generations. The company is committed to saving natural resources, water, energy and raw materials in particular and to continuous improvement, pollution prevention and compliance with all requirements legal and other, by providing all the necessary means.

This commitment is proved by the Company's transparent operation, its full compliance with environmental regulations and legislation as well as its commitment to invest in technologies and equipment that minimize environmental impact. Additionally, this commitment is evident by its relevant policy, systems and development of know-how for sustainable development.

## 6.1 Environmental Protection Investments and Expenditure

Intending to protect the environment and constantly improve its performance in this aspect, HALCOR invests every year in the upgrading of its infrastructure.

The total HALCOR investments and expenditures for 2011 exceeded euro 1 million.



## 6. Environment

### 6.2 Environmental Management System

The Environmental Management System HALCOR implements in all its production units, in its pursuit for integrated management of environmental issues, is certified according to the requirements of standard ISO 14001:2004.

#### ISO 14001 Certification of HALCOR plants

No	Plant	2009	2010	2011
1	Copper Tubes	√	√	√
2	Recycling - Milling	√	√	√
3	Titanium-zinc Rolling Plant *	√	√	√
4	PVC production line (at the Plastic and Rubber Compound plant)	-	-	√

(\*) Production in the facility suspended since 01.01.2011.

#### Certification of PVC production line of the Plastic and Rubber Compound plant

In 2011, HALCOR received ISO 14001:2004 certification of the Environmental Management System implemented at the PVC production line of the Plastic and Rubber Compound plant in Oinofyta. HALCOR demonstrates its commitment for integrated and systematic management of its environmental issues.

### 6.3 Protection of the Environment at HALCOR

Management is immediately informed on any Health and Safety related issues and pursues unhindered implementation of the Health and Safety Policy and relevant National and EU legal provisions. HALCOR's Environmental Policy is based on the following environmental principles:

#### HALCOR Environmental Principles

1. Compliance with existing national and European environmental legislation and regulations. Its manufacturing sites always operate within the emission limits of their environmental licenses.
2. Responsible operation with full knowledge of existing and potential environmental consequences and taking appropriate measures to reduce these.
3. Cooperation with licensed waste management companies (for the collection, transportation, further use and disposal of waste), that follow practices in full compliance with relevant legislation.
4. Continuous improvement of the HALCOR environmental performance and minimization of the environmental impact from its operations.
5. Transparency and open communication with all stakeholders on environmental issues.
6. Continuous Training, updating and awareness of employees on environmental issues so that they actively participate in matters of environmental concern.
7. Implementation of an Environmental Management System to ensure continuous improvement and compliance with the law and regulations.

HALCOR has an administrative structure in place to manage environmental issues while its Environment Department, staffed by specialised scientific personnel, implements the Environmental Management System and monitors the progress of the Company's environmental programmes.



HALCOR, pursues awareness of its employees through training seminars on environmental issues (e.g. environmentally-safe management of raw materials and waste). The seminars are implemented either by the Company's Environment Department or by external institutions.

<b>Training on environmental issues</b>	<b>2010</b>	<b>2011</b>
Number of employees	120	109

During 2011, there were 283 hours of training and 109 employees attended. The main training subjects were:

- Implementation of environmental legislation
- Prevention of unsafe situations (leaks/spills) and waste management
- Dealing with a chemical substance leak
- Dealing with a fire situation

#### **6.4 HALCOR's Environmental Issues**

With effective management and planning, monitoring and the prevention of environmental impacts as main targets, HALCOR has traced, listed and evaluated all the environmental parameters that relate to its operation. The most important are:

- air pollutant emissions
- discharge of liquid waste
- energy consumption (thermal and electric),
- Management of hazardous materials

## 6. Environment

### Raw materials

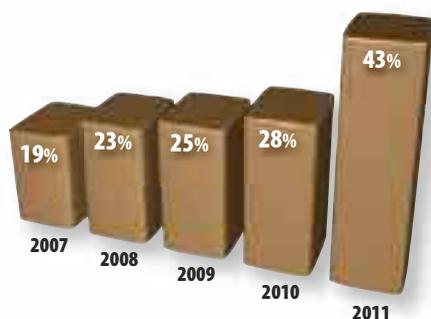
HALCOR purchases raw materials to cover the requirements of its production process. The main raw material purchased and used by the Company is copper, the use of which entails a high financial cost. Combining environmental management with financial efficiency and the preservation of natural resources, HALCOR covers a significant part of its raw material requirements with the use of recyclables (scrap). The term scrap is used to describe recyclable materials, which are left over from all kinds of production processes and product consumption, such as vehicle components, building equipment and other materials.

The **Benefits of Recycling Copper** (in relation to primary copper production from minerals) recycled copper production:

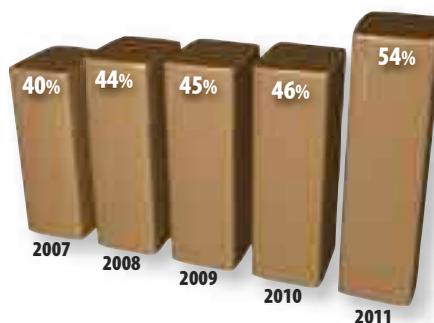
- Prevents harmful gas emissions such as Sulfur dioxide, particles, etc.
- Saves approximately 85% of required energy (requires 3 times less electric and 2.5 times less thermal energy)
- Saves approximately 75% of CO<sub>2</sub> emissions, thus contributing significantly to the global reduction of greenhouse gases.

HALCOR is the largest recycler of copper, zinc and their alloys in Greece. In 2011, 54% of metal used by the Company was recycled metal.

**Recycled metal consumption average in relation to total metal consumption (without internal returns)**



**Recycled metal consumption average in relation to total metal consumption (including internal returns)**



### Benefit to the Environment from Copper Recycling

During the 2008-2011 period, HALCOR used 22,875 tons more copper scrap than in 2007. Energy saving in relation to the primary copper production of the same quantity is estimated at 540,104 MWh\* which is equal to the energy consumed by a town with a population of 93,000 (calculated using the EU average).

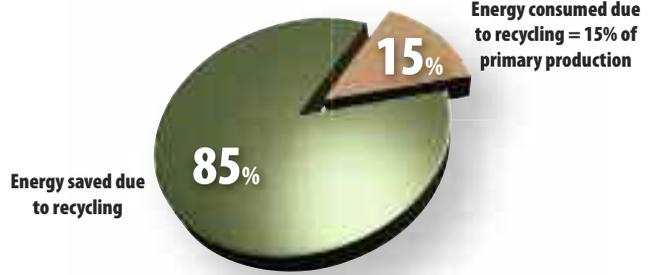
Gain in CO<sub>2</sub> emission in relation to primary copper production for the period 2008-2011, was 80,520 tons CO<sub>2</sub>, which is equal to the annual CO<sub>2</sub> emissions of a town with a population of 7,500.

**Energy consumption decrease**

**Primary copper production**



**Copper recycling**



**From 2008 to present**



Equal to the annual consumption of a town with a population of 93,000

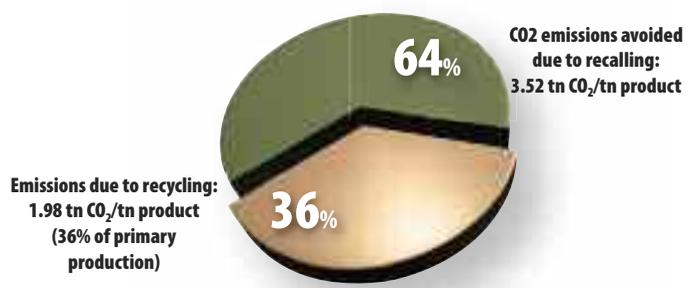


**Reduction of CO<sub>2</sub> emissions**

**Primary copper production**



**Copper recycling**



**From 2008 to present**



Equals annual CO<sub>2</sub> emissions of a town with a population of 7,500



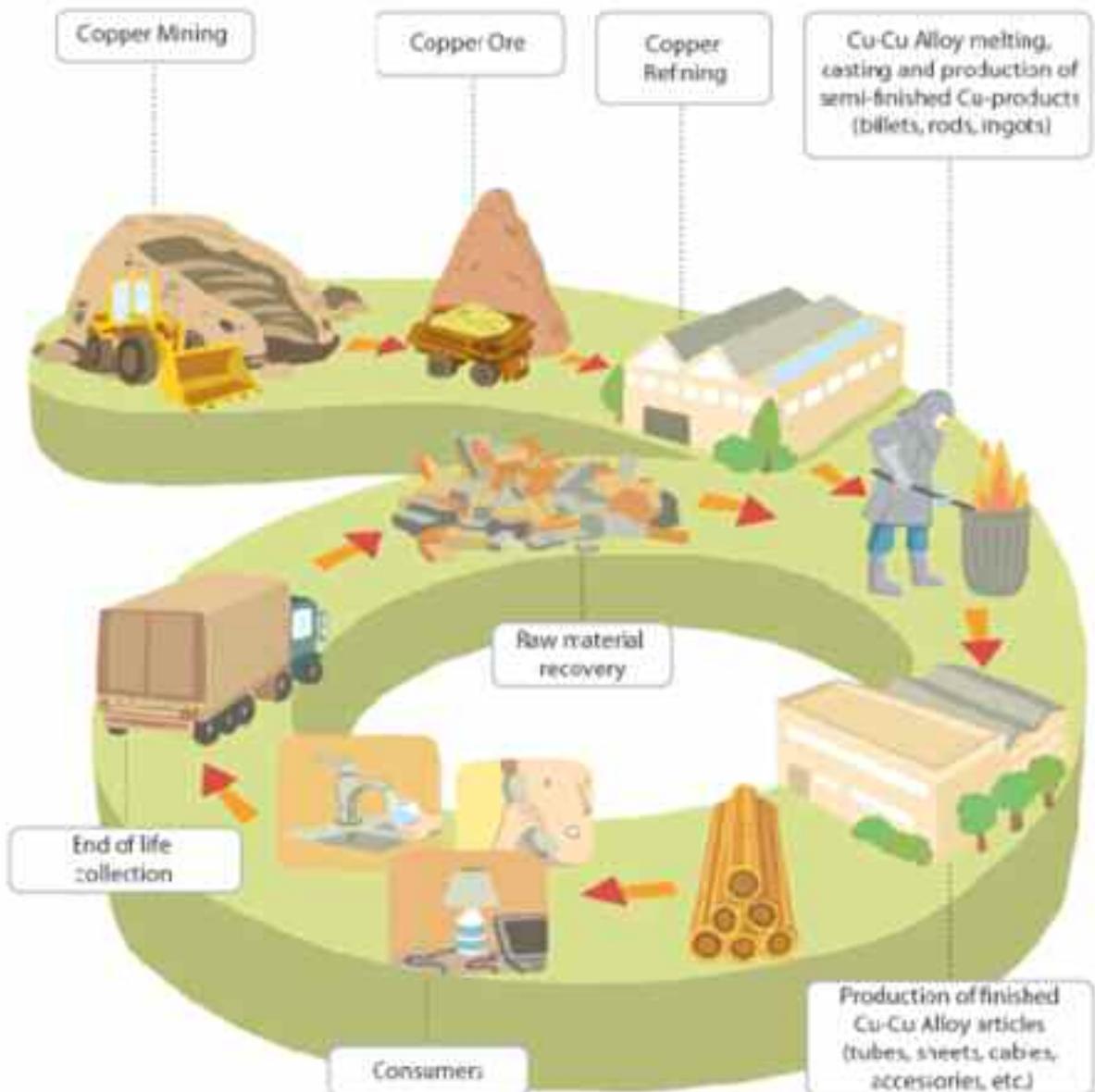
## 6. Environment

### Life Cycle Assessment of HALCOR products

Life Cycle Assessment of a product is a tool used to draw useful conclusions on the environmental impact associated with all stages of a product's life cycle.



