

A large, stylized, light gray 'C' logo that frames the central text. The 'C' is composed of two overlapping, rounded shapes that create a continuous, open loop.

ENVIRONMENTAL
REPORT 2014
Eighth Edition

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1

General information

- 7 Chairman's Letter
- 8 Introduction
- 9 Lean and Green
- 10 Approach to sustainable development
- 11 Corporate Social Responsibility
- 12 Cementir Group
- 13 Key indicators
- 16 Waste management activities
- 19 Governance
- 22 2014 Performance

2

Environmental performance

- 26 The cement production cycle and environmental features
- 34 The ready-mixed concrete production cycle and environmental features
- 37 Innovation, Research and Development

3

The people and the environment

- 42 Health and safety
- 46 The environment

- 49 Glossary





General information

- 7** Chairman's Letter
- 8** Introduction
- 9** Lean and Green
- 10** Approach to sustainable development
- 11** Corporate Social Responsibility
- 12** Cementir Group
- 13** Key indicators
- 16** Waste management activities
- 19** Governance
- 22** 2014 Performance



Chairman's Letter

For players on the international scene like Cementir, being on the market implies accepting a competitive challenge on several fronts.

Product quality, logistic efficiency and productivity, are all growth enablers requiring companies to be more sensitive to different issues and a willingness to embark on new initiatives.

The environmental challenge, the exploitation of human resources and growth policies therefore become key elements of a global strategy that considers the industrial contribution of a company as an added value for an entire society.



This is why the 8th edition of the Environmental Report is considered an added value together with the Financial Statement and a useful tool, describing another aspect of the Group's activity, the one that focuses on people and the environment.

This approach has led us to adopt "Lean and Green", a value map based on the key value "special", since we want all the links in our production chain to be special, from supplier and client relations to the services offered. This philosophy underpins the "Lean Six Sigma", our ambitious project that involves the entire Group and aims to create a company culture based on operational improvement and increasing client satisfaction. The primary objectives of this project are to invest in the daily use of our resources, to train future leaders and to be committed to improving the businesses and the communities in which we operate.

All this within the general framework of a Group that is strongly committed to the environmental challenge, seen not only as a way of showing respect for the ecosystem that hosts our work, but considered as a further opportunity for development, as shown by the technologies that produce renewable energy through waste recycling.

During 2014 the Group chalked up a series of positive results in terms of an increased usage of alternative fuels and raw materials, continued compliance with environmental certifications, and reduced severity rates of work accidents. All these objectives will be pursued and bettered during 2015.

This confirms our strong commitment towards attaining high quality standards that ensure modern, correct and sustainable industrial progress.

Francesco Caltagirone Jr.
Chairman and Chief Executive Officer

A handwritten signature in black ink, appearing to be 'F. Caltagirone Jr.', written in a cursive style.

Introduction

Through this Environmental Report, the Cementir Group seeks to provide a clear, transparent and immediate usable overview of its most important environmental and social initiatives pursued, and an analysis of the environmental impact of its operations performed over the course of 2014.

The document is addressed to all of its stakeholders that directly or indirectly interact with the Group.

The report is divided into three parts:

- Introduction to the Group: contains a profile of the Group, its governance, institutional structure and performance for the year.
- Environmental performance: this section contains the assessment of the primary environmental impact of the activities carried out for all the cement production facilities in Italy, Turkey, Denmark, Egypt, Malaysia and China and for all the ready-mix concrete production facilities in Italy, Turkey, Denmark and Norway.
- Activities for the environment and safety: presentations of projects and activities undertaken for the environment, safety and for the community where the Cementir Group operates.

The various sections of the Environmental Report include examples of specific projects undertaken by the Cementir Group to improve environmental performance and ensure health and safety in the workplace.

QUARRY OF SPOLETO - ITALY



Lean and green

VALUE MAP

Our key value is "Special", since for our company "special" must be our commercial relations, our products and services offered to our clients and to companies. In detail:

Special People

We encourage diversity (many nationalities, diverse backgrounds, different perspectives).

- **RELIABILITY** clients and stakeholders trust us and we have many long standing clients.
- **COMPETENCE** high level of skills/competences in our field.
- **TRANSACTIONAL EXCELLENCE** we are the only cement, aggregates, waste and RMC company undertaking Lean Six Sigma as a company-wide tool.
- **INVENTORS** a mindset to improve are distinctive features of our people.



Special sustainability

- **ENVIRONMENT** we are an environmental-friendly company.
- **CEMENT** 42% of energy comes from renewable sources in Denmark is one of the highest in the industry; we supply heat to nearby communities.
- **WASTE TREATMENT** we are environmental-friendly to the point that we have invested a significant sum to develop green technology in waste to energy, something that set us apart from the rest of the industry.
- **READY-MADE CONCRETE** we introduced flyash mixed in receipts at our plants to minimize our footprint on CO₂ in Scandinavia.



Society

We provide employment and growth to local communities and we create further economic impact on both up and downstream activities as well as through our suppliers.



Creating value for shareholders

We create value for our shareholders. Our ROCE and ROE indexes have improved in the last 3 years: ROCE has increased from 3.2% in 2012 to 7.4% in 2014, ROE has increased in the same period from 2.2% to 7%.



Sustainable development approach

For our Group, environmental performance is a crucial aspect of our business, which allows us to evaluate the way and quality with which we operate.

This is why Cementir places considerable attention on research, innovation, and the introduction of an organizational approach that makes sustainable development one of its main points of interest.

In fact, the Group's management is well aware that in order to continue operating in this industry, we must deal with the fact that we live in a world of limited resources, where an ethically-sustainable approach is required.

Cementir Holding seeks to achieve sustainable development by continually improving its financial, environmental and social performance.

Guidelines

Cementir Holding promotes financial, social and environmental development by:

- complying with applicable legislation and local regulatory standards;
- respecting human resources by ensuring a healthy, safe workplace;
- promoting and adopting clean technologies;
- reducing the environmental impact of individual products;
- developing eco-sustainable products;
- setting improvement targets;
- involving and continually training employees to achieve targets;
- increasing transparency and promoting a dialogue with customers, suppliers, employees, local communities and shareholders.

To achieve the goals stated in the above guidelines, Cementir Holding is committed to:

- developing, implementing and maintaining an environmental management system in all the Group's manufacturing plants;
- sharing its sustainable development policy, objectives and action plans by publishing a periodic Report;
- formulating and using environmental performance indicators to monitor the extent to which the set targets have been achieved;
- improving the environmental performance of plants through:
 - controlling and reducing all types of emissions;
 - controlling energy consumption
 - engaging in technological research focusing on the use of alternative fuels in manufacturing, thus reducing the consumption of fossil fuels;
 - controlling and reducing the consumption of water and controlling the drainage of waste water;
 - controlling noise emissions;
 - preventing and responding to emergencies that have an environmental impact.
- preventing accidents and injuries through workplace studies and verification, health and safety surveys and action plans.



Corporate social responsibility

The Cementir Group has long pursued a sustainable approach to its business in the belief that acting with respect for environmental and social values creates lasting value for the Company and its stakeholders. An important element of this process is publication of the annual Group Environmental Report, now in its eighth edition, in which we clearly explain to our stakeholders who we are, what we do, what strategies we have chosen and what progress we have made in terms of economic, environmental and social sustainability.

All employees are required to follow a Corporate Social Responsibility policy that lays out a set of principles, conducts and actions for protecting the environment, society and the health of workers. The Group companies are in full compliance with the laws and regulations of the countries in which they operate, following a policy of social and environmental responsibility that translates into effective programs and actions ranging from improving production processes to projects that benefit local communities.

In 2011, the Group's concern for the environment and issues relating to climate change and atmospheric emissions took the form of, among other things, joining the Carbon Disclosure Project (CDP), a non-profit organisation operating on behalf of 722 institutional investors that manages USD 87,000 million in assets, which conducted a study of 4,000 companies around the world concerning the actions they have taken to reduce the effects of climate change.

For more than twenty years, Aalborg's Danish factory has provided the nearby city with about 495,000 MWh of thermal energy, capable of meeting the heating needs of more than 36,000 households.

Waste and scraps from other industries can be recycled and used as fuel and raw materials in cement production. This practice significantly reduces the overall impact on the environment and promotes the efficient use of resources.

The Group Research Centres cooperate with leading European universities for the development of new types of clinker and supplementary cementitious materials that meet the growing demand for more sustainable solutions.

In Turkey, the Çimentoş Education and Health Foundation, founded in 1986, provides financial assistance and educational materials to families and schools in partnership with the authorities of the surrounding provinces.

The Cementir Group

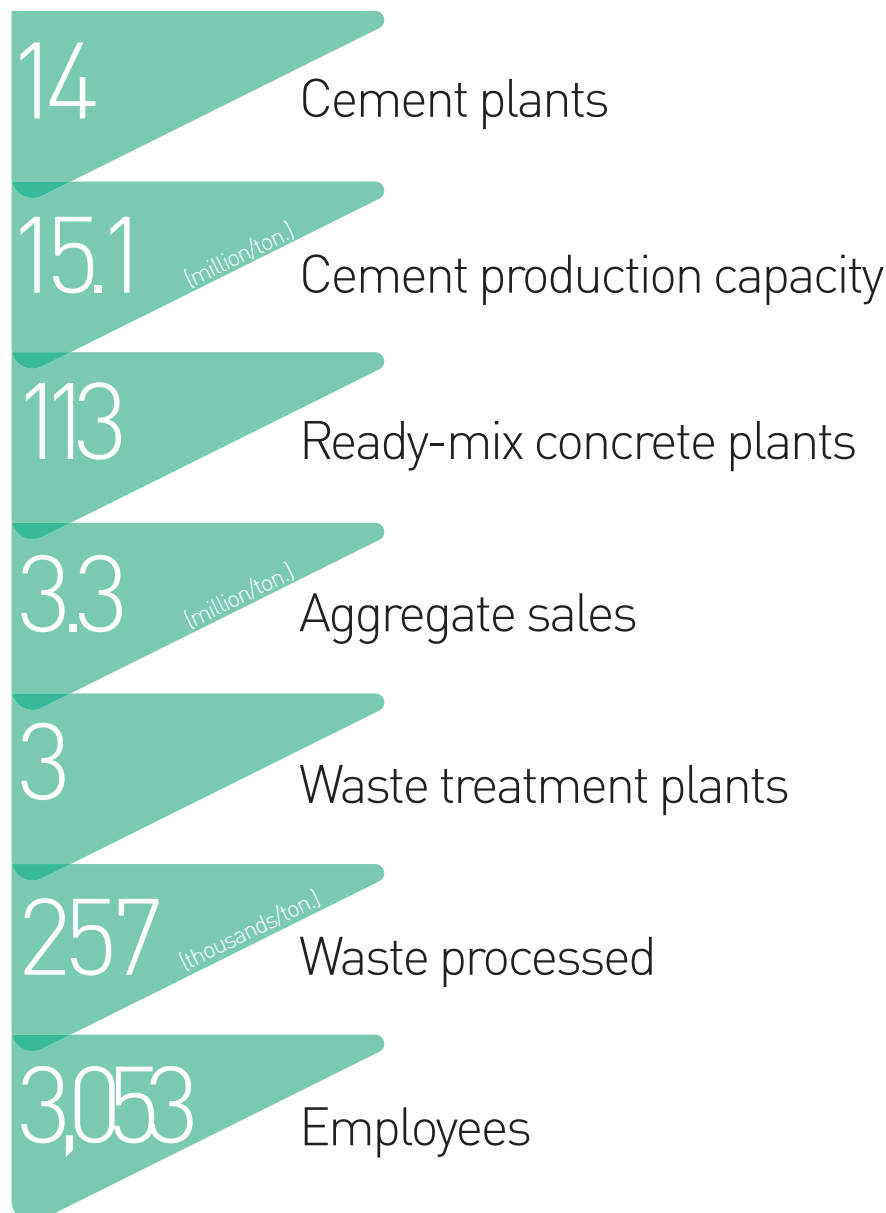
Cementir Holding is an Italian multinational company that produces and distributes white and grey cement, ready-mix concrete, aggregates and concrete products. The company is a member of the Caltagirone Group and has been listed on the Italian Stock Exchange (Borsa Italiana) since 1955, currently in the STAR segment. Through its subsidiaries Aalborg Portland, Cimentas and Cementir Italia, Cementir Holding operates in 16 countries across 5 continents, selling 9.6 million tons of cement, 3.5 million m³ of ready-mix concrete and 3.3 million tons of aggregates in 2014.

