

'07

SUSTAINABILITY
REPORT



GROUP STRUCTURE

(1ST QUARTER 2008)

1 PORTUGAL

→ *6.8 million t/year*

- 3 Cement plants (Alhandra, Souselas and Loulé)
- 1 Hydraulic lime plant
- 2 Cement grinding units
- 62 Ready-mix concrete units
- 9 Aggregates production units
- 2 Dry mortar plants

2 SPAIN

→ *3.2 million t/year*

- 4 Cement plants (Oural, Toral de los Vados, Córdoba and Niebla)
- 2 Cement grinding units
- 83 Ready-mix concrete units
- 18 Aggregates production units
- 2 Dry mortar plants

3 MOROCCO

→ *1.3 million t/year*

- 1 Cement plant (Asment de Témara)
- 4 Ready-mix concrete units
- 2 Aggregates production units

4 CAPE VERDE

- 1 Bulk cement unit
- 3 Ready-mix concrete units
- 3 Aggregates production units

5 BRAZIL

→ *6.0 million t/year*

- 6 Cement plants (Campo Formoso, Candiota, Cajati, Cimepar, Atol and Goiás)
 - 2 Cement grinding units
 - 35 Ready-mix concrete units
 - 2 Dry mortar plants
- 3,5

6 PERU

- 1 Cement plant (Arequipa – planning stage)
- 1 Aggregates production unit

7 TUNISIA→ **1.6 million t/year**

- 1 Cement plant (Jbel Oust)

8 SOUTH AFRICA→ **1.0 million t/year**

- 1 Clinker plant (Simuma)
- 1 Cement grinding unit (Durban)
- 1 Slag grinding plant (Newcastle)
- 7 Ready-mix concrete units
- 3 Aggregates production units

9 EGYPT→ **3.9 million tonnes a year**

- 1 Cement production complex (Amreyah)

10 MOZAMBIQUE→ **0.7 million t/year**

- 1 Cement plant (Matola)
- 2 Cement grinding units
- 5 Ready-mix concrete units

11 TURKEY→ **2.2 million t/year**

- 3 Cement plants (Yosgat, Çorum and Sivas)
- 3 Cement grinding units
- 12 Ready-mix concrete units
- 2 Aggregates production units

12 CHINA→ **1.8 million t/year**

- 1 Cement plant (NLG)
- 1 Cement grinding unit

13 INDIA→ **1.1 million t/year**

- 1 Cement plant (Sikka)



● Cement Plants ● Cement plant-planning stage ● Cement grinding units

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CIMPOR's 2007 Sustainability Report is a complementary publication to the Group's Annual Report and Accounts for the period in question.

This report covers only the Group's cement production in 11 Business Areas – Portugal, Spain, Morocco, Tunisia, Egypt, Turkey (*), Brazil, Mozambique, South Africa, Cape Verde and China (*).

The planned extension of its scope to CIMPOR's other areas of activity, concrete and aggregates, is mentioned in Chapter 5.

() – Business Areas set up in 2007*



INTERVIEW WITH THE CHAIRMAN

HOW WOULD YOU DESCRIBE CIMPOR TODAY?

We are a multinational group, which has its decision centre in Portugal and operates in construction material in general and cement in particular. Around 75% of our turnover is generated internationally and over 50% outside the Iberian Peninsula. We have plants in Portugal, Spain, Morocco, Tunisia, Egypt, Turkey, Mozambique, South Africa, Brazil, Peru, Cape Verde, India and China. We are responsible for employing around 8,000 people in the whole Group and we rank among the 10 largest world cement producers in terms of production capacity.

IT SEEMS THAT INTERNATIONALISATION HAS BEEN THE DRIVING FORCE OF THE GROUP'S DEVELOPMENT. IS IT GOING TO CONTINUE?

The acquisition of assets outside Portugal, seeking a balanced combination of mature and emerging markets, is a goal that we consider essential in creating sustainable wealth, a vital pillar of the social role we wish to play. We have other goals, which include consolidating our position in the markets in which we already operate, optimising operations by making use of synergies and investing in R&D, reducing costs in general and energy costs in particular and increasing productivity.



THERE SEEMS TO BE A CONSTANT CONCERN FOR BALANCING THE CREATION OF WEALTH AND THE SOCIAL ROLE THAT YOU WISH TO PLAY...

That's true. It is in all our managers' minds, all the time. The precision and transparency of corporate governance practices, the sustainable use of natural resources and respect for social demands and the preservation of the environment are essential values and permanent concerns here at CIMPOR.