### Copper Life Cycle Assessment



HALCOR, covers a significant part of its raw material requirements with recycled metal (scrap). Thus, apart from the financial benefit, a drastic reduction of environmental consequences is achieved under the scope of copper products life-cycle assessment. The Environment Department of HALCOR plans to attend a special seminar in 2012, on Life-cycle Analysis, in order to better organise Company actions on this subject.

### **Safe use of raw and other materials**

As is the case in all industries, various chemical substances are used during HALCOR's manufacturing procedure. Use of chemical substances is necessary for correct treatment of metals. Even though their use is unavoidable, HALCOR takes great steps to reduce their use to the only absolute necessary levels. HALCOR records detailed data on any substance that imports, exports, produces or trades.

All actions in this direction are in full compliance with the standards and specifications of Safety Data Sheets (SDS) in relation to:

- storage in dry, guarded areas, where required;
- training of operators on correct management and avoiding spills;
- conducting response drills for emergencies;
- preventive measures to avoid spillage and leakage of chemical substances.



## 6. Environment

HALCOR complies fully with legal regulations on chemical substances and mixtures:

- European Regulation REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals);
- CLP (Classification, Labelling and Packaging).

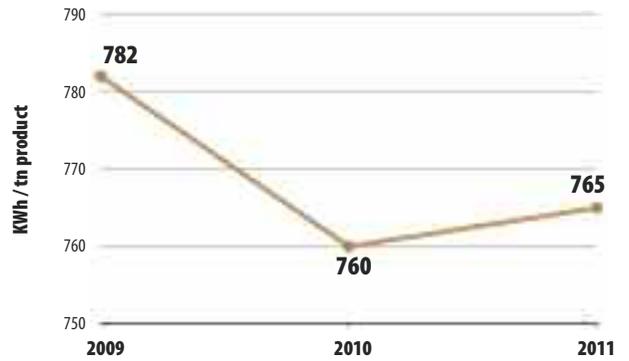
### Energy Use

At HALCOR there is extensive use of thermal energy (natural gas, LPG, diesel) and electric energy. The Company pursues reduction of its energy consumption on a constant basis, as the nature of its operations, as a metal recycling and processing industry, has increased energy requirements.

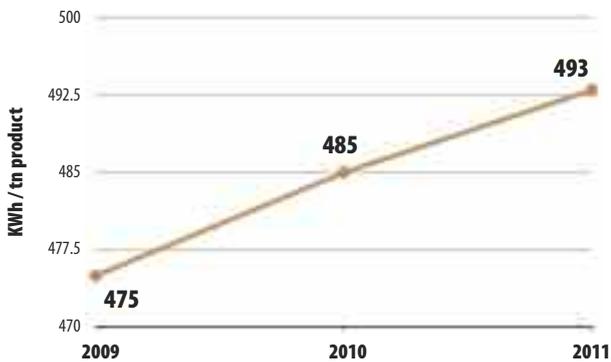
#### Thermal Energy

In 2011, total thermal energy amounted to 79,538 MWh, a 8.3% drop from the previous year. This is due to the Brass Bars and Tubes plant spin-off and its transfer to the subsidiary company FITCO and suspension of the Titanium Zinc rolling plant production. Specific thermal energy consumption (consumption by product quantity) amounted to 760KWh per product ton, marking a small 0.6% increase from 2010.

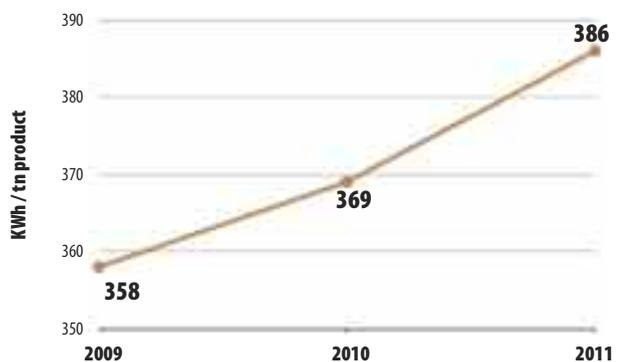
Specific thermal energy consumption



Specific thermal energy consumption  
Recycling - Milling plant



Specific thermal energy consumption  
- Copper Tubes plant



The increase at the Recycling-Milling plant is a result of emptying the furnaces when they are not in operation and pre-heating to restart. The increase at the Copper Tubes plant is due to the increased quantity of end products undergoing annealing treatment.

HALCOR takes various measures aimed at saving and efficient use of energy. The energy consumption decrease due to these measures results also in significant decrease emissions of greenhouse gases, since fossil fuel combustion process are avoided. The following energy saving actions were implemented in 2011, with respect to natural gas:

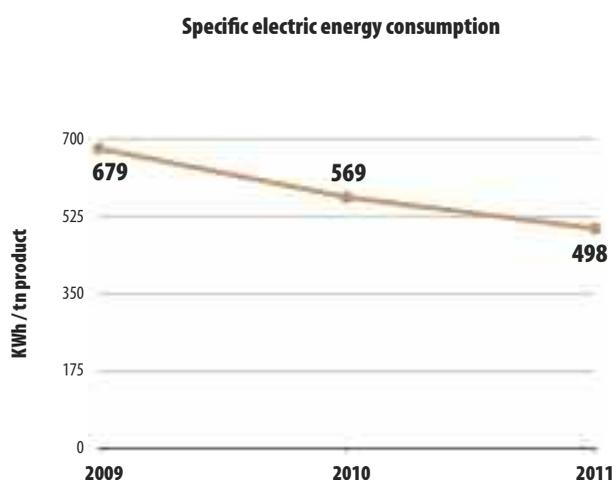
- Scheduling production for longest possible continuous operation of production lines and in order to reduce consumption of natural gas required to pre-heat the channels and furnaces (saving 153,000 Nm<sup>3</sup>/year – Recycling-Milling plant).
- Changes in the operation schedule (production, stand-by, shut-down - Copper Tubes plant).
- Decrease consumption in the copper billet production line by 3,5 Nm<sup>3</sup>/tn (saving 260,000 Nm<sup>3</sup> / year – Recycling-Milling plant).
- Furnace thermal loss check (Copper Tubes plant).
- Installation of natural gas meters (individual recording 100% of consumption– Copper Tubes plant).

#### *Electric energy*

Specific electric energy consumption in 2011 was 498 KWh/tn of product. There was a 12.5% reduction compared to the previous year, which is due mainly to the actions described above.

The following power saving actions were implemented in 2011:

- Sine waveform check and correction (to 0.975). This restricts power loss at cables, decreases transformer load and restricts reactive power, resulting in more environment-friendly power management and reduced power provider burden.
- Scheduling of the copper production line aimed at emptying furnaces and less stand-by (saving 810,000 KWh / year – Recycling-Milling plant).
- Reduced consumption at compressed air station (installation of central control with activation function, to save energy when not in use - Copper Tubes plant).
- Check and repair compressed air leaks (saving 162,000 KWh / year – Recycling-Milling plant).
- Replacement of incandescent light bulbs with new, energy saving bulbs of less wattage and same output (saving 63,000 KWh / year – Recycling-Milling plant).
- Power consumption check at continuous annealing lines and improvements in collaboration with the manufacturer (Copper Tubes plant).
- Optimization of press, pump stations, etc., operation (Copper Tubes plant).
- Reduced consumption for exterior lighting with new design, low-consumption fixtures and photocell lighting (Copper Tubes plant).
- Reassessment of exterior lighting reasoning (Copper Tubes plant).