Cementir Holding is the largest producer and exporter of white cement in the world, with production sites in Denmark, Egypt, China, Malaysia and the United States. The Group's white cement factories have a capacity of 3.3 million tons and the cement produced is shipped to over 60 countries throughout the world.

Through its subsidiary, Sinai White Portland Cement, Cementir Holding runs the largest white cement factory in the world, located in El-Arish, Egypt.

On an industrial level, the Cementir Group is the sole producer of cement in Denmark, the 4th leading producer in Italy and among the top producers in Turkey, in addition to being the leading producer of ready-mix concrete in Scandinavia.

Since 2009, Cementir Holding has also been operating in the municipal and industrial waste management and renewable energy sector in Turkey and England through its subsidiary, Recydia.



Key Indicators

Cementir Group

	2014	2013	2012	Unit of measurement
Performance Indicators				
Grey and white cement produced	8,903	9,287	9,496	Metric tons/thousands
Ready-mix concrete sold	3,495	3,736	3,580	m ³ thousands
Revenues	948.0	988.6	976.2	EUR/millions
Net profit	71.6	40.1	16.5	EUR/millions
Capital expenditure of property, plants and equipment and intangible assets	66.3	81.7	87.5	EUR/millions
Employees	3,053	3,170	3,307	number

Cement production facilities in Italy, Denmark, Turkey, Egypt, Malaysia and China

	2014	2013	2012	Unit of measurement
Environment				
CO ₂ emissions per metric ton of cement produced	0.73	0.72	0.71	t/TCE
Alternative raw materials	6.70	6.68	9.01	%
Electricity consumed	3,920	4,170	4,220	tj
Direct energy consumed	30,180	32,300	32,623	tj
from alternative sources	8	7.3	6.6	%
ISO 14001 certifications	9	9	9	number

Ready-mix concrete facilities in Denmark, Norway, Turkey and Italy

	2014	2013	2012	Unit of measurement
Environment				
Raw materials	7.5	7.9	7.3	metric tons/million
% alternative raw materials	1.8	1.6	1.6	%
Water consumption	551,921	548,449	591,208	m ³
% recycled water	12.8	12.3	11.8	%
ISO 14001 certifications	1	1	0	number

Cementir Group

	2014	2013	2012	Unit of measurement
Health & Safety				
Frequency rate	16.4	13.9	17.6	
Severity rate	0.23	0.28	0.46	
Fatal accidents	2	0	0	number
Hours of HSE training per employee	11.09	11.9	6	hours/employee
HSE investments	15.3	15.6	9.6	EUR/millions
OHSAS 18001 Certifications	7	7	7	number

Global presence

Grey cement production capacity: 11.8 million t

White cement production capacity: 3.3 million t

Grey cement sales: 7.7 million t

White cement sales: 1.9 million t

Ready-mixed concrete sales: 3.5 million m³

Aggregate sales: 3.3 million t

Cement plants: 14

Terminals: 24

Ready-mixed concrete plants: 113

Quarries: 8

Cement products plants: 1

Waste management facilities: 3



Denmark

Grey cement production capacity: 2.1 million t
White cement production capacity: 0.85 million t
Grey cement sales: 1.30 million t
White cement sales: 0.56 million t
Ready-mixed concrete sales: 1.02 million m³
Aggregate sales: 0.71 million t
Cement plants: 1 (7 kilns)
Ready-mixed concrete plants: 42
Terminals: 9
Quarries: 3

Turkey

Grey cement production capacity: 5.4 million t
Grey cement sales: 4.76 million t
Ready-mixed concrete sales: 1.39 million m³
Cement plants: 4
Ready-mixed concrete plants: 14
Waste management facilities: 2

Norway

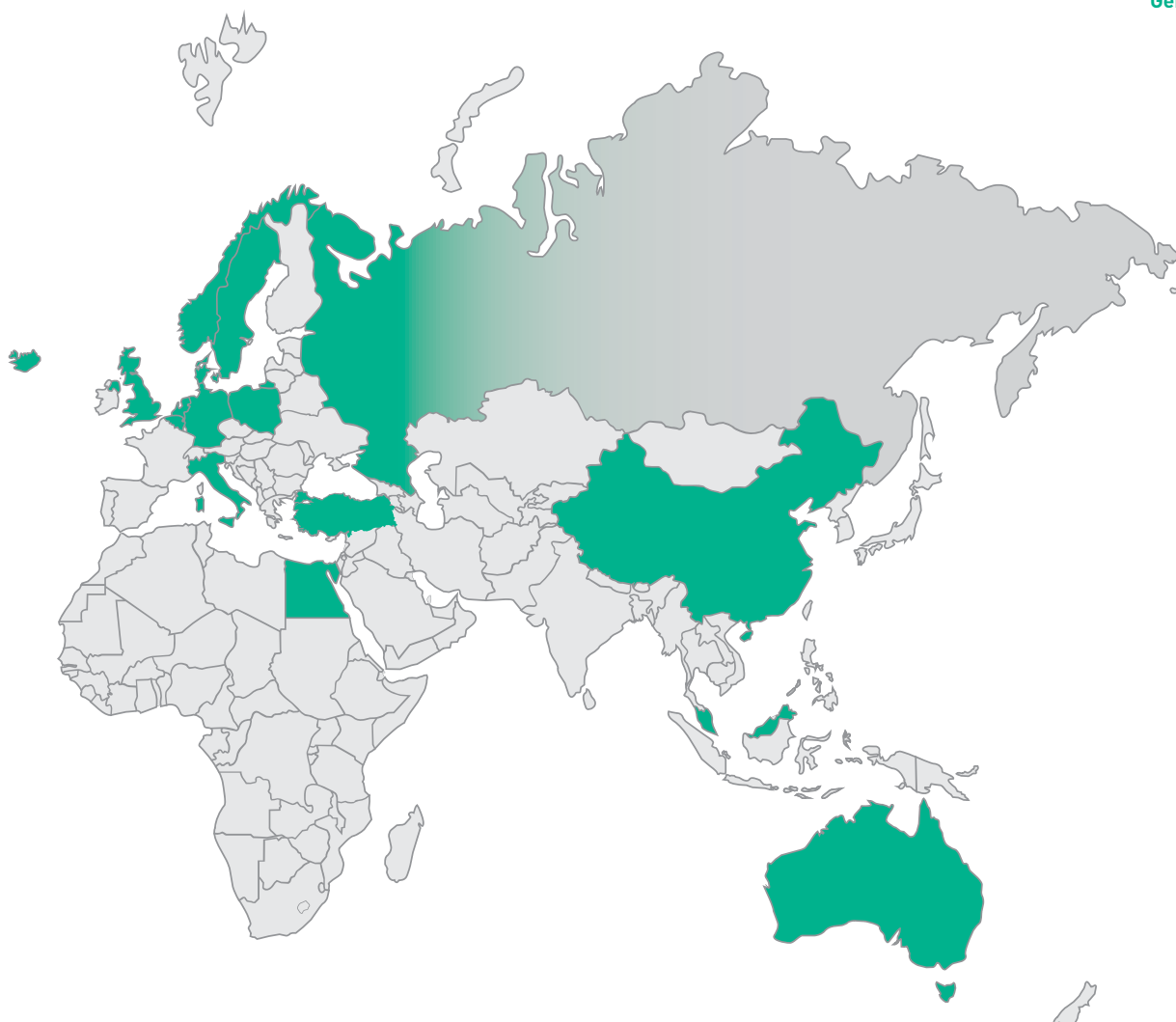
Ready-mixed concrete sales: 0.90 million m³
Ready-mixed concrete plants: 31
Terminals: 1

Sweden

Ready-mixed concrete sales: 0.15 million m³
Aggregate sales: 2.55 million t
Ready-mixed concrete plants: 10
Quarries: 5

Italy

Grey cement production capacity: 4.3 million t
Grey cement sales: 1.62 million t
Ready-mixed concrete sales: 0.04 million m³
Cement plants: 4
Ready-mixed concrete plants: 16
Terminals: 3

**Egypt**

White cement production capacity: 1.1 million t
 White cement sales: 0.53 million t
 Cement plants: 1

China

White cement production capacity: 0.7 million t
 White cement sales: 0.60 million t
 Cement plants: 1

Malaysia

White cement production capacity: 0.35 million t¹
 White cement sales: 0.19 million t
 Cement plants: 1

USA

White cement production capacity: 0.26 million t
 Cement plants: 2
 [24.5%-owned joint ventures with Heidelberg and Cemex]
 Cement product plants: 1
 Terminals: 1

United Kingdom

Waste management facilities: 1
 Terminals: 1

Australia

Terminals: 4

Germany

Terminals: 1

Iceland

Terminals: 1

Netherlands

Terminals: 1

Poland

Terminals: 1

Russia

Terminals: 1

¹In December 2014, expansion works were completed to increase cement production capacity from 0.2 to 0.35 million t.

Waste Management Activities

The Cementir group confirms its commitment in the waste management business through direct projects involving the entire production cycle and through activities carried out by its subsidiaries.

Recydia

Recydia, established in 2009, keeps on efficiently exploiting the waste cycle starting with the waste treatment, going to fuels obtained from the waste and ending with the production of renewable energy. Recydia produce alternative fuels and thermal energy using the most innovative biological technologies in order to minimize the waste disposal in a landfill.

Süreko

Süreko, the subsidiary of Recydia which is working on Industrial and Hazardous waste management, has integrated Management Systems Certifications which are ISO 9001 Quality, ISO 14001 Environmental and OHSAS 18001 Occupational Health and Safety

In 2014, Süreko collected 83,680 tons of waste from 750 customers in Turkey. 18% of whole waste is raw material to cement, 13 % is Hazardous Industrial Waste out of which alternative fuel is produced, 38% of whole waste is sent to landfill. Also, Sureko recycled 405.5 tons of packaging waste, 2,481 tons of metallic swarf and 2,048 ton of non- hazardous metal.

Süreko's Integrated Waste management high technology facility covers the following main activities and processes:

- Refuse Derived Fuel (RDF) Facility
- Industrial Waste Chemical Facility
- Energy Production from Waste
- Metal Recycling
- Package Waste Collection and Sorting
- Industrial Waste Landfill
- Industrial Waste Temporary Storage
- Waste Cable Recycling
- Household Waste Bio drying
- Waste Management Consultancy
- Waste Logistics
- Quality Control and Laboratory Services.

Süreko contributes to our Group's cement business by providing cost savings from alternative fuels, which also helps to preserve the environment with less CO₂ emissions and to prevent pollution and contamination. In this direction, within the scope of Sureko's activities in 2014, produced RDF was substituted instead of 8,860 tons coal, which corresponds to 29,250 tons CO₂ equivalent.