PROF. ENG. RICARDO MANUEL SIMÕES BAYÃO HORTA,
Chairman of the Board of Directors and of the Sustainable
Development Steering Committee of the CIMPOR Group

IN SOCIAL TERMS, WHAT DO YOU DO?

This report contains several examples of what we do in different markets. In view of the specific characteristics of each country in which CIMPOR operates and the diversity of social priorities there, we undertake initiatives of a very different nature with varying volumes of resources used. We always try to ensure that the social responsibility strategy defined at Group level is interpreted and implemented in accordance with local circumstances. For example, in Portugal in 2007, we launched CONNOSCO, a social responsibility programme encouraging employee volunteer work. It is proving a great success and we would like to introduce it progressively in the other countries.

WHAT DOES THE CONCEPT OF SUSTAINABLE DEVELOPMENT MEAN FOR CIMPOR?

It is a culture that we introduced a long time ago. It is our way of working and is in line with our mission. It is the set of values that make up our genetic code. It is the challenge of introducing these practices in the companies that we take over. It is abiding by a set of rules that make sure that people in the future will have at least the same amount of resources as we have today. Above all, it is respect for others and for future generations.

HOW IS THIS REFLECTED IN THE COMPANY'S MANAGEMENT?

We constantly ensure that excellence in technical, economic and financial performance, decisive factors in our ability to create wealth, is compatible with effective social and environmental responsibility. We feel that it is essential to be aware of stakeholders' expectations and this is why one of our management guidelines is to foster dialogue with them. In this report, we focus on freely made commitments that drive us to constantly develop best practices in terms of the environment, innovation, quality of life in the communities close to our facilities and a transparent, fruitful climate in relations with all our stakeholders.

HOW IS THE EXPERIENCE SHARED?

We share this experience with the market by all means at our disposal, as described in this report. Indeed, our employees themselves act as excellent channels for passing on knowledge of sustainability in their personal relationships.

“ we focus on freely made commitments that drive us to constantly develop best practices in terms of the environment, innovation, quality of life in the communities ”





We also participate very actively in associations whose main goal is to promote sustainable development practices, where we share our experiences and keep up with the state of the art in sustainability.

WHAT ARE THESE ASSOCIATIONS?

We are members of the WBCSD - World Business Council for Sustainable Development, where we and the world's largest cement groups are involved in the constant application of the concept of sustainable development. In March 2007, we released a document entitled CSI - Cement Sustainability Initiative containing general guidelines on sustainable development for the sector. At local level, for example, we are founding members of BCSD Portugal - Business Council for Sustainable Development and belong to its Board and Executive Secretariat. Here, along with six members from completely

different sectors of activity, we disseminate the principles of sustainable development and promote eco-efficiency, innovation and social responsibility in the Portuguese business world.

HOW DO YOU SEE CIMPOR IN THE FUTURE?

In the future, we will be what we want to be today. We will be playing a leading world role in the consolidation of our sector. We will continue down the road of growth and internationalisation, ensuring that our performance is compatible with the principles of sustainable development that we have freely embraced. In short, we hope to continue to contribute to a better world.

Interview conducted
by the editor of CIMPOR News

Spring 2008

“ In the future, we will be what we want to be today. We will be playing a leading world role in the consolidation of our sector. We will continue down the road of growth and internationalisation ”





01

OUR SUSTAINABLE DEVELOPMENT

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1. OUR SUSTAINABLE DEVELOPMENT

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The main priority in the management of the CIMPOR Group is the ongoing, long-term creation of value for its shareholders.

By ensuring balanced, transparent compatibility between the degree of excellence of our financial, technical and business performance in harmony with strict environmental, social and ethical principles, we are able to meet this great priority, which is not only one of the pillars of the CIMPOR Group's corporate culture but also a fundamental condition for future development and success.

The Group takes on this task voluntarily, fostering frank dialogue on the issue and mobilising all those involved with us, thereby ensuring socially responsible behaviour on the part of its employees and subsidiaries.

Aware that without a good corporate governance system, no other form of involvement will be sufficiently credible, we foster correct conduct and socially responsible behaviour in the company and all its associates and their employees. Among other aspects, we guarantee compliance with local, national and international laws and our operations in each Business Area abide by the principles of honesty and integrity through frank, open communication with employees and stakeholders.