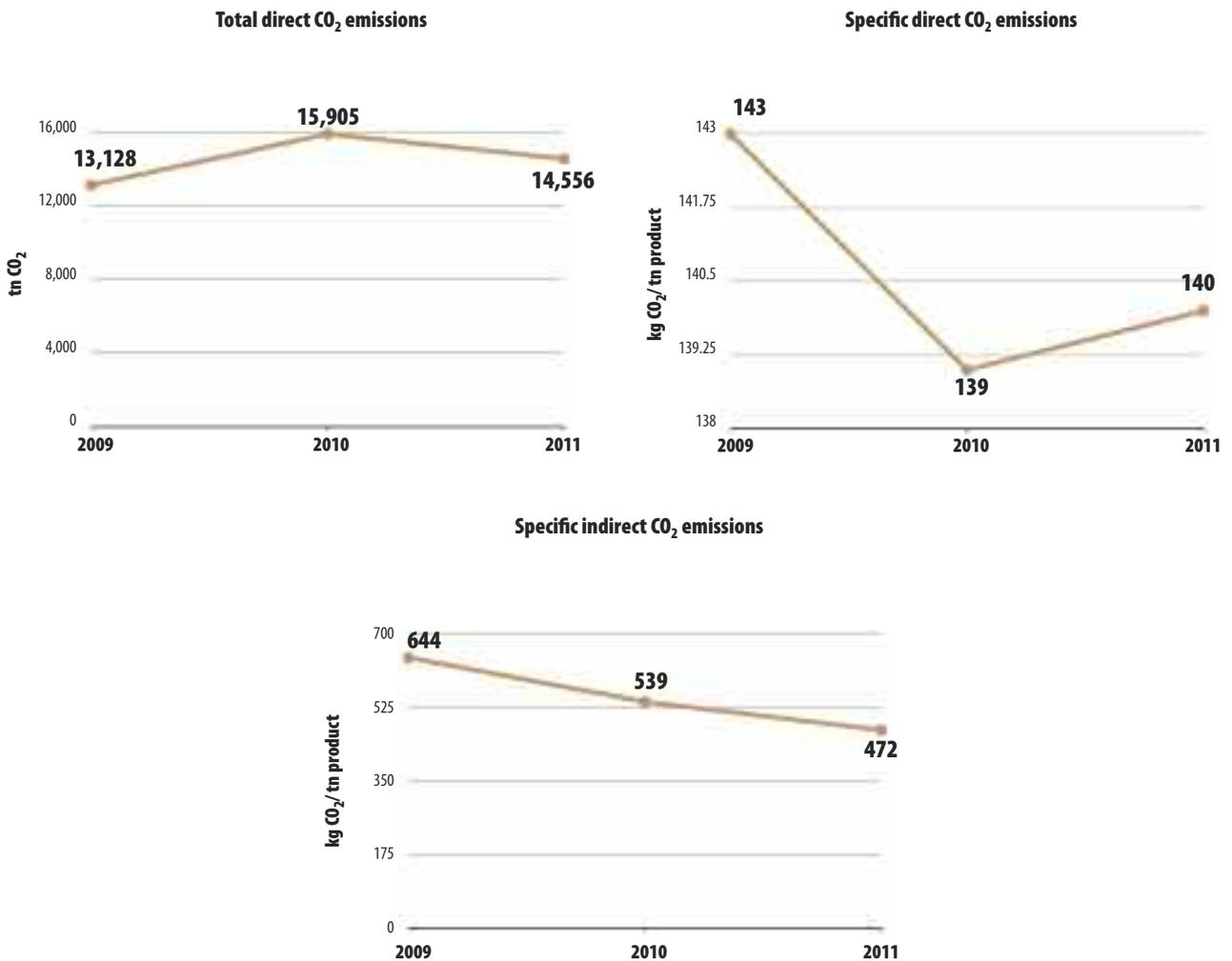
## 6. Environment

### Climate Change

HALCOR is aware of how important its contribution is in combating climate change and for this reason tries to restrict carbon emissions resulting from its operations, as much as possible. Although HALCOR is excluded from the EU Emissions Trading System, it implements a series of measures to reduce pollutants that contribute to climate change:

- uses environmentally-friendly fuels, such as natural gas, which produce fewer air polluting emissions per energy output;
- has introduced regular maintenance and fine tuning of relevant equipment, in order to maximize efficiency and therefore reduce air polluting emissions.

Carbon emissions derive from fossil fuel combustion process used in manufacturing and forklifts. Total direct emissions marked an 8.5% drop in 2011, as calculations did not include the Brass Bars and Tubes plant due to its spin-off to the subsidiary FITCO and the Titanium Zinc rolling plant, since its operation was suspended.

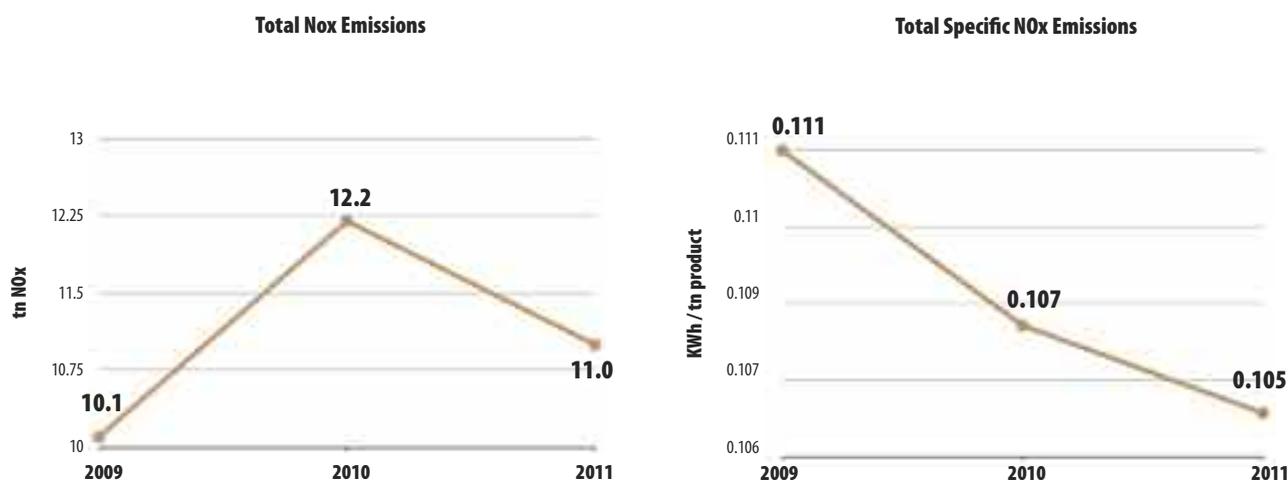


\* The quantity of direct emissions is calculated according to the Natural Gas consumption in production and diesel consumption for transport. Factor 0.95 kg CO<sub>2</sub>/KWh is used to calculate indirect carbon emissions.

## Air

NOx emissions are mainly the result of fossil fuel combustion processes, including natural gas which is the main type of fuel used for the Company's thermal energy requirements.

In 2011, NOx emissions were 11tn, a 10.5% drop from the previous year. This is due to the suspension of operations of the Brass Bars and Tubes plant and the Brass Bars and Tubes plant spin-off and its transfer to the subsidiary company FITCO, which was not included in the calculations.



Total volatile organic compound emissions (VOCs) in 2011 were 254tn, reduced from 296tn in 2010.

### *Airborne particles*

HALCOR has three permanent recording units, which are used to record continuous measurements of airborne particles generated from the Recycling-Milling plant furnaces. The Company follows closely all the legal guidelines in relation to airborne particle emissions generated during production operations. According to the measurements conducted, the allowed levels set by Greek environmental legislation, have not been exceeded up to present.

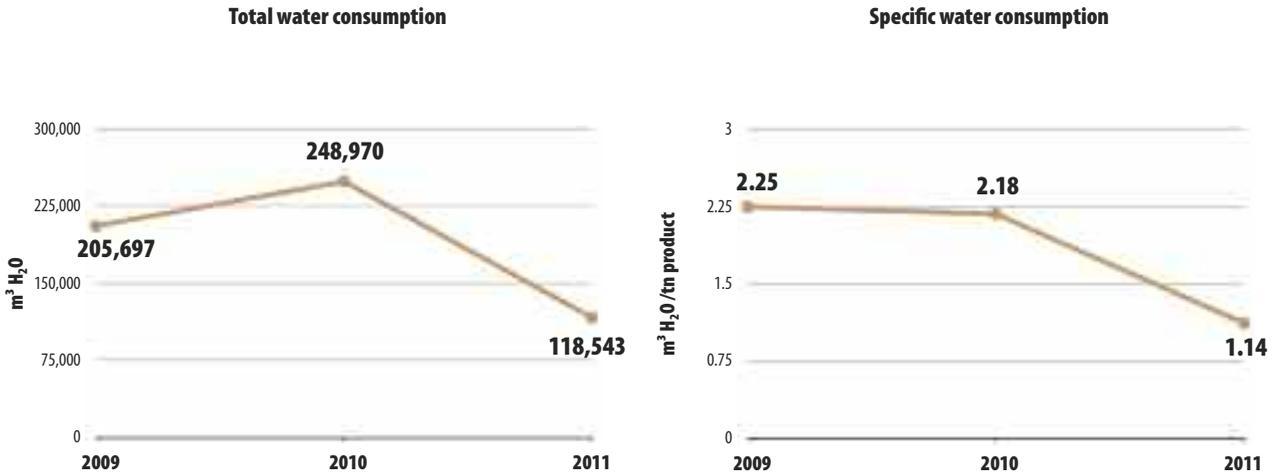
## Water Use

The water used in the company facilities comes from four sources:

- EYDAP water supply network
- Borehole/Well (company property and licensed)
- Oinofyta water supply network for the Copper Tubes plant and the Recycling-Milling plant
- Tanker trucks

## 6. Environment

In 2011, water consumption was 118,543 m<sup>3</sup>, a significant 52.4% drop from 2010, which is due to the Brass Bars and Tubes plant spin-off and its transfer to the subsidiary company FITCO and suspension of the Titanium Zinc rolling plant production. Specific water consumption was reduced by 47.8%, due to the reasons above.



*\*The revised 2010 consumptions were due to delayed issuing of certain water bills from the provider.*

### Waste

HALCOR is making every possible effort to minimize generated and ensures best possible waste management. The primary goal of the waste management procedure used by the Company, is to reduce the volume of generated waste; additionally, recycling, reuse and utilization practices are applied to reduce drastically the volume of waste that is discharged in sanitary landfills.



*\*Recovery (energy or other form of recovery)*

The total generated waste in 2011 was 180 kg/tn product, a 32,5% drop from 2010 (267 kg/tn product). This is due to the Brass Bars and Tubes plant spin-off and its transfer to the subsidiary company FITCO and suspension of the Titanium Zinc rolling plant production.

The Company not only complies with the legal provisions, but takes further measures to surpass these requirements. It should be noted that, in compliance with Law 2939/2001, HALCOR has contracts with all Alternative Waste Management Systems.

## Noise

The Company follows closely all the legal guidelines in relation to the levels of noise generated during production operations.

To monitor noise, HALCOR conducts measurements along the perimeter of the plant with its own, calibrated measuring instruments, twice a year. All measurement results recorded until today are within the relevant legal limits.

## Protection of Nature and Biodiversity

HALCOR ensures that all necessary measures are taken in order to minimize as much as possible its impact on the natural environment in the areas of its operations. All of HALCOR's operations are located outside protected areas or areas of high biodiversity value, and none of its facilities is adjacent to high-biodiversity areas. Furthermore, none of the Company's facilities is adjacent to protected areas and therefore there is no direct impact from HALCOR's operations to protected areas or other areas of high biodiversity value.