Hereko

Municipal solid waste are managed by Hereko the other the subsidiary of Recydia who signed, in 2011, a 25-year contract with the Istanbul Metropolitan Municipality to handle the Municipal Solid Waste programme until the year 2036. The Hereko Komurcuoda plant located in Sile/Istanbul, has an input capacity of 2,000 tons/day of municipal solid waste. Thanks to the initial investment today Komurcuoda is the largest Integrated Mechanical Biological Treatment facility in Europe and the first of its kind in Turkey.

2014 results confirm this leadership as Hereko has recycled 2086 tons of ferrous-metals, 8,067 tons of plastics, 322 tons of aluminum, 771 tons of glass and produced 34,186 tons of SRF (solid recovered fuel)

Hereko processes waste through the following processes and productions:

- Recycling
- Bio drying
- Solid Recovered Fuel (SRF)
- Plastic film pelletizing (valorisation)
- Quality control and laboratory services.

Neales Waste Management

Group operates in waste management in England through Neales Waste Management Holdings Limited (NWMH) based in Blackburn, UK, who is currently the company that controls Neales Waste Management, Neales Direct Services and Quercia Ltd.

These three companies works together in order to ensure a coherent approach and create more synergies and efficiencies.

Neales Waste Management is a leading regional supplier of waste management services throughout the north west of England, providing waste processing, recycling and disposal services in an area that spans from Lancaster, in the northern region of the country, reaching Preston, Manchester, Liverpool and Cheshire. NWM is holder of certifications including ISO 9001, ISO 14001, OHSAS 18001, Investors in People (IIP) and The Contractors Health and Safety Assessment Scheme (CHAS).

The company has two main operational divisions:

- The Blackburn operating area, responsible for providing complete waste management solutions, such as waste processing, recycling, general dry waste and hazardous waste disposal. These services are also provided on the customers' sites.
- Direct services, responsible for maintaining the contract with Lancashire County Council for the operation of two Waste Transfer Stations; in Middleton and Preston.

Quercia is the company that manages the landfill site in Clayton Hall, near Blackburn, to which residual waste is delivered by the Lancashire County Council as well as by Neales Waste Management Limited and other small waste management operators.

In 2014 133,210.72 tons of waste came in to the landfill site of Clayton Hall, of this 84,895 came from Lancashire County Council, 33,486 came in from Neales Waste Management, 14,828 from others. There was also 19,481 tons of waste recycled.



Company Bodies

Board of Directors in office for the period 2012 - 2014	<i>Chairman</i> <i>Vice Chairman</i> <i>Board Members</i>	Francesco Caltagirone Jr. Carlo Carlevaris (<i>independent</i>) Alessandro Caltagirone Azzurra Caltagirone Edoardo Caltagirone Saverio Caltagirone Flavio Cattaneo (<i>independent</i>) Mario Ciliberto Fabio Corsico Mario Delfini Paolo Di Benedetto (<i>independent</i>) Alfio Marchini (<i>independent</i>) Riccardo Nicolini
Executive Committee	<i>Chairman</i> <i>Components</i>	Francesco Caltagirone Jr. Mario Delfini Riccardo Nicolini
Control and Risks Committee	<i>Chairman</i> <i>Components</i>	Paolo Di Benedetto* (<i>independent</i>) Flavio Cattaneo (<i>independent</i>) Alfio Marchini (<i>independent</i>)
Appointment and Remuneration Committee	<i>Chairman</i> <i>Components</i>	Paolo Di Benedetto* (<i>independent</i>) Mario Delfini Flavio Cattaneo (<i>independent</i>)
Board of Statutory Auditors in office for the period 2014 – 2016	<i>Chairman</i> <i>Auditors</i>	Claudio Bianchi Giampiero Tasco (<i>standing</i>) Maria Assunta Coluccia (<i>standing</i>) Vincenzo Sportelli (<i>standing</i>) Patrizia Amoretti (<i>standing</i>) Stefano Giannuli (<i>standing</i>)
Manager responsible for the financial reports		Massimo Sala
Supervisory body (D.Lgs. 231/2001)	<i>Chairman</i>	Mario Venezia Francesco Paolucci

* Lead Independent Director

Governance

The Corporate Governance structure adopted by the Company is based on the recommendations and standards indicated in the "Codice di Autodisciplina della Borsa Italiana delle Società Quotate" (hereinafter the "Corporate Governance Code") which the Company complies with.

The Company has adopted a traditional administration and control model characterized by a Shareholders' Meeting, a Board of Directors and a Board of Statutory Auditors. The Corporate Governance system is based on the Board of Directors (as the highest body responsible for managing the Company in the interests of the shareholders), playing an essential role, on transparency in the Company's decision-making process and an effective system of internal controls.

Board of Directors

The Board of Directors of Cementir Holding SpA was appointed by the shareholders on 18.04.2012 for a term of three years (2012-2014), which shall expire upon the approval of the financial statements as of 31.12.2014. The Board is currently composed by thirteen members, the majority of which are non-executive; three are independent directors in accordance with the Corporate Governance Code.

The Chairman of the Board is vested with all powers of ordinary and extraordinary administration of the company, with the exception of those that, by law or the Company's bylaws, are reserved for the shareholders and for the Board of Directors; in the event of the Chairman's absence or other impediment the Vice Chairman shall exercise such powers.

Board of Auditors

The Board of Auditors monitors compliance with the law and the Company's bylaws, as well as compliance with the principles of sound administration in carrying out the Company's business and verifies the adequacy of the Company's organization, its internal controls system and its system of administration and accounting as well as the reliability of the accounting records in properly representing the current state of affairs.

The Board of Auditors consists of three standing auditors and three alternate auditors elected on the basis of slates submitted by shareholders all with prescribed requisites of independence and honourability and with advanced and specific professional skills.

Other Company Bodies

Other Company Bodies include: the Executive Committee, the Control and Risks Committee and the Appointment and Remuneration Committee.

The Executive Committee, consisting of a Chairman and two executive directors, has all powers exercised by the Board of Directors, except those exclusively attributed to the Board itself by law or the Company bylaws. The Internal Control and Risk Committee consists of three independent Directors.

The Appointment and Remuneration Committee, consisting of a majority of independent Directors, makes proposals to the Board of Directors for the remuneration of the executive directors and/or those covering specific roles. For example, it may suggest the use of instruments for variable incentives related to the economic results of the company and/or the achievement of specific objectives which may include stock options. They also make proposals, on the indications of the executive directors, for the determination of the criteria for the remuneration of the senior management of the company, while maintaining the specific responsibilities of the executive directors themselves.

The governance model of Cementir Holding SpA also provides for a Manager responsible for the Company's financial reports, appointed by the Board.

The Manager responsible for preparing the Company's financial reports is assigned with the powers necessary to perform his/her duties pursuant to points 2 and 3 of Article 154-bis of the Consolidated Law. Finally, the governance model adopted by the Company also provides for a Lead Independent Director who is the representative and coordinator of the requests and contributions of the non-executive directors, particularly those who are independent.

The internal control and risk management system

The Company's internal control and risk management system consists of a set of rules, procedures and organizational structures established to ensure, through the appropriate identification, measurement and management of major risks, the sound management of the Company in a manner consistent with its objectives. The Board of Directors has ultimate responsibility for the internal control and risk management system and, with the assistance of the Internal Control and Risk Committee, defines the guidelines for the internal control and risk management system that were approved at the meeting of 7 March 2013.

This document specifies roles and responsibilities of the main control bodies such as the Internal Control Committee, the appointed head of the internal control and risk management system, the Chief Internal Audit Officer and the Supervisory Body pursuant to former Italian Legislative Decree 231/2001.

The Internal Control and Risk Committee is responsible for:

- a. assisting the Board of Directors in defining and updating these guidelines;
- b. assisting the Board of Directors in evaluating the internal control and risk management system;
- c. assisting the Board of Directors, at least once a year, in approving the work plan prepared by the head of the Internal Audit, in conjunction with Statutory Auditors (and the Director in charge of the internal control and risk management system);
- d. examining periodic reports that evaluate the internal risk management control system, and those of particular relevance prepared by the internal audit department;
- e. monitoring the independence, adequacy, effectiveness and efficiency of the internal audit department that reports to the Board of Directors at least semi-annually on its activities and the adequacy of the internal control and risk management system;
- f. evaluate, together with the manager responsible for preparing the corporate accounting documents and the Statutory Auditor and the Board of Auditors, the correct application of accounting principles and their uniformity for the purposes of preparing the consolidated financial statements.

The Internal Audit Department is responsible for verifying that the internal control and risk management system is always adequate, fully operational and functional. The department reports to the Chairman, and as such is not responsible for any operating areas, nor is it hierarchically subordinate to any Head of operating areas and reports to the Director in charge of the internal control and risk management system and to the Board of Statutory Auditors on risk management and compliance with risk containment plans, along with an assessment of the suitability of the internal control system.

Organization and control model italian legislative decree 231/2001

In 2008 the company adopted an Organization and Control Model as per former Italian Legislative Decree no. 231 of 8 June 2001. The organization model, the result of the analysis of risks-violations related to the activities performed by Cementir Holding, was formulated in line with the principles set forth in Italian Legislative Decree 231/01 with Italian best practices and with Confindustria recommendations and is suitable for preventing the violations provisioned in the aforementioned regulation. Following the update of Italian Legislative Decree no. 231/01 and the introduction of new types of violations, including those indicated in Law 190/2012 regard the "Rules for the prevention and repression of corruption and lawlessness in the public administration", the Company has updated the Organization and Control Model, the contents of which were formally approved by the Board of Directors July 26, 2013.

This model represents an additional element of rigor and sense of responsibility in internal relations and with the outside world while offering shareholders adequate assurance for an efficient and fair management. The Model contains a list of procedures designed to cover risks associated with activities susceptible to or instrumental in the perpetration of violations covered by the aforementioned legislative decree.

An integral part of the model is the Code of Ethics which contains a series of guidelines on modes of conduct that may be illicit for the intents and purposes of Italian Legislative Decree 231/01 and constitutes a base on which the prevention and control system is built.

In addition to various principles of ethics and conduct, the Code regulates the protection of health, safety and the environment.

The Code was distributed to the company's staff and is available on the website www.cementirholding.it. With the adoption of the Model, the Board of Directors of Cementir Holding appointed a Supervisory Body composed of one independent external member and one internal member (Head of Internal Auditing).








The Supervisory Body is responsible for:

- a. updating the Organization and Control Model;
- b. distributing the Model;
- c. assessing the Model's actual ability to prevent the commission of violations provisioned by Italian Legislative Decree 231/01;
- d. conducting periodic checks on the actual implementation of the Model;
- e. monitoring the validity and adequacy of the Model;
- f. periodically reporting to the Board of Directors and the Board of Auditors on its activities, alerts received, measures taken to correct and improve the Model and their implementation status.

The Supervisory Body has the power to access, or delegate access on their behalf, all of the activities performed by the company and the relevant documentation.