The Group's corporate Code of Ethics was released in 2006 and the CIMPOR Whistle-blowing Regulations also came into effect. These documents have now been published in all the Group's languages, with the exception of Chinese and Hindi (due to their very recent acquisition). Since then, in-house programmes have been implemented in several Business Areas so as to foster ethics, moral codes, respect for human rights, compliance with labour laws and other socially acceptable practices, in order to achieve a common approach to the issues.

PARTNERSHIPS FOR SUSTAINABILITY

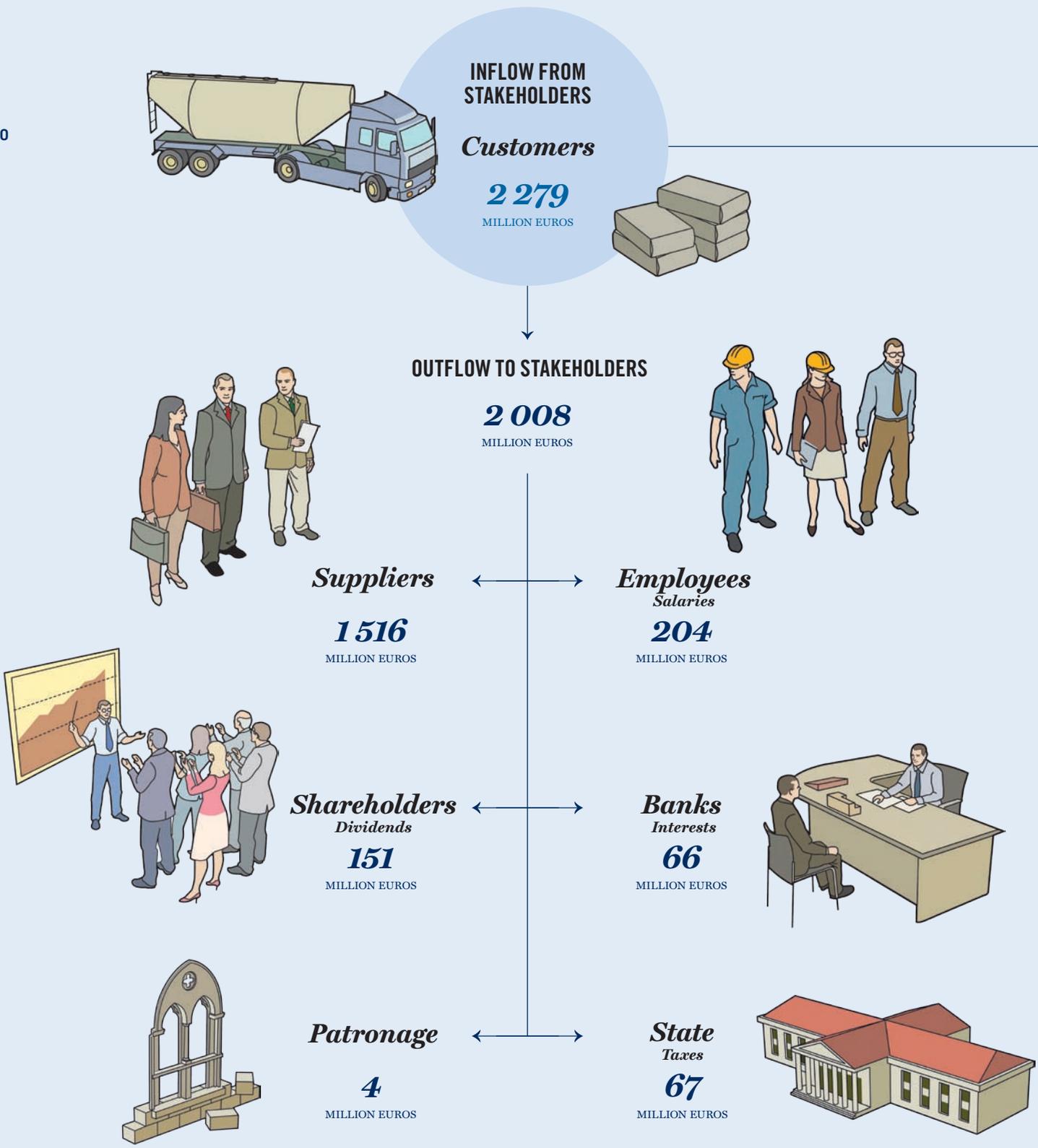
Identifying the stakeholders in our industry and partnerships for sustainability and holding a positive, fruitful dialogue with them - universities, research institutes, schools, non-governmental organisations and local communities, among others - are part of the Group's concerns. This process advances at different rates in different Business Areas.