## Targets for 2012

	Target 2012	Responsible for implementation
	Increase production employee training time on environmental issues by 10%.	Quality Assurance and Environmental Department
	Plant trees and extend green by 10% at least at the Copper Tubes plant.	Quality Assurance and Environmental Department
	Provide training of personnel on Life Cycle Assessment and Carbon Footprint – for future application by the Company.	Quality Assurance and Environmental Department
	Increase the use of recycled scrap by at least 2%.	Recycling-Milling Plant Management
	Reduce specific total waste generation by 5% over the next five years.	Quality Assurance and Environmental Department
	Publish a training brochure/newsletter on environmental issues.	Quality Assurance and Environmental Department
	Save energy through modification of indoor and outdoor lighting at the Copper Tubes plant, over the next two years.	Copper Tubes Plant Management
	Install an urban waste treatment facility at the Copper Tubes plant, within the next two years.	Copper Tubes Plant Management

## 6. Environment

### Environment: Our overall performance

#### Environmental Spending

Spending Categories	2010	2011
Commissioning and maintenance of environmental protection equipment	412,709	337,069
Support to Environmental Management Department	260,120	197,176
Waste management	239,009	234,948
Monitoring environmental parameters	155,817	67,891
New environmental infrastructure and antipollution systems	154,317	175,207
Landscape improvements and maintenance	10,944	20,844

#### Use of recyclables

Year	2009	2010	2011
Recycled metal consumption average (without internal returns)	25%	28%	43%
Recycled metal average (including internal returns)	45%	46%	54%

#### Specific thermal energy consumption per production unit

Specific thermal energy consumption	2009	2010	2011
Total HALCOR	782	760	765
Recycling - Milling	475	485	493
Copper Tubes	358	369	386
Titanium-zinc Rolling	143	153	-
Compounds	1,245	1,168	1,504

#### Direct energy consumption by type of fuel

Type of fuel	2009	2010	2011
Diesel (lt)	203,431	246,219	246,554
Natural Gas (Nm <sup>3</sup> )	6,021,102	7,320,002	6,826,706
Liquefied Petroleum Gas (LPG) (kg)	110,970	117,390	500
Total (GJ)	248,179	300,807	275,783

#### Specific electric energy consumption

Year	2009	2010	2011
Specific electric energy consumption (KWh/tn product)	679	569	498

**Total direct CO<sub>2</sub> emissions**

<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Total indirect CO <sub>2</sub> emissions	13,128	15,905	14,556

**Total Direct and Indirect CO<sub>2</sub> Emissions (kg/tn product)**

<b>Total HALCOR</b>	<b>Direct</b>			<b>Indirect</b>		
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Specific CO <sub>2</sub> Emissions (Kg/tn product)	143	139	140	644	539	472

**Totals NO<sub>x</sub> Emissions**

<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
NO <sub>x</sub> emissions (tn)	10.1	12.2	11.0

**Total Specific NO<sub>x</sub> Emissions**

<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Specific NO <sub>x</sub> Emissions (Kg/tn product)	0.111	0.107	0.105

**Water consumption by source (in m<sup>3</sup>)**

<b>Water Source</b>	<b>2010</b>	<b>2011</b>
EYDAP water supply network	154,238	113,614
Borehole/Well (Titanium Zinc rolling plant)	84,162*	-
Oinofyta Water Supply Network	10,492	3,010
Tanker trucks	78	1,919
<b>Total</b>	<b>248,970</b>	<b>118,543</b>

\* Reviewed due to delayed EYDAP bill.

**Specific water consumption**

<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Specific water consumption (m <sup>3</sup> /tn product)	2.25	2.18	1.14

## 6. Environment

### Breakdown of waste by category and management method

Waste	Category	Method Management Method	Quantity (kg)		
			2009	2010	2011
Mixed recyclables (scrap Metal, metal packaging, Paper, wood, plastic)	solid	Recycling	19,184,504	26,995,228	16,288,835
Sewage sludge	solid	Recycling	73,590	81,830*	-
Slag	solid	Recycling	1,557,727	1,505,261	966,885
Mixed materials	solid	Recovery	-	164,410	114,000
Waste	solid	Landfill disposal	1,039,205	313,881	290,335
Used oils	liquid	Recycling	370,644	358,179	310,010
Batteries	solid	Recycling	1,180	2,486	2,100
Filer dust	solid	Recycling	190,228	154,970	129,340
Emulsions	liquid	Recovery	1,019,950	872,430	575,820
Polluted absorbing materials	solid	Recovery	17,520	36,480	71,615
Fluorescent lamps	solid	Recycling	80	20	270
WEEE	solid	Recycling	3,990	0	8,160
Tires	solid	Recycling	8,420	0	9,560
<b>Total Waste</b>			<b>23,467,038**</b>	<b>30,485,175</b>	<b>18,766,930</b>

\*Reviewed due to FITCO spin-off.

\*\*For 2009, data is different from last year's publication, due to a printing error.





## 7. Society



### We support local communities, investing in a relationship of mutual trust and cooperation

*“Contribution and responsible attitude towards the local communities has been recognised as one of the important aspects of HALCOR’s Corporate Responsibility and Sustainable Development. Investing in the communities where we live and work supports our business activities.*

*HALCOR has a long tradition in supporting local communities as one of its goals has always been to employ people from the local communities near its facilities.*

*HALCOR is always standing by the local community, providing regular support to various organizations, schools and other institutions. Every year, we support programmes and actions related to the society, the environment, disadvantaged groups, culture and health”.*

*Administrative Manager*

### 2011 Target performance

What we said	Performance	What we did
Planning and executing employee voluntary actions.		Implemented volunteer cleaning of the local beach and an action to support families and disadvantaged groups of the local community.
It is our priority to hire people from the local community where possible and continue the student internship programme aimed at providing work experience.		There was an increase in hiring employees from the local community. The internship programme continued in 2011. HALCOR provided paid internship to five students.

## 7.1 Copper and Health

### Developments in the COPPER and HEALTH sector

#### Research proves that antimicrobial copper reduces the risk of infection by more than 40%

The first findings of a comprehensive multi-site clinical trial in the US, demonstrated that the use of antimicrobial copper surfaces in intensive care unit rooms reduced the amount of bacteria in the rooms by 97% and resulted in a 41% reduction in the hospital acquired infection rate. The findings of the clinical trials were presented at the 1st International Conference on Prevention & Infection Control by the World Health Organ-

ization in Geneva, Switzerland on 1 July 2011. Dr Michael Schmidt, Professor and Vice Chairman of the Department of Microbiology and Immunology of the University of South Carolina, who presented the findings during the 1st International Conference on Prevention & Infection Control, said: "Bacteria on the surfaces of intensive care units are probably responsible for 35-80% of patient infections, demonstrating

how crucial it is to maintain hospitals clean. Copper items, often used in clinical trials have replaced the cleaning protocols, reduced the microbial burden and concomitantly resulted in a significant reduction to the number of infections seen in patients treated in copper rooms".

More information of this article can be found at the Hellenic Copper Development Institute website ([www.copper.org.gr](http://www.copper.org.gr))

#### Hospital rooms get health-conscious makeover

Some local hospital rooms are getting a new look, all in an effort to reduce the chances of spreading an infection. Kafi Drexel filed the following report.

Doctors at Memorial Sloan Kettering Cancer Center seem to be putting a lot more effort into working to prevent hospital infections in their intensive care unit. In some of the rooms you will find copper bed rails and meal trays, copper-lined computer monitors – and even a copper-plated computer mouse.

The makeover is part of an ongoing study to see if the red-orange metal surfaces can better protect patients from life-threatening hospital infections. "We are looking to see if you decrease the bacteria count or the bacteria milieu in the room, would that have a positive or negative effect on patient outcome," said Dr. Neil Halpem, chief of Critical Care Medicine at Memorial Sloan Kettering. University of Southampton scientists in the U.K. have proven the bacteria killing power of

copper using florescent dye to examine resistant staph under a microscope. If copper can truly play a role in lowering the number of infections, in the years ahead more of it may start to appear in hospital areas like the Intensive Care Unit where patients are most at risk".

More information of this article can be found at the Hellenic Copper Development Institute website

([www.copper.org.gr](http://www.copper.org.gr))

## Fukushima kindergartens rebuild with antimicrobial copper

As Iwaki City - capital of the Fukushima Prefecture - rebuilds in the wake of 2011's devastating earthquake and tsunami, two kindergartens have upgraded frequently-touched surfaces such as taps and stair rails to antimicrobial copper to help protect the health of children using the facilities.

The Kanaya Kindergarten and Ojima Daycare Center installed antimicrobial copper hand rails, taps, door handles and push plates that will continuously kill

bacteria, viruses and fungi that settle on them, 24/7 and in between normal cleans.

Children have already begun benefiting from the new installations - opened in mid-March with a strong presence of local media - and the centre staff stressed the importance of infection control, especially at this time, but for the health of children and their families in general.

The Director of Kanaya Kinder-

garten, Hideko Saito, says of the installation: "The new hand rails and taps were installed right at the beginning of flu season. Many kindergartens in the city had to close down due to outbreaks, but in our kindergarten, not one child had flu. I don't know the science behind it, but I do think that might have had something to do with our copper touch surfaces."

For more information, case studies and copper installation research, please visit the website [www.antimicrobialcopper.org](http://www.antimicrobialcopper.org)

## Antimicrobial Copper Protects Children from Infectious Diseases

With influenza outbreaks on the rise, the spread of infectious diseases is a growing concern for educational institutions, and one Tokyo daycare centre is leading the way in infection prevention with antimicrobial copper.

Mejiro Daycare Center for Children, located in Hachioji City in Tokyo, Japan, uses copper alloy

touch surfaces that have inherent antimicrobial activity. Hand washing basins, taps, food serving tables, serving trolleys and door furniture have been replaced with a view to improving hygiene. Director Shoji Hiiragizawa is pleased with his decision: Director Shoji Hiiragizawa is pleased with his decision: The introduction of copper has given

us a great opportunity to educate children and parents about infection prevention. We explain to the children 'copper defeats bacteria for us', and then talk to them about what they can do to avoid infection."