2014 Performance

HSE Objectives	Status	Comment
To REDUCE SPECIFIC EMISSIONS		NOx emissions for t/TCE decreased by 1.7% compared to last year
		CO ₂ emissions for t/TCE increased by 1.7% compared to last year
To CONTAIN ENERGY CONSUMPTION		Thermal energy consumption for t/TCE increased by 0.4%
		Electrical energy for t/TCE increased by 1.1%
To INCREASE THE USE OF ALTERNATIVE FUELS IN MANUFACTURING		Thermal energy from alternative sources for t/TCE increased by 9.4%
		Use of recycled raw materials decreased by 5.6% compared to 2013
		Water consumption in litres per metric ton of cement produced decreased by 1.3% compared to 2013
To IMPROVE ACCIDENT RATIOS, ESPECIALLY SEVERITY RATIOS		The frequency ratio increased by 17.2% compared to 2012
		The severity ratio improved by 17.8% compared to 2013
To MAINTAIN AND INCREASE THE NUMBER OF ISO 14001 AND OHSAS 18001 AND ENVIRONMENTAL CERTIFICATIONS		The number of plants with certifications remained the same

2015 Objective

- To reduce specific emissions;
- To contain energy consumption;
- To increase the use of alternative fuels and raw materials through special projects in Italy, Denmark and Turkey;
- To maintain and increase ISO 14001 and OHSAS 18001 environmental certifications;
- To improve accident ratios.

SUREKO PLANT - TURKEY





2



Environmental performance

- 26** The cement production cycle and environmental features
- 34** The ready-mixed concrete production cycle and environmental features
- 37** Innovation, Research and Development

The cement production cycle and environmental impact

Cement is made from natural raw materials (limestone, chalk and clay) extracted from natural quarries. The raw materials, precisely measured and mixed with other materials, are ground prior to heating. The grinding process yields a raw meal. The raw meal is heated in a special kiln generally fed with fossil fuels to produce clinker, a primary component of cement.

Once cooled, the clinker is ground and mixed with gypsum and other additives (e.g. slag, fly ash) that differ based on the type of cement.

The activities performed during the various stages have a significant environmental impact, illustrated briefly here below.

Natural resources

The raw materials used in the production cycle, such as limestone, chalk and clay, are essentially natural and non-renewable quarried materials. Within this context, attention has been given to all the environmental aspects related to containing the impact on the ecosystem, restoring and recovering areas involved and using non-natural raw materials.

Energy Resources

Considerable energy is required to manufacture cement due to the high temperatures to which the kilns must be heated (1500 °C), the electricity needed to grind the product and the quantity of material used.

Air emissions

These are linked primarily to the gases tied to the combustion process and the decarbonisation of the raw materials such as carbon dioxide, sulphur dioxide, and nitrogen oxides. The burning and grinding process also generates dust emission.

Waste

The cement manufacturing process does not produce waste. The only waste products are generated by ancillary activities, such as maintenance, storage and office activities.

Noise emissions

Noise emissions are associated with certain stages of the cement manufacturing process, such as grinding.

Water supply and waste water

The manufacturing process requires limited quantities of water, essentially connected with controlling the temperature of the kiln gases and for cooling the machinery.

Transport

The methods used to transport raw materials and finished products are another point to consider when assessing the related environmental impact.

Reporting data

The Cementir Group considers respect for the environment to be a key value in its operations. Thus, complying with environmental protection laws in all the countries in which it operates, it determines its strategic choices with a view to satisfying the principles of sustainable development and promoting awareness of environmental protection among its managers, employees and other associates. The 2014 Environmental Report is the result of a multi-step process carried out by Cementir Holding through a operating group made up by the various

units that represent the areas connected with the Group's environmental and economic reports. The working group collected the data, identified the performance indicators and prepared the reports. Environmental data is reported by sending a reporting package to the plants included within the scope of reporting. These data are consolidated in individual reports in the SAP Business Warehouse.

Key performance indicators

In order to enable a composite, uniform and comparable assessment of the Group's environmental performance in terms of emissions and consumption, key performance indicators relating to production have been used. Production is reported in metric tons of Total Cement Equivalent (tTCE), an indicator related to the plant's clinker production, based on the production of clinker and the plant's average ratio of clinker/cement. This indicator was selected in consideration of the fact that the production of clinker, the primary component of cements, is the one with the greatest environmental impact. The following charts show the consolidated data for 2014, 2013 and 2012. Additional information on acronyms utilized and indicator calculation method is included in the annex in the final section of the Report.

Scope of reference

The data used to calculate environmental performance refers to all the cement manufacturing plants in:

- Italy: Maddaloni, Arquata, Spoleto, Taranto;
- Denmark: Aalborg (7 kilns);
- Turkey: Elazig, Izmir, Kars, Edirne;
- Egypt: Sinai (El Arish);
- Malaysia: Ipoh;
- China: Anqing.

The output of these plants represents about 97% of the total Group cement output for 2014.

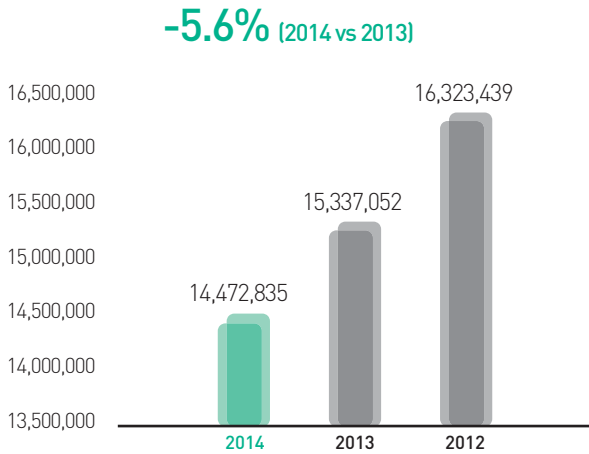
Natural Resources

The cement manufacturing process starts with the extraction of raw materials from the quarries. These are natural raw materials such as limestone, chalk, marl and clay. Raw materials are primarily used in two stages. Initially they are mixed to create the meal (first stage) for the production of clinker. Then the raw materials are added to the clinker in the cement mills (second stage) to produce the different types of cement. In 2014, the Cementir Group's plants used a total of about 14.4 million metric tons of raw materials to manufacture cement, marking a slight decline (-6%) over last year's figure.

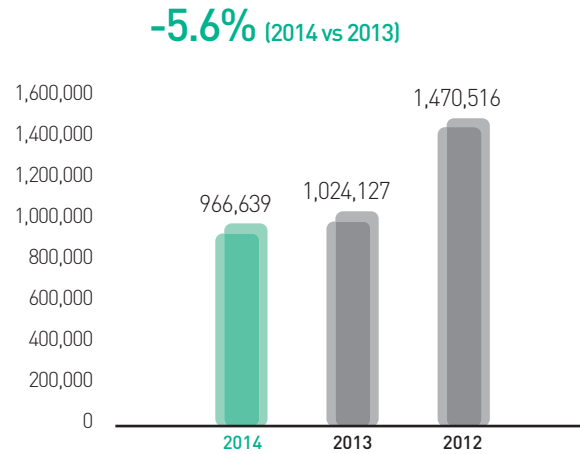
In order to contain or reduce the consumption of non-renewable raw materials, the Cementir Group promotes the use of alternative raw materials (thus called since they are not extracted from quarries but rather derive from other production processes), for example foundry sand and blast furnace slag.

In 2014 Cementir Group plants used alternative raw materials, replacing about 6.7% of the non-renewable natural raw materials. In particular, alternative raw materials used at the Aalborg, Taranto and Arquata plants made up more than 81% of the total renewable raw materials. Another strategy implemented by the plants of the Cementir Group to reduce the use of non-renewable raw materials is the internal recycling of materials, such as, for example, the dust captured by filters, which are reused in the production process as raw materials. In 2013 the Group's plants reused more than 923,000 metric tons of internally recovered materials.

Raw material consumption
(ton)



Alternative raw material consumption
(ton)



Energy Resources

The cement production process consumes considerable energy during the various processing stages. The energy used in the cement manufacturing plants is either electric or thermal. This latter is mainly used to start up and operate the kilns (1500 °C) and to operate the burners or heaters needed to increase efficiency and optimize the manufacturing process (for example, to dry raw materials and fuels). Electric energy is mainly used to operate the mills for grinding the raw materials, the clinker and fuels.

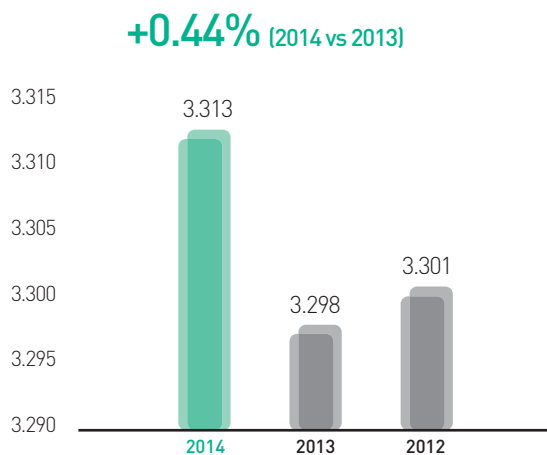
In 2014 the Cementir Group's facilities used approximately 30,180 TJ of thermal energy and 3,920 TJ of electric energy with a consumption coefficient per metric ton of cement produced, respectively equal to 3.31 GJ/tCE and 0.43 GJ/tCE. Thermal energy consumption increased by 0.44% compared to 2013 while electric energy consumption increased by 1.10%.

The thermal energy needed to manufacture cement is traditionally produced by using fossil sources (combustible oil, pet coke, coal, natural gas). The Cementir Group, in compliance with the permits issued by local authorities and the applicable legislation of the countries in which it operates, promotes the use of alternative fuels in place of traditional fossil fuels. In 2014 alternative fuels used by Cementir Group plants to generate thermal energy included: tires, animal meat and bone meal and fats, used oil, contaminated textile waste and secondary solid fuel (RDF).

In 2014 the Cementir Group used alternative fuels to produce 8% of total thermal energy. In particular, the use of such fuels was appreciable in the Aalborg plant in Denmark (approximately 30.6% for the production of grey) and the Edirne plant in Turkey (16.9%). Furthermore, in the same plant in Aalborg, a portion of the heat recovered from exhaust gases is used to heat the town. In 2014 the heat recovered was approximately 0.64 GJ per tCE produced, serving a population of approximately 36,000 households

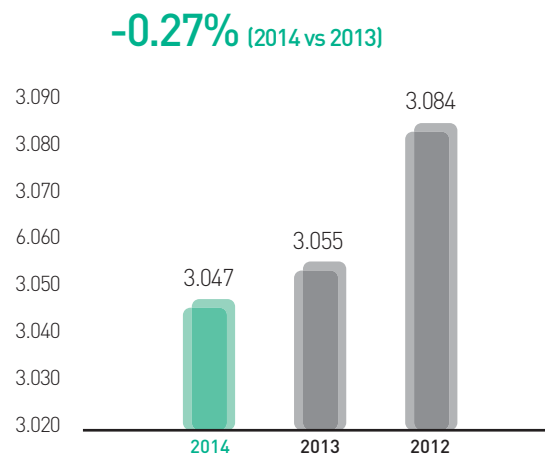
Thermal energy consumption

Thermal energy (Gj/tCE)