In fact, in order to progress towards a model of sustainable development, it is crucial for all sectors of society to be involved and for all the players to be prepared to evolve towards a common understanding of development models and changes in attitude and adopt and share the same vision.

There are examples of this kind of partnership in this report.

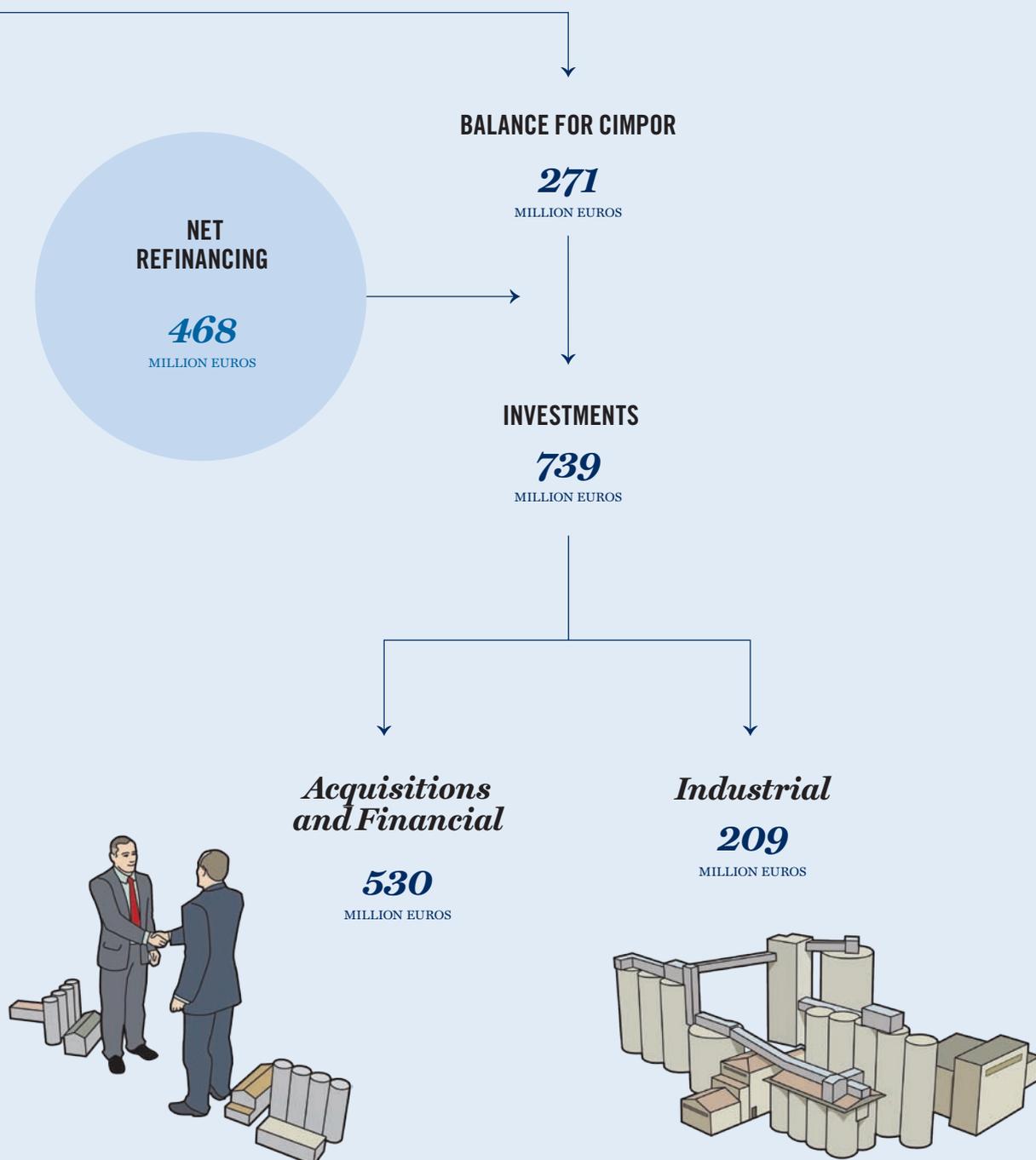
1.1. ECONOMIC PERFORMANCE

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For a better understanding of the company's financial relationship with its stakeholders, i.e. customers, shareholders, employees, suppliers, the state and financial institutions and associations, we have prepared a flow chart (based on the consolidated cash flow statement for 2007), which clearly illustrates the main costs and earnings of our overall activity in the financial year.