Published by the Hellenic Copper Development Institute ([www.copper.org.gr](http://www.copper.org.gr))

## Redefining the role of copper in modern society

*“Until now, when we referred to copper what came to mind was an ancient material used mainly for pipes and cables.*

*Today, new, innovative and fundamental applications take front stage as the bar to cover the current requirements of our society is set very high. Recent research carried out by international scientific centres under the initiative of the International Copper Association (ICA), substantiates one more advantage to using copper, known from the ancient times. Its antimicrobial properties. These properties are useful in touch surfaces where accumulation and transfer of bacteria becomes minimal or completely extinct the first moment and up to two hours after the bacteria come into contact with copper or certain copper alloy surfaces.*

*Apart from its antimicrobial properties, we should add that copper is 100% recyclable without losing any of its properties across the entire range of applications (architecture, automotive industry, electronics, modern industry, telecommunications). Nearly 40% of total copper used in Europe is recovered from recycled material. In Asia, this percentage is 38%, in North America 32% and it is 16% in the remaining world. Copper recyclability results in up to 85% energy savings. These numbers demonstrate the significant contribution of copper in restricting the use of natural resources that would be required in primary copper production .*

*Use of recycled copper restricts the use of natural resources and reduces waste generation.*

*In summary, we could say that copper is a material with a unique combination of properties. Its contribution to the environment and sustainable development, through soft energy applications, its complete recyclability and significant role in the health sector make it a necessary material to cover the requirements of our modern society and the only material that can respond to the challenges of the times”.*

*Director of the Hellenic  
Copper Development Institute*

Copper is valuable in the health sector due to its antimicrobial properties. Increasingly more surveys on a national and international level confirm the antimicrobial properties of copper that make copper and copper alloy products the most suitable for water supply, ventilation and air conditioning applications. Furthermore, the antibacterial properties of copper have led to the replacement of other materials used on surfaces that people come in frequent contact with (e.g. door handles, handrails etc), with copper or specific copper alloys, resulting in the reduction of their bacterial load. As natural antibacterial materials, copper and copper alloy products can help against infections and contribute further to the reduction of the bacterial load of such surfaces, always in combination with modern methods of sterilization.

## 7. Society

### Launching production and marketing of Greek, certified antimicrobial copper door knobs and hand rails

Under the initiative of the Hellenic Copper Development Institute (HCDI) and in cooperation with the Greek company FITCO, a HALCOR subsidiary, antimicrobial copper alloy was provided as raw material to a Greek door furniture manufacturer, to design and sell in the Greek market the first antimicrobial door handles and hand rails. These products were certified after HCDI's approval, bearing the official antimicrobial marking Cu+. The goal of this pilot production and sale of door handles and hand rails made of antimicrobial copper alloy, is to provide an effective solution to the transfer of bacteria through touch surfaces, not only in strictly hygienic areas but also in public places such as schools, hotels, nursing homes and recreational areas.



Recent studies have proved that the development of copper plated surfaces in intensive care units and the use of antimicrobial copper in everyday life, fights off stems of germs responsible for the spreading of infections, resulting in minimizing the use of antibiotics and reducing the days and cost of patients' medical treatments.

### Installation of antimicrobial copper at the "Attikon" General Hospital

In 2011, the "Attikon" General University Hospital installed antimicrobial copper on various surfaces, such as antimicrobial copper bed railing and copper IV stands, door handles and hand rails. Similar antimicrobial copper installations were carried out at the Piraeus Hospital and the two secondary education Arsakeion schools in Ekali and Psychico, as an effective supplementary means to prevent the spreading of dangerous bacteria in the schools.

The results of scientific research encourage the spreading of antimicrobial copper installations globally.

### Copper and Mass Transport

Millions of people use Mass Transport daily. The touch surfaces and congestion help the spreading of bacteria with serious consequences to public Health and Safety. Use of antimicrobial copper on the surfaces of common areas, such as hand rails, benches and other Mass Transport surfaces can kill 99.8% of harmful bacteria within 2 hours from exposure, thus reducing the chances for transfer of the bacteria from the surfaces to the hands.

### **Chilean Subway Protected with Antimicrobial Copper**

Copper's well-known antimicrobial properties are being harnessed by subway stations in Chile, where handrails made from a copper alloy have been installed to help lower the risk of infections spreading via these high-touch surfaces. The new Santiago Bueras station is equipped with 350 metres of brass tube, each rail bearing the Antimicrobial Copper brand to verify it is capable of continuously killing bacteria, viruses and fungi that may settle on it.

With normal cleaning, this equals less contamination and consequently less risk of the next hand touching the surface picking up pathogens.

## **7.2 Copper and the Environment**

The natural properties of copper deliver added value to its applications and use. Regarding protection of the environment and natural resources, the properties and characteristics of copper constitute the profile of a metal, whose use not only does not have an environmental impact, but can also significantly contribute to its protection since it is:

- 100% recyclable: can be recycled many times over without losing any of its properties
- Extremely time resistant with long-lasting properties
- a good electric current conductor, thus increasing the efficiency of electrical applications.

Copper is highly conductive and therefore a good electrical current conductor, thus increasing the efficiency of applications and saving energy. According to published research, the energy saved through the use of copper in electrical applications (transformers, motors, etc) could reach up to 70% of the energy consumed.

Energy consumption leads to CO<sub>2</sub> emissions. Apart from saving energy, the use of copper also reduces CO<sub>2</sub> emissions. According to a study by the Motor Challenge Program, the use of copper in the manufacture of high performance motors, could lead to annual savings of 200 billion kW/h as well as reducing CO<sub>2</sub> emissions by 100 million tons, which is equivalent to 25% of the EU commitment under the Kyoto treaty.

## 7. Society

### 7.3 Enhancing Research and Training

Research and Development represents a lever for development, innovation and constant improvement. The significant investments in Research and Development and investments for optimization of production procedures implemented by the Company aim to control the quality of manufactured products on the one hand and to the development of new products on the other.

#### **Hellenic Copper Development Institute (HCDI)**

- HALCOR is a founding member and takes part in the organization of programmes for the HCDI, by providing materials and facilities for the seminars or through funding the implementation of specific programmes throughout Greece.
- Through the Hellenic Copper Development Institute, which is a constituent member of the European Copper Institute (ECI), HALCOR participates actively in significant research on the effect of copper on human health and the environment. The results of many years of research demonstrate the definite benefits in using as well as the neutral and positive effects its use has on human health and the environment. HCDI is funded and supported by the non-profit organization International Copper Association (I.C.A), a global network of 24 Copper Centres.
- I.C.A activities are implemented by regional copper centres in Europe, North and South America and Asia.

#### **ELKEME (Hellenic Research Centre for Metals SA)**

- HALCOR supports the activities of ELKEME (Hellenic Research Centre for Metals SA), aimed at developing new technologies for the use and production of steel, aluminium, copper and zinc products.

*Having developed partnerships with most universities and other higher education institutions in Greece and abroad, which conduct research on metals and materials, ELKEME contributes to student training by providing materials, equipment and trained staff for experiments, according to their study programmes.*

### 7.4 Supporting local communities

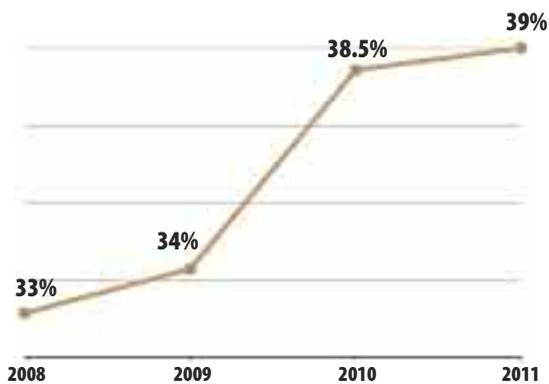
HALCOR aspires to positive and productive interaction of its business activities with the social environment within which it operates, contributing to the country's overall economic development and providing benefits to local communities with the creation of new jobs and business opportunities.

#### **Enhancing employment at a local level**

In 2011, 182 HALCOR employees were from local communities (greater Viotia and Evia region, corresponding to 39% of the company's total human resources).



**Human Resources from the local community**



**Distribution of suppliers**



### Supporting local businesses

Wherever possible, HALCOR tries to cooperate with suppliers and contractors from the local community. During 2011, 5.5% of purchasing was realised from local suppliers. Through its Corporate Responsibility strategy, HALCOR regards its suppliers as partners and bases this relationship on the principle of equal treatment, objective assessment, transparency, moral integrity, honesty, sincerity and respect.

## 7. Society

### Social Activities

HALCOR is aware of its responsibility as a member of the society, beyond the limits of its business activities. The company recognises the needs of local communities and responds with great sensitivity and various cooperation and support methods.

#### Support to NGOs

- For another year, instead of sending out corporate Christmas gifts, HALCOR chose to allocate a sum for the needs of "PNOI" (BREATH) Friends of Intensive Child Care, in support of its actions. PNOI is a non-profit organization, created to support the intensive care units (ICU) for children and infants.
- In 2011, HALCOR decided to sponsor the non-profit organization "The Smile of the Child". "THE SMILE OF THE CHILD" is a non-profit voluntary Organisation. The Organisation's main concern is defending the rights of children.

#### Supporting Educational Institutions

- HALCOR sponsored the research carried out by students of the Environmental Department of the University of the Aegean during the 2010 - 2010 academic year.
- For this reason, HALCOR offers young people (final year students at Universities and Technological Educational Institutes), on an annual basis, the ability to conduct their practical training at the Company. In 2011, HALCOR offered five internships with remuneration; these students were employed in the electrical and engineering maintenance department, in the quality control department and in the Company's accounting department.

#### Supporting Events

- In the context of promoting the Principles of Corporate Responsibility, HALCOR sponsored the July 2011 training event on Corporate Responsibility and Sustainable Development. The purpose of the event was to provide a global presentation of the integration up to now, of Corporate Responsibility and Sustainability issues in graduate and postgraduate educational programmes in Greece, so that future executives in the Greek market can through their studies, adopt a more responsible environmental and social behaviour.
- Sponsoring the publication of copper objects from the byzantine collection of the Benaki Museum. Photography of the Benaki Museum objects is finished and the book will be published in 2012.

#### Supporting local Associations and Authorities

The Company provides on-going support to local associations and authorities, responding to their requirements. In 2011:

- Support provided to the Parlia Avlida Elementary School for the purchase of fuel oil.
- Donated necessary sports equipment to the Oinofyta Gymnasium and Lykeion.
- Took part in a Tanagra Municipality initiative aimed at collecting donation items. Specifically, the Company purchased food that was distributed to families in need in the area.
- Donated copper tubes and related fittings for the heating requirements of Monastery of Agios Ioannis Theologos in Mazaraki, Thiva.
- HALCOR has a long tradition of providing support and maintaining cooperation with local authorities. In this context, the company provided stationery and other office material for the requirements of local authorities (e.g. Fire Brigade, Police Station).

## 7.5 Employee volunteer contribution

Volunteerism means social solidarity and support and that is how it is regarded by the people of HALCOR. In this context, the voluntary donation programme was successfully implemented in 2011 as well; this programme was implemented last year for the first time. The goal of the programme is to provide support to poor families through an internal employee awareness action aimed at collecting food, clothes, toys and books. The food and other items collected were delivered to the Holy Monastery of the area, which undertook distribution to families in need. It should be noted that despite the adverse economic situation, the quantity of items donated was greater than the previous year's.