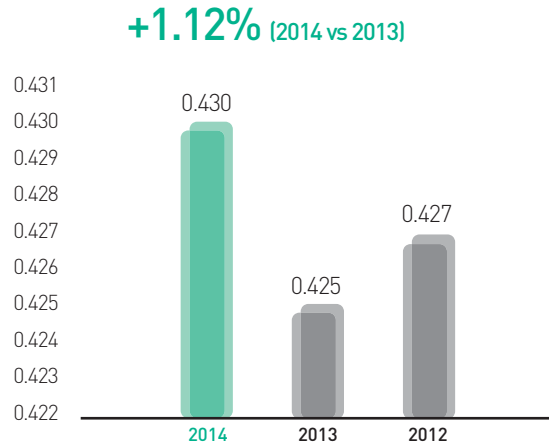
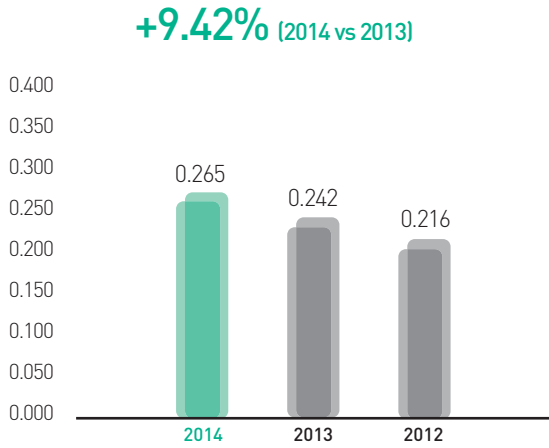
Thermal energy consumption from fossil fuels

Thermal energy (Gj/tCE)



Thermal energy consumption from alternatives fuels
Thermal energy (Gj/tTCE)

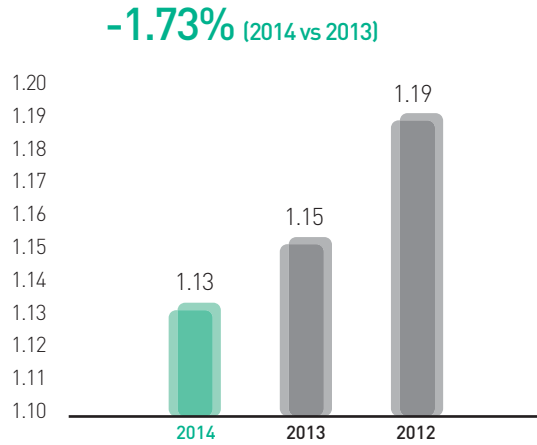
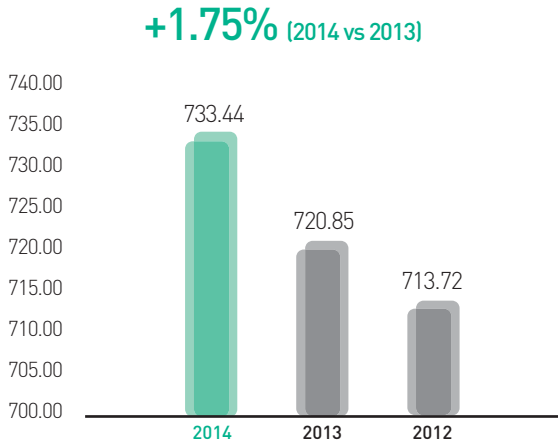
Electric Energy Consumption
Electric energy (Gj/tTCE)



Amospheric Emissions

Emission rate of CO₂
CO₂ (kg/tTCE)

Emission rate of nitrogen oxides
NO_x (kg/tTCE)



The cement manufacturing process generates atmospheric emissions, mainly carbon dioxide, dust and nitrogen and sulphur oxides.

The kiln gases are channelled and filtered prior to being released into the atmosphere. Carbon dioxide emissions (CO₂) in the cement manufacturing process are generated during the heating and pre-calcination of the raw materials and through the burning of fossil fuels.

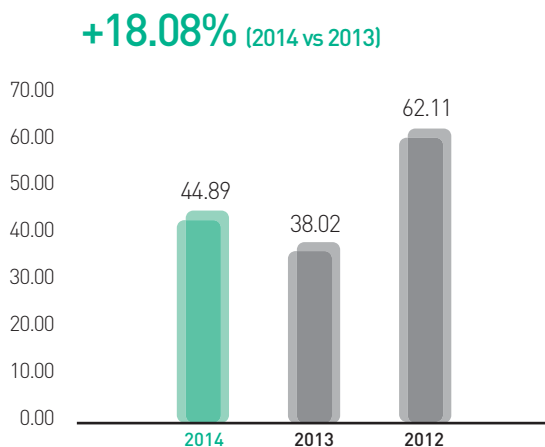
Carbon dioxide emissions by Cementir Group plants in 2014 equalled a total of 6.69 million metric tons, against a value of 7.07 million metric tons in 2013, the decrease is mainly due to reduced cement production. resulting to an emission coefficient per metric ton of cement in 2014 was 733 (kg/t TCE), substantially in line with previous year result.

Emissions of nitrogen oxides (NO_x) are linked to combustion, in particular the types of fuel used. In 2014 the NO_x emissions of Cementir Group facilities were 10,515 metric tons, equal to an emission rate per metric ton of cement (kg/t TCE) of 1.13 resulting in a 1.2% reduction from the figure from 2013. Emissions of sulphur dioxides (SO₂) are linked to the presence of sulphur in the fuels and raw materials used. In 2014, SO₂ emissions of the Cementir Group facilities amounted to 747 metric tons, equal to an emission rate per metric ton of cement (gr/t TCE) equal to 173.73, marking an increase over 2013 (+33.8 %).

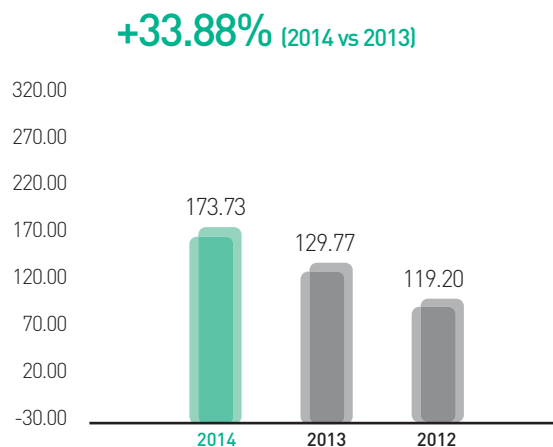
Increase is mainly due to some problems experienced in the SO₂ filtering system in one plant of the group.

In 2014, dust emission from Cementir Group facilities amounted to 418 metric tons, equal to an emission rate per metric ton of cement (g/t TCE) of 44.89.

Specific dust emissions (gr/tTCE)



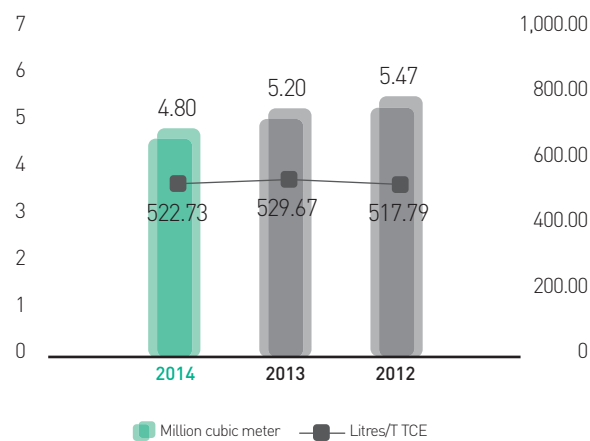
Emission rate of sulphur dioxides SO₂ (gr/tTCE)



Water supply and waste water

The impact of the cement manufacturing process on water supplies is largely tied to consumption, since the production of waste water is not significant either in terms of quantity or concentration of pollutants. In the dry cement production process, water is used primarily to cool the circuits and to control the temperature of kiln gases. In the wet and semi-dry process, water content is greater and water is vaporized during production. In 2014 the Cementir Group facilities used a total of 4.8 million cubic metres of water against 5.2 million cubic metres of water in 2013. The Cementir Group's commitment to a more efficient use of water supplies led to the installation of industrial water and rainwater recovery systems. The technology adopted resulted in an internal recycling of processing water of 5,407 thousand cubic metres, compared to a rate of 5,414 thousand cubic metres in the same period in 2013. The average water consumption per ton of cement produced in 2014 was 522.73 litres/tTCE marking a decrease over the figure recorded for 2013.

Water consumption



Transport

Production at a cement manufacturing plant involves many transport activities:

- inside the facility, to move materials;
- outside the facility, for incoming materials and fuels and outgoing products. Due to the distances covered and the related environmental impact (emissions and traffic created), outgoing transport is particularly important. It can be conducted using a variety of means of transport such as: trucks, trains, ships and conveyer belts. The choice of transport method used is primarily affected by the location of the facility and the infrastructure available in the surrounding area. In 2014 the inbound transport of materials and the outbound transport of products were mainly conducted using trucks; for the Aalborg, Izmir, Ipoh and Anqing facilities ships were also used, thanks to the existence of the necessary infrastructure.

With regard to incoming materials:

- 88.92% arrived at the facility via truck (88.57% in 2013);
- 4.68% arrived via ship (5.06% in 2013);
- 6.41% arrived via the conveyer belt that connects the quarry with the plant (6.37% in 2013).

This movement of material is considered as external transport.

In 2014, 77.18% of products exiting Cementir Group facilities were transported by trucks and 22.82% of the total by ships (in 2013 the respective figures were 77.11% and 22.89% of the total).

The following table shows the percentage of outgoing products transported by ship for the years 2014, 2013 and 2012.

Plant	Country	% of products shipped by sea		
		2014	2013	2012
Aalborg	Denmark	76.0	71.0	72.0
Izmir	Turkey	37.0	30.2	28.0
Ipoh	Malaysia	73.8	78.5	78.3
Anqing	China	51.0	51.0	51.0
Taranto	Italia	36.0	44.0	44.0

Waste

The cement manufacturing process does not produce waste, although ancillary activities, such as maintenance, storage and office activities generate waste equal to each production activity.

Waste produced at Cementir Group facilities is managed in accordance with the applicable laws in the countries in which the Group operates. Emphasis is placed on reusing and recovering materials. The total waste produced by the Cementir Group's plants in 2014 amounted to 140,523 metric tons, marking an increase over the figure reported in the corresponding period in 2013 (110,640 metric tons). The amount of waste destined for recovery was 27.6% of the total, marking an increase over the corresponding period in 2013 (23.5%).

Noise Emissions

Acoustic emissions are generated in various stages of the production process, particularly while moving raw materials and fuels and during the grinding process.

Despite the fact that the plants are located in industrial areas, thus limiting possible disturbances to the public, the Cementir Group regularly samples the noise generated by the manufacturing process in order to ensure compliance with applicable laws and to abate noise levels. The containment of noise emissions seeks to reduce the impact on surrounding buildings and to provide a better working environment for employees of the Cementir Group.



The ready-mix concrete production cycle and environmental impact

Ready-mix concrete is produced from a blend of aggregates, cement and water, with the aggregates acting as the support structure, while the cement reacts chemically with the water in order to bind the other ingredients. At times, in order to obtain particular levels of performance, such as greater fluidity or more rapid drying, various types of additives are dissolved in the water. Ready-mix concrete is packaged and produced in concrete-mixing plants, in which the mix is dosed out directly in batching plants. The mixing stage can take place directly in a pre-mixer or during transport in a cement-mixer truck, which allows keeping the product properly mixed, so that it maintains the fluidity it needs to be used in construction.

Once the concrete arrives on the work site, it is thereby ready to be used. Before being cast, the concrete often undergoes a special process known as “pumping”. This involves sending the concrete through pipes, which makes it easier for the product to reach higher locations, such as upper floors, tunnel structures, and so on.

The activities performed during the various stages have a significant environmental impact, as outlined below.

Natural resources

The raw materials used in the production cycle, such as sand and gravel of various sizes, are derived from quarried materials. Within this context, attention is placed on all the environmental aspects related to containing the impact on the ecosystem, restoring and recovering areas involved, and using raw materials.