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1.2. OUR ACTIVE PARTICIPATION

WBCSD AND BCSD PORTUGAL

The CIMPOR Group's accession in 1997 to the WBCSD – World Business Council for Sustainable Development and its participation in the founding of the Business Council for Sustainable Development (BCSD Portugal) in 2001 were part of our partnership policy, which aims at identifying possible roads to progress.

The Group is in regular contact with the WBCSD through a Liaison Delegate (LD / WBCSI), who keeps the CIMPOR Group's Executive Committee informed of its main activities, initiatives and programmes.

CIMPOR participates regularly in several of the many WBCSD and BCSD Portugal initiatives, one of the ideas being to familiarise its employees with the new challenges that society is facing.

OUR AGENDA FOR ACTION

As part of the WBCSD's CSI – Cement Sustainability Initiative, we established in 2002 a voluntary five-year plan called Our Agenda for Action, which identifies six key areas for progress towards a more sustainable society. It took off in 2007 with another three segments within the key area "Climate protection and management of CO₂ emissions", which is the main focus of the CSI and the CIMPOR Group. The following are the most important features:

- A computerised global and regional system, named "Getting the Numbers Right" (GNR), was developed to produce statistics on energy and CO₂ performance in the cement sector. This database is managed by an independent body and serves the needs of internal and external stakeholders. It should be taken into account in future negotiations on schemes for mitigating the sector's CO₂ emissions;
- A generic CDM methodology was developed based on benchmarking principles and adapted to projects in the cement sector. It will soon be submitted to the UNFCCC | CDM Executive Board;

- We monitored emerging technologies in order to reduce CO₂ emissions and sought to encourage R&D partnerships (e.g. equipment manufacturers, universities, R&D institutes, etc.) and possible sponsorship of pilot projects with potential;

In 2007, the CIMPOR Group updated its goals for these issues and implemented in-house measures, such as the inspection by an independent body, for the first time, of our occupational health and safety data, as has already been done with the Group's consolidated CO₂ emissions.

The first CSI Forum was also held in 2007, a seminar for the discussion and sharing of knowledge on sustainable development between CSI companies. It was attended by specialists and guests of international renown.

CIMPOR HAS THE BEST CORPORATE GOVERNANCE IN PSI 20

CIMPOR obtained the best score of all the companies in the PSI 20, the main Lisbon Stock Exchange index, in a study of corporate governance conducted by Deco Proteste and the Euroconsumers consumer associations.

The study involved 444 European companies, most of which received middling scores for corporate governance – 5.4 points overall average on a scale of 1 to 10. Metro, a German company, got the best score, 9.3 points. CIMPOR came top in Portugal with 7.4, while the second best company scored 6.9.

The study and its results were published in the Deco Proteste financial newsletter, Poupança Acções.

CHINA GREATER CAPACITY, BETTER ENVIRONMENT



On 25 October, a 50-year cooperation agreement was signed by the Shanting Government and NLG (Shandong Liuyan Company), a Group associate company in Shanting in the Chinese province of Shandong, for the construction of a new joint clinker and cement production plant in Shanting, near the city of Zao Zhuang, where the company already has a plant.

The total estimated investment is around EUR 100 million, to be made in two phases under the contract. The first, the construction of a clinker line with a daily production capacity of 5,000 tonnes, should be completed by early 2009. The second, which involves the construction of another line with the same capacity, will only go ahead when the district government has met certain conditions.

The commitment made by the district government includes not only important aspects of the project and necessary raw materials, but also, when the first line goes into production, a guarantee to close some plants in the district currently operating with outdated technology causing serious environmental pollution. When the second line goes into operation, the commitment will result in the closure of all these plants still in production in Shanting.