### Cleaning the beach

A voluntary action to clean the Halkoutsis Beach of the Municipality of Oropos, was implemented in the fall of 2011, in the context of protecting the environment and providing support to local communities. The beach was cleaned with the voluntary participation of HALCOR employees under the guidance of the non-profit organization "HELMEDA". HALCOR is a member of HELMEDA since 2010.



### Targets for 2012

Target 2012	Responsible for implementation
 Continue the student internship programme aimed at providing work experience.	Administrative Department
 Continue and expand the volunteer actions.	Strategic Planning Department
 Support NGO actions.	Strategic Planning Department
 Provide support to local authorities.	Administrative Department

## 7. Society

### Society Our overall performance

#### Human Resources from the local community

<b>Geographic Region of Residence</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Greater Viotia Region	227	190	182
Percentage of the total human resources	34%	38.5%	39%

#### Number of Suppliers by category / origin

<b>Supplier Category</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Local suppliers	78	161	118
Total number of suppliers	1,108	1,715	1,473
Percentage of local suppliers to total suppliers (%)	7%	9.4%	8%

#### Supplier Distribution by origin level

<b>Supplier Category</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Local suppliers	78	161	118
National suppliers	773	1,116	990
International suppliers	249	404	313
Intercompany suppliers (affiliated companies)	8	34	52
<b>Total</b>	<b>1,108</b>	<b>1,715</b>	<b>1,473</b>



## 8. GRI G3.1 Indicators Table

Following is the table which links the contents of the Corporate Responsibility and Sustainable Development Report 2011 with the GRI - G3.1 indicators.

Description		Notes / Section
1.1	Chairman's statement	Message from the Chairman of the Board of Directors, Message from the General Manager
1.2	Description of key impacts, risks and opportunities	Message from the Chairman of the Board of Directors, Message from the General Manager / 1.1 Presentation – Compliance/Certifications / 1.5 HALCOR Corporate Responsibility (Communication with Stakeholders) / 2. Economic Development and Corporate Governance - 2011 Target performance, Targets for 2012 / 2.2 Corporate Governance § Governing Bodies/ 2.2 Corporate Governance § Corporate Responsibility Management / 2.3 Risk Management / 2.3 Risk Management § Main Impact, Risks and Opportunities / 3. Marketplace – 2011 Target performance, Targets for 2012 / 4. Human Resources - 2011 Target performance, Targets for 2012 / 5.2 Occupational Health and Safety Management System / 5. Occupational Health and Safety - 2011 Target performance, Targets for 2012 / 5.6 Monitoring Health and Safety Performance / Occupational Health and Safety: Our Overall Performance / 6 - Environment - 2011 Target performance, Targets for 2012/ 6.2 Environmental Management System / 6.4 HALCOR's Environmental Issues / 7.1 Copper and Health / 7.2 Copper and the Environment / Annual Financial Report – Annual Report by Board of Directors – Section D – Main Risks and Uncertainties / P. 18 Annual Financial Report 2011 - Audit Report prepared by Independent Chartered Auditor
2.1	Name of the Company	«HALCOR METAL WORKS S.A.» / 1.1 Presentation
2.2	Primary brands, products, and/or services	1.1 Presentation / 3.2 Products
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	1. Company Profile § HALCOR GROUP / 3.2 Products
2.4	Location of organization's headquarters.	1.1 Presentation
2.5	Countries where HALCOR operates	1. Company Profile § HALCOR GROUP / 3.2 Products
2.6	Nature of ownership and legal form	1.1 Presentation
2.7	Markets served	1. Company Profile § HALCOR GROUP / 3.1 Market shares / 3.2 Products - site www.halcor.gr – Investor Relations / Corporate Presentations - P. 12 / The Company's sales are oriented primarily to wholesale clients-distributors (specific international projects) rather than to retail end users
2.8	Scale of HALCOR	1. Company Profile § HALCOR GROUP / 2. Economic Development and Corporate Governance: Our overall Performance / 4.1 Human Resources Data / P. 20 Annual Financial Report 2011 (sales)
2.9	Significant changes during the reporting period	1.1 Presentation / P. 28 and P. 30 Annual Financial Report 2011 / P. 2 About The Report
2.10	Awards received in the reporting period	1.4 Distinctions- Awards
3.1	Reporting period	1/1/2011-31/12/2011
3.2	Date of most recent previous report	Corporate Responsibility & Sustainable Development Report 2011
3.3	Reporting cycle	Annual
3.4	Contact point	P. 2 About The Report
3.5	Process for defining report content	P. 2 About The Report
3.6	Boundary of the report	The Report involves all activities of HALCOR in Greece (all total number of production units as these are referred to in the Report) Subsidiaries are not included. P. 2 About The Report

Description		Notes / Section
3.7	Specific limitations on the scope or boundary of the report	P. 2 About The Report
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities	Full comparability. As in previous years, the Report does not include any data on subsidiaries / joint ventures / third parties./ P. 2 About The Report
3.9	Data measurement techniques and the bases of calculations	P. 2 About The Report / 6.4 HALCOR's Environmental Issues / 5.6 Monitoring Health and Safety Performance
3.10	Explanation of the effect of any re-statements of information provided in earlier reports	P. 2 About The Report
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	No changes have occurred / P. 2 About The Report
3.12	Table identifying the location of the Standard Disclosures in the report	P. 105 / GRI G 3.1 Indicators Table
3.13	Policy and current practice with regard to seeking external assurance for the report	P. 2 About The Report / HALCOR SA 2011 GRI Application Level Check
4.1	Governance structure of the organization	2.2 Corporate Governance
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	2.2 Corporate Governance
4.3	Number and gender of members of the highest governance body that are independent and/or non-executive members	2.2 Corporate Governance
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	2.2 Corporate Governance
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives	2.2 Corporate Governance
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	2.2 Corporate Governance
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity	The selection criteria for the members of the Board of Directors and of its individual committees are irrelevant to gender, nationality or other indicators of diversity, preventing thus any eventual discrimination.
4.8	Internally developed statements of mission or values, codes of conduct, and values relevant to economic, environmental, and social performance	1.5 HALCOR Corporate Responsibility / 2.2 Corporate Governance / 4. Human Resources § Our Commitment / 6. Environment § Our Commitment
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental and social performance, including relevant risks and opportunities	1.5 HALCOR Corporate Responsibility / 2.2 Organizational Structure / 2.2 Corporate Responsibility Management / 2.3 Risk Management / 2.3 Main Impact, Risks and Opportunities / 5.2 Occupational Health and Safety Management System / 6.2 Environmental Management System
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	2.2 Corporate Governance
4.11	Explanation of whether and how the precautionary approach or value is addressed by the organization	2.3 Risk Management / 6.1 Environmental Protection Investments and Expenditures / 6.3 Protection of the Environmental at HALCOR/ 6.4 HALCOR's Environmental Issues / Annual Financial Report – Annual Report by Board of Directors – paragraph iii
4.12	Externally developed economic, environmental, and social charters, values, or other initiatives to which the organization subscribes or endorses	P. 2 About The Report / 1.3 Participation in Organizations / 2.2 Corporate Governance
4.13	Memberships in associations and/or national/international advocacy organizations	1.3 Participation in Organizations
4.14	List of stakeholder groups engaged by the HALCOR	1.5 HALCOR Corporate Responsibility
4.15	Basis for identification and selection of stakeholders with whom to engage	1.5 HALCOR Corporate Responsibility. The process for defining stakeholder groups (categorization and prioritization) is reviewed every year by HALCOR's Corporate Responsibility Team.
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	1.5 HALCOR Corporate Responsibility
4.17	Key topics and concerns that have been raised through stakeholder engagement	1.5 HALCOR Corporate Responsibility
<b>Performance Indicators</b>		
<b>Economic Performance Indicators</b>		
Description	Materiality	Notes / Section
Disclosure on Management Approach		
EC1	Direct economic value generated and distributed	high Introduction of Economic Development and Corporate Governance Chapter/ 2.1 § Key Financials 2.1 Key Financials / 2.1 § Social Product / Economic Development and Corporate Governance: Our Overall Performance

## 8. GRI G3.1 Indicators Table

Description		Materiality	Notes / Section
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	low	No significant Financial implications on the business activities of the Company have been identified or other risks and opportunities for the organization's activities due to climate change/ 2.3 Main Impact, Risks and Opportunities, 6.4 § Climate Change
EC3	Coverage of the organization's defined benefit plan obligations	medium	4.3 Additional Benefits
EC4	Significant financial assistance received from government	medium	During the fiscal year 2011, the Company received grants of 142,658€ for investments made in the Tubes Plant. (P. 39 § Grants - Annual Financial Report)
EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	medium	The Company observes and applies the national, collective profession-related labour agreements (National General Collective Agreement). The salary offered to the vast majority of HALCOR employees is higher than the one determined by the National General Collective Agreement.
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	medium	3.8 Responsible Purchasing / Marketplace: Our Overall Performance / 7.4 Supporting Local Communities / Society: Our Overall Performance
EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation	medium	4.1 Human Resources Data / Human Resources: Our Overall Performance / 7.4 Supporting Local Communities / Society: Our Overall Performance
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in kind, or pro bono engagement	medium	7.1 Copper and Health / 7.2 Copper and the Environment / 7.3 Enhancing Research and Training / 7.4 Supporting Local Communities / 7.5 Employee volunteer contribution
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	medium	2.1 Key Financials/ 2.3 Risk Management § Impact Management and issue and action scaling / 3.8 Responsible Purchasing § Supporting local suppliers / 4.1 Human Resources Data / 7.4 Supporting Local Communities
<b>Environmental Performance Indicators</b>			
Description		Materiality	Notes / Section
Disclosure on Management Approach (DMAs)			Introduction of Environment Chapter / 6.2 Environmental Management System / 6.3 Protection of the Environment at HALCOR / 6.4 HALCOR's Environmental Issues
EN1	Materials used by weight or volume	high	Marketplace : Our Overall Performance / 6.4 § Raw Materials
EN2	Percentage of materials used that are recycled input materials	high	3.8 Responsible Purchasing / Marketplace: Our Overall Performance / 6.4 § Raw Materials / Environment : Our Overall Performance
EN3	Direct energy consumption by primary energy source	high	6.4 § Energy Use / Environment : Our Overall Performance
EN4	Indirect energy consumption by primary source	high	6.4 § Energy Use / Environment : Our Overall Performance
EN5	Energy saved due to conservation and efficiency improvements	high	6.4 § Energy Use / Environment : Our Overall Performance
EN6	Initiatives to provide energy-efficient or renewable energy based products and services	high	P. 46 Corporate Responsibility & Sustainable Development Report 2010
EN7	Initiatives to reduce indirect energy consumptions and reductions achieved	high	6.4 § Energy Use / Environment: Our Overall Performance
EN8	Total water withdrawal by source	high	6.4 § Water Use / Environment: Our Overall Performance