Atmospheric emissions

Atmospheric emissions primarily include emissions connected with the transport of aggregates, the unloading of cement, and the loading of cement mixers. All emission sources are equipped with special filters that significantly reduce the dust emitted, and these filters are subject to periodic maintenance. Emissions are constantly monitored and subject to laboratory testing.

Water supply

The water used in the production of ready-mix concrete serves to bind the aggregates, cement and additives.

Noise emissions

Noise emissions are limited and associated solely with the loading of cement mixers and the transport of aggregates.

Performance Indicators

The following tables illustrate the consolidated numbers on concrete production and the consumption of raw materials and water for the years 2014, 2013 and 2012.

Scope of Reference

The data used to calculate environmental performance for the concrete segment refers to the manufacturing plants in Italy, Denmark, Norway and Turkey. The output of these plants represents 94% of the total Group ready-mix concrete output for 2014.

Natural Resources

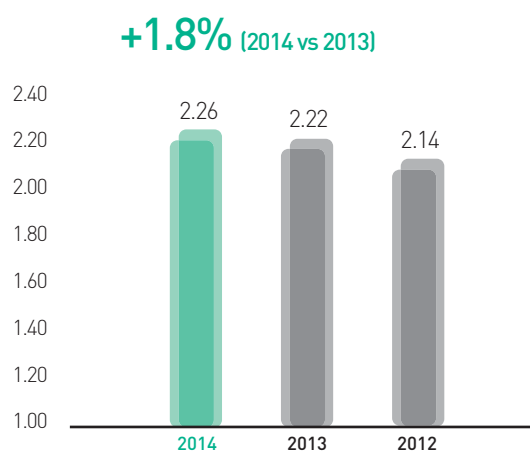
In 2014, the Cementir Group's plants used a total of about 7.5 million metric tons of raw materials to manufacture ready-mix concrete.

	2014	2013	2012
Sand	2,007,372	2,051,278	1,973,426
Cement	1,120,384	1,073,244	1,120,188
Stone	4,292,726	4,494,030	4,207,506
Other raw materials	1,338	2,000	2,400
Additives	113,203	257,818	13,892
Total	7,535,024	7,878,370	7,317,412

The approximately 4.4% decrease over 2013 is due to the proportional decrease of ready-mix concrete during the period. The raw material consumption per cubic meter of ready-mix concrete produced in 2014 was slightly higher than the corresponding figure from 2013 (+2.2%).

Non renewable raw material consumption

Raw material tonnes per cubic meter of concrete



In order to contain or reduce the consumption of non-renewable raw materials, the Cementir Group promotes the use of alternative raw materials (thus called since they are not extracted from quarries but rather derive from other production processes) for example fly ash, microsilica and other recycled materials. In 2014 Cementir Group plants, with the aim of replacing natural raw materials with alternative raw materials, used 137,520 metric tons of the latter in the production cycle, for an increase of +7.7% over 2013 (127,662 metric tons).

	2014	2013	2012
Fly ash	126,268	113,496	101,182
Microsilica	11,252	14,165	8,796
Other recycled materials	0	0	5,400
Total	137,520	127,662	115,379

Transport

Production at a ready-mix concrete manufacturing plant involves the inbound transport of raw materials and fuel, and the outbound transport of finished goods (ready-mix concrete).

In 2014 the inbound transport of materials and the outbound transport of products were mainly conducted using trucks (86%). For the Unicon facilities in Norway, about 60% of the total inbound materials were transported by sea, a figure in line with 2013 results.

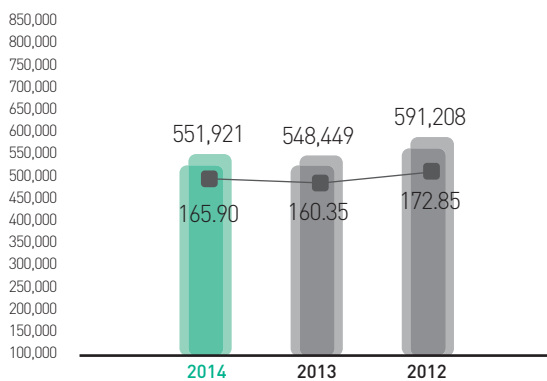
Water Supply

In 2014, water consumption equalled a total of about 0.551 million cubic meters, a figure in line with 2013 (0.548 million cubic meters). The specific water consumption per cubic meter of ready-mix concrete produced increased compared to 2013 (+3.5%), thanks to a more efficient use of available water supplies. Through the recycling and settling loops it was possible to minimize, to the extent permitted, the employment of water in the production process ensuring the reuse of process water and zero discharge. The 2014 figure is equal to 70,864 cubic meters, increased over previous year (67,634 cubic meters).

Water consumption

(m³)

+3.5% (2014 vs 2013)

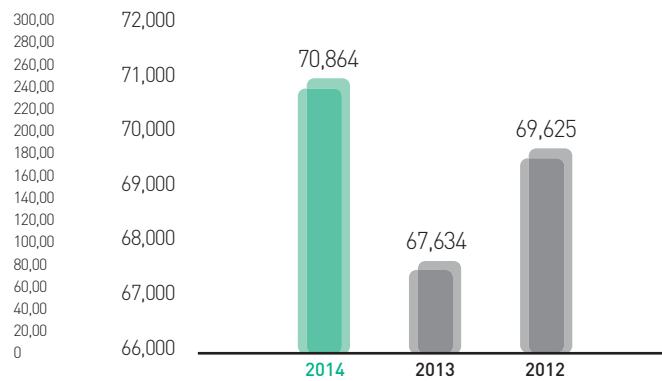


■ Water consumption in cubic meter ■ Litres per cubic metres of concrete

Recycled water

(m³)

+4.8% (2014 vs 2013)

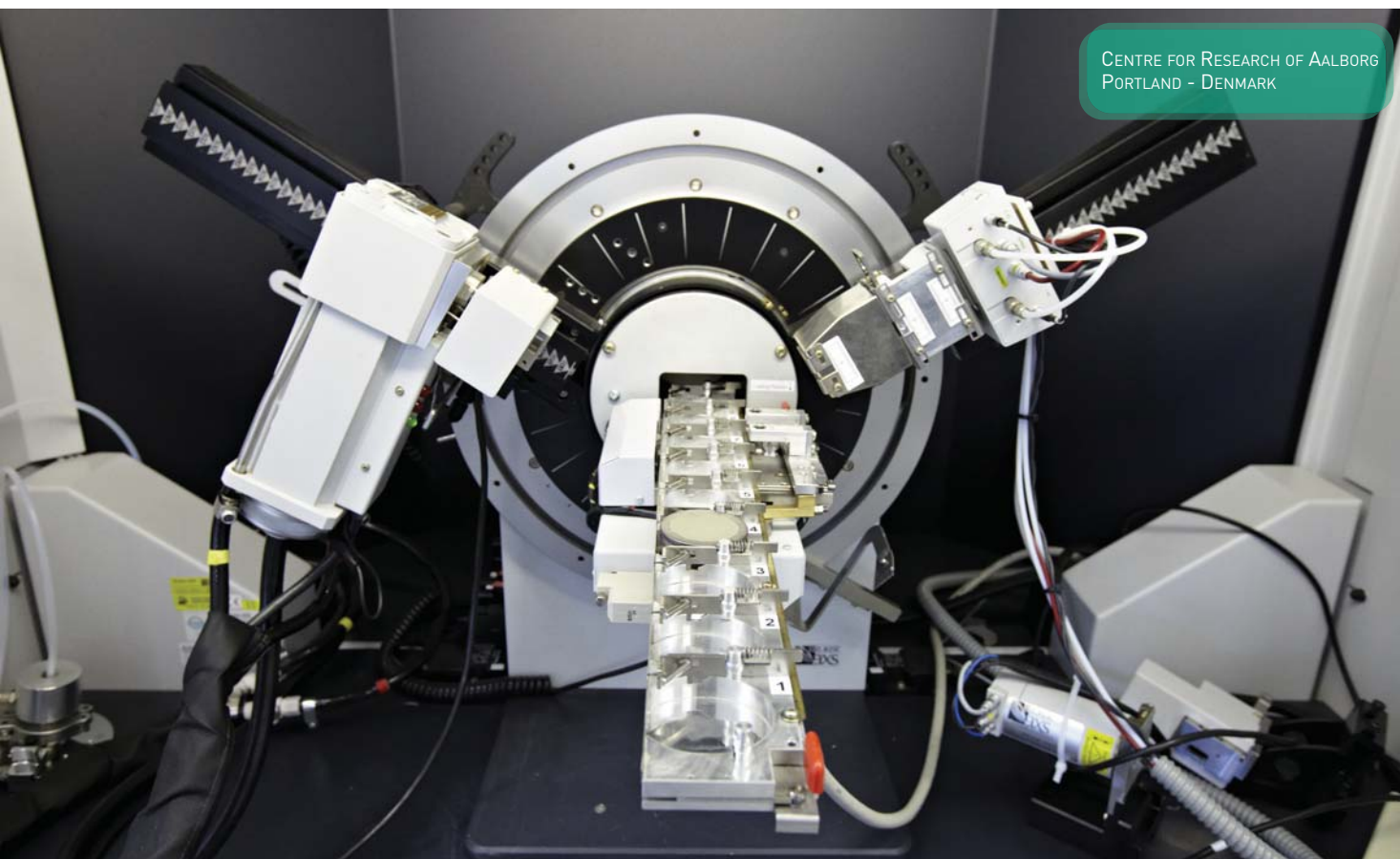


Innovation, Research and Development

Innovation, research and development are fundamental to the Cementir Holding group and are aimed at concurrently improving product quality and cutting production costs. We also seek to improve our innovative capacity by working in close collaboration with customers and all the key stakeholders, both in the traditional cement and concrete sectors and in the waste management sector. The innovative initiatives are defined and supported by an "Innovation Committee", headed by the Chairman of Cementir Holding and made up by the Group's top managers, so that the innovative methods applied by the various operating companies to their products and the production procedures can be shared on an ongoing basis. We also strive to increase our capacity for innovation through close cooperation with our customers and with all major "stakeholders", both in the traditional sectors of cement and reay-mix and concrete and in the Waste management area.

Cement and Concrete

Cement and concrete R&D centres are located in Aalborg Portland, in Aalborg (Demark), Cimentas in Izmir (Turkey) and Cementir Italia, in Spoleto (Italy). The research centres are located near the main facilities to facilitate close collaboration with the R&D specialists, namely engineers, chemists, geologists, industrial technicians and product technicians. The centres study and research cement and concrete as well as the raw materials and fuel used in production to improve product quality, production efficiency and the related environmental issues. Innovation mainly refers to the development of production processes to decrease CO₂ emissions from the cement production cycle and to extend the portfolio of value added products. The Group's aim is to cut CO₂ emissions from cement production by 30% by using locally available raw materials and different compositions of clinkers and by making greater use of biological fuels rather than fossil fuels.



Aalborg Portland and the Innovation Consortium: green transition of cement and concrete production

Aalborg Portland A/S and Unicon A/S are participants in the Innovation Consortium that aim to develop solutions that form the basis of a green transition of the cement and concrete production.

The Innovation Consortium was launched on 1st March 2014 and runs until 2018. The Innovation Consortium is co-financed by the Innovation Foundation and has a total budget of 29 million Danish crown.