Description	Materiality	Notes / Section	
EN9	Water sources significantly affected by withdrawal of water	medium	The company does not operate in protected areas with wetlands and no water is withdrawn from surface waters (e.g. rivers, lakes)
EN10	Percentage and total volume of water recycled and reused	medium	N/A
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	medium	6.4 § Protection of Nature and Biodiversity
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	medium	6.4 § Protection of Nature and Biodiversity
EN13	Habitats protected or restored	low	Apart from the tree planting activities no other habitat restoration plan has been developed.
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	low	There has been no negative impact on biodiversity, since the Company does not operate in or adjacent to protected areas
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	low	There has been no negative impact on IUCN Red List species and national conservation list species, since the Company does not operate in such areas
EN16	Total direct and indirect greenhouse gas emissions by weight	high	6.4 § Climate Change
EN17	Other relevant indirect greenhouse gas emissions by weight	medium	N/A
EN18	Initiatives to reduce greenhouse gas emissions by weight	high	6.4 § Climate Change / Environment : Our Overall Performance
EN19	Emissions of ozone-depleting substances by weight	high	N/A
EN20	NOx, SOx, and other significant air emissions by type and weight	high	6.4 § Air / Environment : Our Overall Performance
EN21	Total water discharge by quality and destination.	high	6.4 § Waste / Environment : Our Overall Performance
EN22	Total weight of waste by type and disposal method	high	6.4 § Waste / Environment : Our Overall Performance
EN23	Total number and volume of significant spills	high	There have been no significant spills
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	high	6.4 HALCOR's Environmental Issues § Waste / Environment: Our Overall Performance
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	high	There have been no water discharges in protected areas. There has been no negative impact on biodiversity, since no operations in, or adjacent to, protected areas have been performed.
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	high	6.2 Environmental Management System / 6.3 Protection of the Environment at HALCOR / 6.4 HALCOR's Environmental Issues / 6. Environment: Our Overall Performance
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	high	6.4 § Raw Materials / Environment : Our Overall Performance
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non compliance with environmental laws and regulations	high	No fines or non monetary sanctions were imposed
EN29	Significant environmental impacts of transporting products and other goods and materials	high	N/A
EN30	Total environmental protection expenditures and investments by type	high	6.1 Environmental Protection Investments and Expenditure

#### Labor Practices and Descent Work Performance Indicators

Description	Materiality	Notes / Section
Disclosure on Management Approach (DMAs)		Introduction of Human Resources Chapter / 4.1 Human Resources Data / 4.2 Responsible Employment Practices/ 4.3 Additional Benefits / 4.4 Employee Assessment / 4.5 Training and Development / Introduction of Health and Safety Chapter / 5.2 Occupational Health and Safety Management System / 5.6 Monitoring Health and Safety Performance

## 8. GRI G3.1 Indicators Table

Description	Materiality	Notes / Section
LA1 Total workforce by employment type, employment contract, and region, broken down by gender	high	4.1 Human Resources Data / Human Resources: Our Overall Performance
LA2 Total number and rate of new employee hires and employee turnover by age group, gender, and region	high	4.1 Human Resources Data / Human Resources: Our Overall Performance
LA3 Benefits provided to full-time employees that are not provided to temporary or part-time employees by significant locations of operations	medium	4.3 Additional Benefits / Employees on a fixed-term contract are not entitled to additional benefits
LA15 Return to work and retention rates after parental leave, by gender	medium	The Company provides parental leaves to all employees who already have child or are about to have one. In 2011, 2 female employees took the parental leave they were entitled to. Any employee who receives a parental leave shall resume his/her work in the Company 12 months after the leave's starting date. All employees which receive such a leave continue working in the Company 12 months after they take this leave.
LA4 Percentage of employees covered by collective bargaining agreements	high	4.3 Additional Benefits / 4. Human Resources: Our Overall Performance
LA5 Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	medium	Employees are informed directly by the Company's management for every important issue concerning the Company / 4.6 Internal Communication
LA6 Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	medium	The Company's Health, Safety and Environment Council reports directly to the BoD on relevant issues that may affect the employees
LA7 Rates of injury, occupational diseases, lost days, and absenteeism, and number of work related fatalities by region and by gender	high	5.6 Monitoring Health and Safety Performance / 5. Health and Safety: Our Overall Performance
LA8 Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	medium	During 2011 no education/training programs or consultation programs on the prevention of serious diseases were organized. Such programs are scheduled for 2012
LA9 Health and safety topics covered in formal agreements with trade unions	medium	2.2 Corporate Governance - § Governing Bodies / 5.2 Occupational Health and Safety Management System / 5.6 Monitoring Health and Safety Performance
LA10 Average hours of training per year per employee by gender, and by employee category	high	4. Human Resources: Our Overall Performance
LA11 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	medium	4.5 Training and Development / 4. Human Resources: Our Overall Performance
LA12 Percentage of employees receiving regular performance and career development reviews, by gender	medium	4.4 Employee Assessment
LA13 Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	medium	4.2 Responsible Employment Practices § Discrimination and Human Rights / 4. Human Resources: Our Overall Performance
LA14 Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	medium	4.2 Responsible Employment Practices § Discrimination and Human Rights
<b>Human Rights Performance Indicators</b>		
Description	Materiality	Notes / Section
Disclosure on Management Approach (DMAs)		3.8 Responsible Purchasing § Health and Safety Provisions / Introduction of Human Resources Chapter / 4.1 Human Resources Data / 4.2 §Responsible Employment Practices
HR1 Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening	low	N/A

Description	Materiality	Notes / Section	
HR2	Percentage of significant suppliers contractors, and other business partners that have undergone human rights screening, and actions taken	low	The Company performs thorough checks in order to ensure that all Contractors' employees working in HALCOR's facilities are insured in accordance with the provisions of the law. / 3.8 Responsible Purchasing § Health and Safety Provisions
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	low	No such training was organized in 2011
HR4	Total number of incidents of discrimination and corrective actions taken	medium	No incident / 4.2 Responsible Employment Practices § Discrimination and Human Rights
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	medium	The Company respects the law and acts in accordance with the relevant legislation / 4.6 Internal Communication
HR6	Child labor	high	4.1 Human Resources Data
HR7	Forced and compulsory labor	high	4.1 Human Resources Data
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights s that are relevant to operation	medium	No such training was organized in 2011. The Company has planned to organize a training course on human rights issues in 2012
HR9	Total number of incidents of violations involving rights of indigenous people	low	No incident of human rights violation of local people has been reported or recorded to date
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	low	No risk of human rights violations on the part of the Company has been identified. Therefore, it was not deemed necessary the elaboration of a relevant specialized study
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms	low	There have been no complaints regarding the violation of human rights. It is considered that there is no such risk on the part of the Company. Therefore, the development of a relevant mechanism was not deemed necessary

### Society Performance Indicators

Description	Materiality	Notes / Section	
Disclosure on Management Approach (DMAs)		Introduction of Environment Chapter / 6.1 Environmental Protection Investments and Expenditure / 6.2 Environmental Management System / 6.3 Protection of the Environment at HALCOR / 6.4 HALCOR's Environmental Issues § Waste / Introduction of Society Chapter / 7.4 Supporting Local Communities / 7.5 Employee volunteer contribution	
S01	Percentage of operations with implemented local community engagement, impact assessments, and development programs	high	7.4 Supporting Local Communities / 7.5 § Employee volunteer contribution / The Company examines direct and indirect impacts to local communities, through the Business Plan of each investment
S02	Percentage and total number of business units analyzed for risks related to corruption	high	All business units are being systematically audited. There have been no incidents of corruption
S03	Percentage of employees trained in organization's anti-corruption policies and procedures	high	11 employees (2.4%) were trained during 2011
S04	Actions taken in response to incidents of corruption	high	There have been no incidents of corruption
S05	Public policy positions and participation in public policy development and lobbying	high	1.3 Participation in Organizations
S06	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	high	The Company does not provide any financial or in-kind support to politicians and/or political parties
S07	Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes	high	P. 38 § Provisions and P. 51 § Contingent liabilities / Assets – Annual Financial Report)
S08	Monetary value of significant fines and total number of non-monetary sanctions for non compliance with laws and regulations	high	P. 38 § Provisions and P. 51 § Contingent liabilities / Assets – Annual Financial Report)

## 8. GRI G3.1 Indicators Table

Description		Materiality	Notes / Section
S09	Operations with significant potential or actual negative impacts on local communities	high	7.1 Copper and Health / 7.2 Copper and the Environment / 7.4 § Supporting Local Communities
S010	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities	high	6.1 Environmental Protection Investments and Expenditure / 6.2 Environmental Management System / 6.3 Protection of the Environment at HALCOR / 6.4 HALCOR's Environmental Issues § Waste / 7.1 Copper and Health / 7.2 Copper and the Environment / 7.4 § Supporting Local Communities
<b>Product Responsibility Performance Indicators</b>			
Description		Materiality	Notes / Section
Disclosure on Management Approach (DMAs)			Introduction of Marketplace Chapter / 3.3 § Product Quality / 3.5 § Customer Relationship Management / 3.7 § Responsible Communication
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement	high	Copper has positive impacts in the end user's Health and Safety and for this reason the Company develops and provides appropriate products and applications towards the market. / 3.3 Product Quality / 7.1 Copper and Health
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	high	There have been no incidents of non compliance
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	high	All products are accompanied with all necessary documents, signs and labels defined by law and/or regulations / 3.3 Product Quality
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	medium	There have been no incidents of non compliance
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	high	3.5 Customer Relations / 3. Marketplace: Our Overall Performance
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	medium	3.7 Responsible Communication
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes	medium	There have been no incidents of non compliance
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	high	There have been no complaints
PR9	Monetary value of significant fines for non compliance with laws and regulations concerning the provision and use of products and services	high	There have been no fines

n/a: Not Applicable

## Global Compact – GRI Indicators Cross-Reference Table

The table below provides cross reference between the GRI indicators covered by HALCOR in this Report and the related Global Compact principles.

Areas	Principles	GRI G3.1 Indicators
Human Rights	<b>Principle 1:</b> Businesses should support and respect the protection of internationally proclaimed human rights; and	EC5, LA4, LA6-9, LA13, LA14, HR1-11, S05, PR1, PR2, PR8
	<b>Principle 2:</b> make sure that they are not complicit in human rights abuses.	HR1-11, S05
Labour	<b>Principle 3:</b> Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	LA4, LA5, HR1-3, HR5, S05
	<b>Principle 4:</b> the elimination of all forms of forced and compulsory labour;	HR1-3, HR7, S05
	<b>Principle 5:</b> the effective abolition of child labour; and	HR1-3, HR6, S05
	<b>Principle 6:</b> the elimination of discrimination in respect of employment and occupation.	EC7, LA2, LA13, LA14, LA15, HR1-4, S05
Environment	<b>Principle 7:</b> Businesses should support a precautionary approach to environmental challenges;	EC2, EN18, EN26, EN30, S05
	<b>Principle 8:</b> undertake initiatives to promote greater environmental responsibility; and	EN1-30, S05, PR3, PR4
	<b>Principle 9:</b> encourage the development and diffusion of environmentally friendly technologies.	EN2, EN5-7, EN10, EN18, EN26, EN27, EN30, S05
Anti-Corruption	<b>Principle 10:</b> Businesses should work against corruption in all its forms, including extortion and bribery.	S02-6

## Report GRI Application Level

This HALCOR Corporate Responsibility and Sustainable Development Report has been compiled in line with the requirements of G3.1 B+ application level of the Global Reporting Initiative. Aimed at increasing the quality of accountability and transparency, HALCOR assigned the GRI level check to an external verification institution. The statement of the external verification institution is presented below.

Report Application Level	C	C+	B	B+	A	A+	
<b>Standard Disclosures</b>	<p><b>G1: Goals</b> Statement</p> <p>Report on: 1.1 2.1-2.10 3.1-3.8, 5.1-5.10 4.1-4.4, 4.7-4.10</p>	<p>Not required</p>	<p>Report on all relevant issues by level of plan:</p> <p>1.2 2.2-2.9 3.1-3.8, 5.1-5.10 4.1-4.4, 4.7-4.10</p>	<p>Report on all relevant issues by level of plan:</p> <p>1.2 2.2-2.9 3.1-3.8, 5.1-5.10 4.1-4.4, 4.7-4.10</p>	<p>Report on all relevant issues by level of plan:</p> <p>1.2 2.2-2.9 3.1-3.8, 5.1-5.10 4.1-4.4, 4.7-4.10</p>	<p>Report on all relevant issues by level of plan:</p> <p>1.2 2.2-2.9 3.1-3.8, 5.1-5.10 4.1-4.4, 4.7-4.10</p>	<p>Report on all relevant issues by level of plan:</p> <p>1.2 2.2-2.9 3.1-3.8, 5.1-5.10 4.1-4.4, 4.7-4.10</p>
		<p><b>Report Extensivity Assessed</b></p>	<p><b>Report Extensivity Assessed</b></p>	<p><b>Report Extensivity Assessed</b></p>	<p><b>Report Extensivity Assessed</b></p>	<p><b>Report Extensivity Assessed</b></p>	
	<p><b>G2: Management Approach</b> Disclosures</p>		<p>Management approach Disclosures for each material category</p>				
	<p><b>G3: Performance Indicators</b> General Supplement to Performance Indicators</p>	<p>Report on a minimum of 12 Performance Indicators, including 10 indicators from external sources, Social and Environmental</p>	<p>Report on a minimum of 12 Performance Indicators, at least one for each materiality, Environmental, Human Rights, Labor, Society, Access to Resources</p>	<p>Report on a minimum of 12 Performance Indicators, at least one for each materiality, Environmental, Human Rights, Labor, Society, Access to Resources</p>	<p>Report on a minimum of 12 Performance Indicators, at least one for each materiality, Environmental, Human Rights, Labor, Society, Access to Resources</p>	<p>Report on a minimum of 12 Performance Indicators, at least one for each materiality, Environmental, Human Rights, Labor, Society, Access to Resources</p>	

The photographs used for this Report are from shots taken by the photographer Spyros Charaktinos as well as by Anastasios Liatis and George Mavraganis.

The paper used for this Report has been produced from FSC sustainable management forests and plantations and contains 60% pulp from recycled paper.

## 9. HALCOR SA 2011 GRI Application Level Check



### Information on the Assurance Statement

The Assurance Provider TÜV AUSTRIA HELLAS ('the Provider') has been engaged to provide external assurance on the disclosures published in the Sustainability Report 2011 ('the Report') of HALCOR S.A. ('the Company'). The Company is exclusively responsible for the data and information within the Report. The assurance process was conducted by the Provider in terms of sample-based audits of data and information as well as audits of data collection systems and procedures.



The Provider has not offered any consulting services to the Company, apart from the audit of Management Systems.

### Scope of Assurance

The Provider undertook the following tasks during May 2012:

1. Review of the Report's content against the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines G3.1 and confirmation of the application level (GRI Application Level Check).
2. Data checks for the Report's chapters under the title "Human Resources" and "Health & Safety".
3. Visits in the Company's factory for production of copper tubes and the foundry on the 24th & 25th of May, for the implementation of verification and sampling inspections of files in order to evaluate:
  - the reliability and accuracy of performance indicators of the Sustainability Report
  - the processes for generating, gathering and managing information included in the Report.

### Conclusions

During the assurance engagement, it was confirmed that the data and information are accurate and reliable. The accuracy of the disclosed statements and assertions was found to be within acceptable limits. The Company provided a comprehensive and proper presentation of performance on the basis of reasonably documented information as well as that there is an effective data gathering, management and reporting system in place for issues which pertain to sustainable development.

The Provider concurs that the criteria for GRI Application Level 'B+' have been met.

### Opportunities for Improvement

Based on the observations and concluding remarks derived from the assurance engagement, the Provider's recommendations for the improvement of the Company's future Sustainability Reports are as follows:

- ☞ Provision of information for additional GRI G3.1 indicators in order to accomplish Level A.

- ☞ Assurance of additional chapters in order to extend the report's validity.
- ☞ Assurance of the Report's qualitative information too.
- ☞ Documentation of the procedure concerning the identification and evaluation of key sustainability issues.
- ☞ Documentation of the procedure concerning the identification and selection of related third parties.

On behalf of TÜV AUSTRIA HELLAS,  
Athens the 18th of June 2012

Sifakis Nikolaos  
Lead Auditor



Kallias Yiannis  
General Manager







## 10. Communication Form

HALCOR always pursues open, two-way communication with all stakeholders associated with its activities. You may list any issues and concerns you may have regarding your cooperation with HALCOR; by filling out and forwarding the questionnaire below, you are helping us improve our performance and the Company's Annual Corporate Responsibility and Sustainable Development Report:

### Which HALCOR stakeholder group do you belong to?

- Employee
  Local Society
  State / Institutional Authority  
 Shareholder / Investor
  Supplier
  Media  
 Customer
  NGO
  Other:

### What is your overall impression on the Report?

CRITERIA / CHARACTERISTICS	Excellent	Very Good	Average	Needs Improvement
Coverage of basic subjects regarding the Company's operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data comparability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data transparency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Balance between sections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate Responsibility Targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Actions per Corporate Responsibility priority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference to international standards and systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of finding information of interest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Graphic presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### In which of the following sections of the Report did you find particularly useful and important information regarding HALCOR?

SECTIONS OF THE REPORT	Very Useful	Needs Improvement
Message from the General Manager	<input type="checkbox"/>	<input type="checkbox"/>
Company Profile	<input type="checkbox"/>	<input type="checkbox"/>
Economic Development and Corporate Governance	<input type="checkbox"/>	<input type="checkbox"/>
Marketplace	<input type="checkbox"/>	<input type="checkbox"/>
Human Resources	<input type="checkbox"/>	<input type="checkbox"/>
Occupational Health and Safety	<input type="checkbox"/>	<input type="checkbox"/>
Environment	<input type="checkbox"/>	<input type="checkbox"/>
Society	<input type="checkbox"/>	<input type="checkbox"/>
GRI Indicators Table	<input type="checkbox"/>	<input type="checkbox"/>

### In your opinion, does the HALCOR Corporate Responsibility Report contain sufficient information in providing an overall picture of its activities?

- Yes
  No
  Needs Improvement

Was there any information or data on the Company that you looked for and is not included in the Report?

---



---



---



---

Please describe basic concerns or issues you have identified during your cooperation with the Company which you wish to communicate.

---



---



---



---

What actions do you suggest the Company should take to respond to your concerns?

---



---



---



---

**Personal Details (optional):**

Full name: \_\_\_\_\_  
 Company/Organization: \_\_\_\_\_ Address: \_\_\_\_\_  
 \_\_\_\_\_ Tel./Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Please return this form by post to:**

HALCOR  
 Attention Mr G Mavraganis, Strategic Planning and Corporate Responsibility Manager  
 57th km Athens - Lamia National Road, GR 320 11 Oinofyta, Viotia, Greece e-mail: [csr@halcor.vionet.gr](mailto:csr@halcor.vionet.gr)  
 or fax to 22620 48910.

All data submitted on this form will be used exclusively for internal assessment by the Strategic Planning Director and Corporate Responsibility Department of HALCOR. All personal data is protected as defined by law.

**Useful Contact Information:**

- Domestic Market Sales Department - [domestic@halcor.vionet.gr](mailto:domestic@halcor.vionet.gr)
- Export Department, Copper Tubes Installations - [installations@halcor.vionet.gr](mailto:installations@halcor.vionet.gr)
- Export Department, Industrial Copper Tubes - [industrial@halcor.vionet.gr](mailto:industrial@halcor.vionet.gr)
- Marketing Department - [marketing@halcor.vionet.gr](mailto:marketing@halcor.vionet.gr)
- Supply Chain Department - [supplychain@halcor.vionet.gr](mailto:supplychain@halcor.vionet.gr)
- Strategic Planning Department (Corporate Responsibility issues) - [csr@halcor.vionet.gr](mailto:csr@halcor.vionet.gr)
- Human Resources Department - [hr@halcor.vionet.gr](mailto:hr@halcor.vionet.gr)
- Financial Department - [finance@halcor.vionet.gr](mailto:finance@halcor.vionet.gr)