The other participants in the Innovation Consortium are: Danish Technological Institute (project manager), Rail Net Denmark, Grontmij A/S, Rambøll A/S, MT Højgaard A/S, Dansk Beton Fabrikbetongruppen, DTU Civil Engineering, The Danish Road Directorate, The Danish Energy Agency, Copenhagen School of Design and Technology (KEA), Zealand Institute of Business and Technology, Lillebaelt Academy of Professional Higher Education, Via University College – Campus Horsens and Center for Betonuddannelse (AMU Nordjylland).

Consortium's challenges

The project addresses numerous current community challenges both in relation to energy optimization and reduction of CO₂ emission from heavy industries.

"Efforts to reduce the energy consumption and CO₂-emissions from production of cement take place already, and Danish concrete technology is already in front with green solutions. However, the prognoses predict that the global need for cement and concrete in 2050 is twice as much as in 2010. Thus, it is very important to continue developing a basis for a green transition of the cement and concrete production", explains project manager of the Innovation Consortium, Lars Nyholm Thrane, the Danish Technological Institute.

The project focus on both research, development, demonstration and implementation. Three full-scale demonstration projects are scheduled and these are an important part of the strategy to disseminate new knowledge about green cement and concrete production. The first demonstration project – a new highway bridge – is expected to be finished in 2016.

More than 400 Young students get their Hands in Green Concrete

To ensure the implementation of the newest knowledge, the project also focuses on knowledge dissemination and education. For instance, it is expected that approx. 400 students from Copenhagen

School of Design and Technology, Zealand Institute of Business and Technology, Lillebaelt Academy of Professional Higher Education, VIA University College - Campus Horsens, and DTU Civil Engineering should participate in concrete workshops throughout the project period to learn about green concrete. The first workshops were launched in February 2015 in the Concrete Centre at the Danish Technological Institute. The purpose is to give the students hand-on experience with the concrete and insight into the possibilities and challenges of designing and applying greener concrete, says the project manager, senior consultant Lars Nyholm Thrane from the Concrete Centre, the Danish Technological Institute. The task for the students is to design concrete which – within certain limits – fulfil different technical requirements, and which are as green as possible. Prior to the workshops, the students have worked on this – while at the workshop, the first thing they have to do is to mix and test their own concrete mix designs. It has been very exciting to work with the students and discuss green concrete and the possibilities for merging the technical requirements with a low environmental footprint, says Lars Nyholm Thrane.

Away with Barriers and Traditions

Denmark is in front with the development of new energy-efficient cement technologies, but Danish tradition of only applying well tested cement and concrete types result in the fact that it can be difficult to implement new types of cement, because knowledge about the long-term durability is not present. The project will fight these traditions, as there is a substantial development potential according to the chairman of the steering committee, Jesper Sand Damtoft, Director of the research and development at Cementir Holding.

“It is our vision to create far more environmental friendly concrete types and implement new CO₂-reduced cements that are based on naturally occurring raw materials, and which are manufactured via more energy-efficient methods. In this way we can reduce the CO₂-emission from the cement production. Cement and concrete are the world’s most widely used building material – and with good reason. Its formability and the many different surface expressions and design possibilities combined with a high thermal mass, makes the product a both societal and environmental good solution for both housing and infrastructure projects. If possible to maintain good concrete properties and reduce the CO₂-emission, we can contribute to Denmark being among the leading countries within our line of business”, says Jesper Sand Damtoft.

Other important objectives of the Innovation Consortium is to create growth and new jobs in the Danish concrete sector, and potentially export Danish knowledge and solutions within the cement, concrete and production technology on an international market. A societal challenge, which is extremely important to the participating companies.



3



The people and the environment

42 Health and safety

46 The environment

Health and Safety

Respect for the health and safety of employees represents one of the company's main objectives.

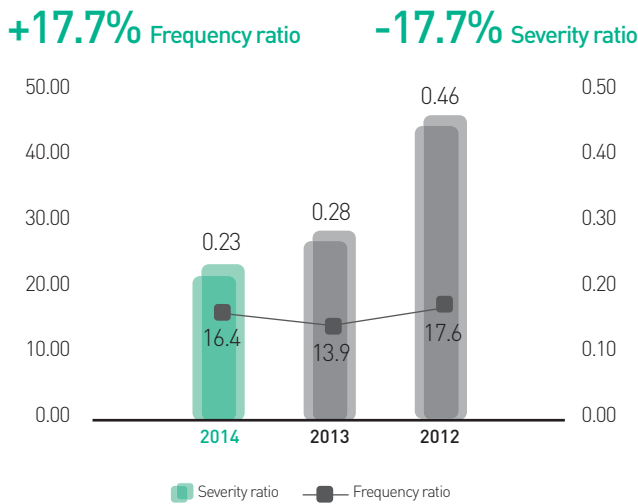
The Group uses the following tools to improve its performance:

- ongoing training on specific health and safety issues and on the proper use of machinery (see the section "Training");
- investments and expenditures on safety devices (individual and facility-wide) and machinery to maintain a high level of technology (see the section "HSE investments");
- adoption of worker health and safety management systems (see the section "Certifications").

The accident severity ratio in the Group's cement, concrete and waste plants in 2014 improved whereas the frequency severity ratio has worsened

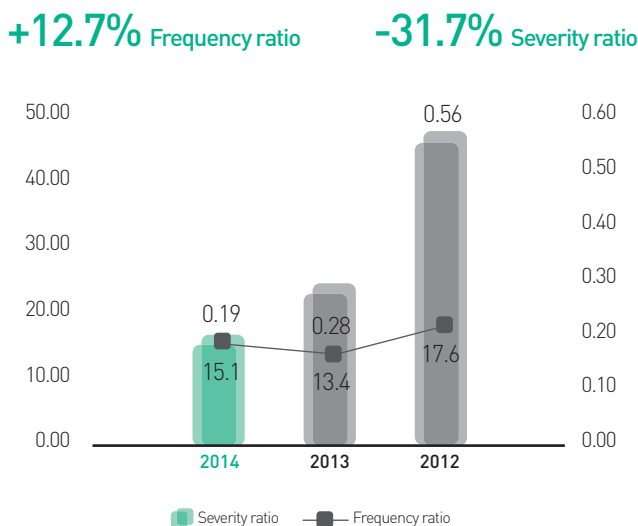
In particular, the severity ratio recorded in 2014 amounted to 0.23 compared to a rate of 0.28 (-17%) in 2013. At the same time the frequency ratio increased, going from 13.9 in 2013 to 16.4 in 2014 (+17%).

Accident ratios Group



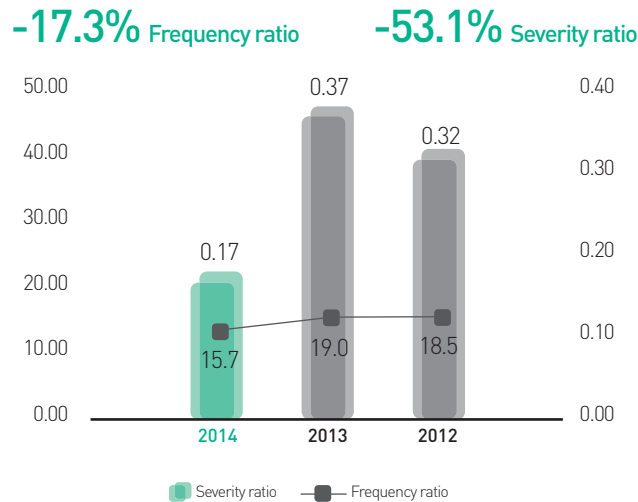
Data related to Cement plants confirm the Group trend with an improvement of severity ratio and a worsening of the frequency ratio.

Accident ratios Cement Plants



Over the last year, despite the continuous efforts taken by the Group there have been two fatal accidents in the cement production facilities. These accidents have been analyzed and some specific actions have been defined in order to minimize the risk of this happening again in the future.

Accident ratios RMC Plants



Training

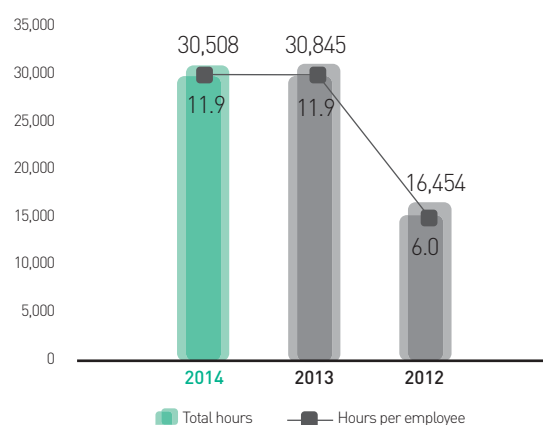
One of the keys to the Cementir Group's continual improvement of its HSE performance is training on environmental, health and safety issues.

Training programs are provided for all Group employees and are adjusted to address specific needs based on the duties of each employee in different HSE areas. In 2014, 22,085 hours of HSE training were provided at Group cement plants, corresponding to an average of 13.7 hours per employee. These figures mark an increase over the same period in 2013. With regard to the staff employed in the concrete production facilities, in 2014 the number of training hours offered in the concrete manufacturing plants were 2,429 with an average of 4 hours per worker. Both figures mark a slight decrease compared to the same period in 2013.

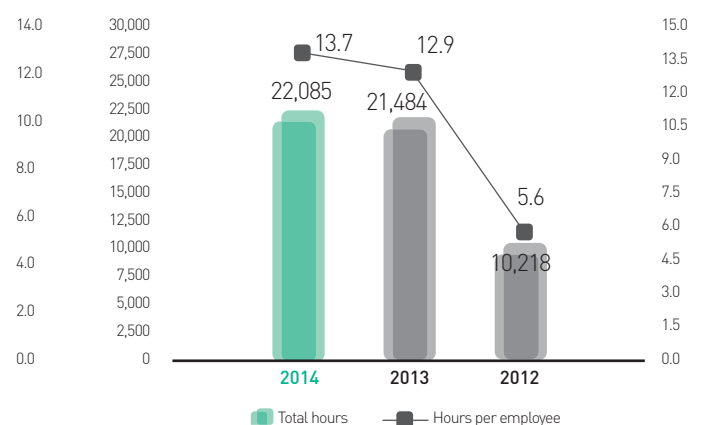
In the waste business the figures demonstrate the Group's efforts to improve performance in the areas of health, safety and the environment as training hours increased sharply from 2012 to 2013 and 2014.

Training hours were nearly 6,000 in 2013 and 2014 against a figure of 2,014 in 2012.

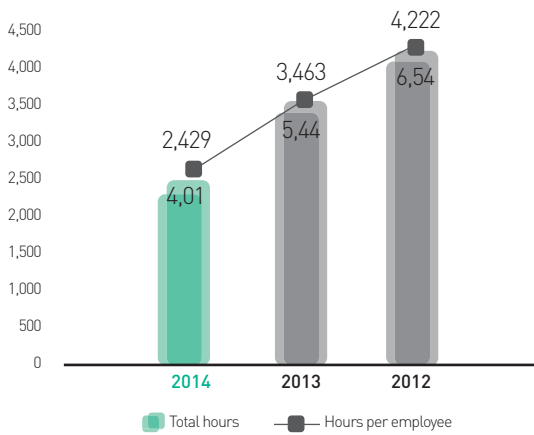
HSE training hours Group



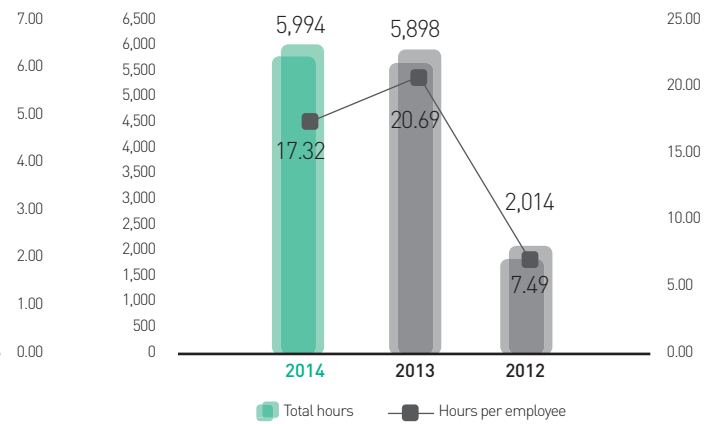
HSE training hours Cement



HSE training hours RMC



HSE training hours Waste



Certifications

The Cementir Group is active in adopting environmental management systems certified as compliant with ISO 14001 and worker health and safety management systems certified as compliant with OHSAS 18001 at its facilities in order to continually improve environmental performance and to achieve high levels of workplace safety and protection. Standard ISO50001 Energy Management System has been adopted by Aalborg Portland plant.

The following table details cement plants certified according to the above mentioned standards and to the standard EMAS and ISO 9001.

Certified plants	ISO 14001	OHSAS 18001	ISO 50001	EMAS	ISO 9001
Aalborg	x	x	x	x	x
Anqing					x
Ipoh	x	x			
Edirne	x	x			x
Elazig		x			x
Izmir	x	x			x
Kars	x	x			x
Arquata Scrivia	x				
Maddaloni	x				
Spoletto	x				
Taranto	x				x
Ready-mixed and concrete					
Unicon Danimarca					x
Unicon Norvegia	x				
Waste					
Sureko	x	x			x
Neales Waste Management	x	x			x

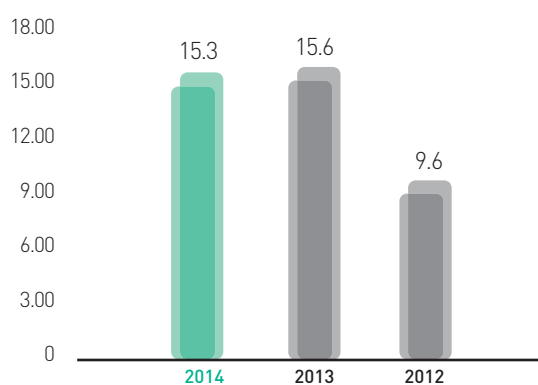
HSE Expenses and investments

The Cementir Group's commitment to Health, Safety and the Environment (HSE) is demonstrated by its financial and managerial efforts to:

- reduce the environmental impact of its manufacturing activities;
- ensure workplace safety;
- guarantee the health of workers.

HSE expenses and investments by the Cementir Group in 2014 amounted to EUR 15.35 million, substantially in line with those made in 2013. HSE investments in 2014 amounted to EUR 9.2 million, split into 8.2 million for environmental investments and 1 million of investments on safety.

HSE Investments and expenses (EUR millions)



The Environment

Kars plant

During 2014, Kars Cimento has started a project to renew the main plant dedusting system in order to meet the more strict regulation for dust emission.

The existing kiln ESP (Electro Static Precipitator) and cooler multicyclone have been replaced with state of the art bag filters, able to reduce the dust emission below 10 mg/Nm³. The kiln de-dusting system has been equipped with fibreglass bags with PTFE membrane and 10m length bags.

The new cooler dedusting system installed consist of a traditional air to air heat exchanger and polyester bag filter. The existing heat recovery boiler was included in the new system.

The new systems have been installed in September 2014, during the kiln revision time. The dedusting system has been recently commissioned with full success and dust emissions of kiln and cooler filters are now compliant with the more strict regulation. Below pictures shows the plant before and after the installation.

In the same period, the existing open clinker storage has been covered by roofing the existing clinker storage. This project will reduce drastically the dust fugitive emissions.



Elazig plant

During 2014, Elazig plant has scheduled a project to upgrade the main plant dedusting system in order to reduce the dust emission at the stack.

The existing kiln ESP (Electro Static Precipitator) has converted into a bag filter. The bag filter has been equipped with fiberglass bags with PTFE membrane and 10m length bags. The new systems have been installed in April 2014, during the kiln revision time. The whole dedusting system has been recently commissioned with full success and dust emissions of kiln has been reduced below 10 mg/Nm³.



Trakya plant

Another important environmental project is ongoing in Trakya plant. The old open clinker storage will be transformed in a clinker covered stockpile with capacity of 55.000 tonnes. This system has been designed by combining economic and ecological aspects including automatic and environmental friendly reclaiming of clinker. This project will be completed in March 2015.



Alternative fuel – reaching of a milestone

In March 2014, Aalborg Portland sent in an application regarding environmental approval of an increase of the plant handling alternative fuel. The project frame of this investment was DKK 42.0m. The application to The Environmental Protection Agency included a summary as following:

“Aalborg Portland wants to increase use of combustible non-hazardous waste (RDF) as alternative fuel replacing fossil fuel. The existing RDF transport and feeding facility has a feeding capacity of approx. 93,000 tonnes per year corresponding to approx. 34% of the total thermic energy, which Kiln 87 needs to run a full clinker production.

Today it is possible to feed RDF fuel into the two calciners of kiln 87, but not into the main burner of the kiln.

In order to increase the substitution of fossil fuel it is necessary to increase the feeding of RDF fuel into the two calciners of kiln 87 and implement a system for feeding of RDF into the main burner of kiln 87.

After implementing of the above project, it is possible to increase the feeding quantity by 25,000 tonnes RDF/per year, which will replace approx. 14,000 tonnes petcoke/per year. This will result in the fact that in total approx. 45% RDF of the total thermic energy to kiln 87 can be used.

Besides substitution of fossil fuel directly into the kiln, it will save oil for drying of petcoke and coal in the coal mill.

Increased feeding of RDF fuel will not involve significant change with regard to air emission, noise, waste and passing through of wastewater and the risk for ground pollution and ground water pollution.

The applied project will not cause percolation with subsequent ground and ground water pollution and therefore investigations of preparation of basic surveyor’s report will not be relevant.

The change stated in the application is not considered to cause change of the valid conditions of the company.”

On 21st January 2015, Aalborg Portland received settlement about environmental approval from the Environmental Protection Agency. The plant is put into operation – a milestone has been reached.





Workshop on alternative fuels

Sharing experiences and know-how together with the cement and waste teams

On 19th and 20th of November 2014, an internal Alternative Fuels workshop was performed in Turkey coordinated by Cementir Holding Group Technical Center and sponsored by Recydia and Cimentas, with the main purpose of sharing learnings and experiences with cement and waste teams altogether.

It was a good chance to learn from all participants about the potential opportunity of using alternative fuels in cement kilns and making it a much better and sustainable way to produce cement.

A research project to develop cement produced with reduced CO₂ emissions

A trial casting of a retaining wall in concrete with experimental CO₂ reduced cement has been made at Aalborg Portland cement plant nearby the gypsum storage.

Aalborg Portland has been part of a research project in the last four years to develop cement produced with reduced emission of CO₂. In order to reduce the emission of CO₂ per ton of cement, a part of the clinker is substituted by limestone and burnt clay. The project has been financially supported by Innovation Fund Denmark and has been made in cooperation with the universities in Aalborg and Aarhus. Industrial partner is FLSmidth which has produced the burnt clay.

The cement has initially been tested in the laboratory. The results were promising but testing in full scale is needed to understand the properties of the new cement in practical use.

In the next four years, Aalborg Portland and Unicon will collaborate with companies and research institutes in this project to further develop new supplementary cementitious materials, cement and concrete types. However, the positive results have already put Aalborg Portland in the forefront in the race to develop the CO₂ reduced cement of the future.

Glossary

Cement equivalent (TCE - Total Cement Equivalent): an indicator related to the plant's clinker production, calculated based on the clinker produced and the average ratio of clinker/cement for the year.

CO₂: Carbon dioxide.

Direct energy: internally produced energy.

Indirect energy: energy acquired from external sources.

g/tTCE: grams per metric ton of cement equivalent.

Joule: a unit of measurement of energy (one joule is the work required to exert a force of one Newton for one meter). A gigajoule (GJ) is equal to 1*10⁹ joules, while a Terajoule (TJ) is equal to 1*10¹² Joules.

Frequency rate*: The rate used to indicate the frequency of accidents. The numerator is the number of accidents during the year and the denominator is the number of hours worked during that year. In order to make the result more understandable, the ratio is multiplied by one million. The index yields the number of accidents per 1,000,000 (one million) hours worked.

Severity rate*: The rate used to calculate the damage caused by accidents (i.e. the severity of the consequences of workplace accidents). The numerator is the number of work days lost due to accidents and the denominator is the number of hours worked during that year. In order to make the result more understandable, the ratio is multiplied by 1,000 (one thousand).

Accident*: a chance event that occurs during work that causes permanent and/or temporary physical or mental harm or that causes the death of the worker.

PPE (personal protective equipment): all equipment designed to be worn and held by the worker to protect him/her against one or more hazards likely to endanger safety and health at work, and any other item or accessory designed for that purpose.

FPC (fire prevention certificate): certifying compliance with the regulatory requirements for fire prevention and compliance with the requirements of fire safety.

RDF (refuse derived fuel): a solid fuel obtained from the treatment of dry municipal solid waste generally collected in cylindrical blocks known as Eco Bales.

ISO 14001: a voluntary international standard that establishes requirements that must have an effective environmental management system. The ISO 14001 is a certifiable standard, which can be obtained from a certification body accredited to work within certain rules, certificates of compliance with the requirements contained therein. To be certified according to ISO 14001 is not required, but it is the voluntary choice of the company / organization that decides to establish / implement / maintain / improve its own environmental management system. Adopting the ISO 14001 standard allows an organization to identify and monitor the environmental impact of its activities to continuously improve the environmental performance, implementing a systematic approach results in the establishment and achievement of specific environmental objectives.

OHSAS 18001: It is the international standard that establishes requirements for developing a management system to protect the safety and health of workers (the abbreviation means OHSAS Occupational Health and Safety Assessment Series). The OHSAS certification verifies the voluntary implementation, within an organization, of a system that ensures adequate oversight concerning the safety and health of workers, in addition to compliance with mandatory standards.

ISO 50001: a voluntary international standard that establishes requirements for establishing, implementing, maintaining and improving an energy management system. Purpose of the system is to enable an organization to follow a systematic approach in achieving continual improvement of energy performance, including energy efficiency and energy use and consumption.

* For the calculation of the accident contained in the Environmental Report 2014:
- Only injuries longer than one day were considered (excluding injury's day);
- Commuting accidents not included.

(EMAS) Eco-Management and Audit Scheme: It is the voluntary instrument created by the EU, which can be voluntarily joined by organizations (companies, public entities, etc.) to evaluate and improve environmental performance and provide the public and other interested parties with information on their environmental management. The main priority of EMAS is to contribute to the creation of economically sustainable growth, focusing on the company's role and responsibilities. In order to obtain (and maintain) the Emas recognition (registration), the organizations must subject their environmental management system to a conformance evaluation by an Accredited Verifier, and to obtain the Environmental Declaration (and its updates, usually annual) from the same verifier.

ISO 9001: Voluntary international standard published in 1987 by the International Organization for Standardization, concerning the requirements for Quality Management System organizations in all sectors and sizes.

l/t: Litres per metric ton

m³: Cubic meter

NO: Nitric oxide

NO₂: Nitric dioxide

NO_x: Nitrogen oxides (NO and NO₂)

SO₂: Sulphur dioxide



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