<p>yürütülmesi, bütünlükte işi Grubumuzun üst düzey yöneticilerinin beklentide olan yönetim ilkeleri esas alınarak, işlevsel ergonominin gerektirdiği gibi, sistematik bir biçimde organize edilmesini öngörmektedir.</p> <p>X. Yolsuzluklara karşı belirlenmiş standartlara uygunluk</p> <p>"Etik Kurallar"ta yer alan değerler ve ilkelerle göre, herhangi bir Çalıřanı, söz konusu yetki/sorumluluğunun görevi gereği yerine getirmesi gereken sorumluluğunu ihlal etmesi için herhangi bir işlemden bulunması ya da ihmalde bulunması maksadıyla, şahısları veya işçileri bir şahıs/kurumla, bilerek ve isteyerek, bir yetki/sorumluluğu veya görevi bir şahsa emun bilgin dahilinde maddi veya gayri maddi herhangi bir avantaj sağlanması ya da bu yönde söz vermesini yasaklayan hükümler, Grup költürü ve uygulamalarının dâhil bir parçasıdır.</p> <p>XI. İç Kontrol Sistemi</p> <p>1.1.</p> <p>(i) İlgili hukuki veya akitlerle gereklere uygunluğun sağlanması, (ii) Grubun şeffaflıkla ilgili politikasının ve bilgilerin Grup içerisinde ve dışında iletilmesi ve finansal bilgilerin bütünlüğünü düzenleyen kurulların etkinliğini sağlanması, (iii) Gruba ait her bir birimin yönetim ve iç denetim mekanizmalarının kontrol edilmesi ve (iv) bilhassa mali riskler bağta olmak üzere Grubun risklerinin değerlendirilmesi ve denetlenmesini amaçlayan iç denetim kurulu ve prosedürlerinin hayata geçirilmesi amacıyla, iç kontrol sistemini kalite, işbirliği ve etkili Grubun devam eden önceliklerinden birisi.</p>	<p>A. İçindekiler</p> <table border="0"> <tr> <td>A. İçindekiler</td> <td>3</td> </tr> <tr> <td>B. Giriş</td> <td>4</td> </tr> <tr> <td>I CIMPOR Grubu Hakkında</td> <td>4</td> </tr> <tr> <td>II Değerler Vizyonu ve Strateji</td> <td>4</td> </tr> <tr> <td>III Değerler</td> <td>5</td> </tr> <tr> <td>IV Uygulamalar ve İhtidatlar</td> <td>7</td> </tr> <tr> <td>C. CIMPOR Grubu'nun Etik İlkeleri</td> <td>11</td> </tr> <tr> <td>I Genel İlkeler</td> <td>11</td> </tr> <tr> <td>II Şeffaflık İhtidatı</td> <td>12</td> </tr> <tr> <td>III Finansal Bilgiye İlgili Kurallara Uygunluk</td> <td>13</td> </tr> <tr> <td>IV Çalışma Şeyhi</td> <td>14</td> </tr> <tr> <td>V Grup İlgili Bilgilerin Kullanılmasına İlgili Standartlara Uygunluk</td> <td>15</td> </tr> <tr> <td>VI Tanıtım ve Çıkart Çalıřmalarının Özetlenmesine İlgili Kurallara Uygunluk</td> <td>16</td> </tr> <tr> <td>VII Rekabet Standartlarına Uygunluk</td> <td>18</td> </tr> <tr> <td>VIII Çevre ve Sürdürülebilirlik Standartlarına Uygunluk</td> <td>19</td> </tr> <tr> <td>IX Sağlık ve Güvenlik Standartlarına Uygunluk</td> <td>21</td> </tr> <tr> <td>X Yıkıcılarla Karşı Belirlenmiş Standartlara Uygunluk</td> <td>22</td> </tr> <tr> <td>XI İç Kontrol Sistemi</td> <td>22</td> </tr> <tr> <td>XII Hissedarlar, Yatırımcılar ve Diğer Paydaşlarla İlgili</td> <td>23</td> </tr> <tr> <td>XIII Çalıřanlara İlgili</td> <td>24</td> </tr> <tr> <td>XIV Müşteriler ve Tedarikçilere İlgili</td> <td>25</td> </tr> <tr> <td>XV Kamu Sektörü ve Diğer Kurumlara İlgili</td> <td>27</td> </tr> <tr> <td>XVI Genel Çevre Toplantısı İlgili</td> <td>28</td> </tr> </table>	A. İçindekiler	3	B. Giriş	4	I CIMPOR Grubu Hakkında	4	II Değerler Vizyonu ve Strateji	4	III Değerler	5	IV Uygulamalar ve İhtidatlar	7	C. CIMPOR Grubu'nun Etik İlkeleri	11	I Genel İlkeler	11	II Şeffaflık İhtidatı	12	III Finansal Bilgiye İlgili Kurallara Uygunluk	13	IV Çalışma Şeyhi	14	V Grup İlgili Bilgilerin Kullanılmasına İlgili Standartlara Uygunluk	15	VI Tanıtım ve Çıkart Çalıřmalarının Özetlenmesine İlgili Kurallara Uygunluk	16	VII Rekabet Standartlarına Uygunluk	18	VIII Çevre ve Sürdürülebilirlik Standartlarına Uygunluk	19	IX Sağlık ve Güvenlik Standartlarına Uygunluk	21	X Yıkıcılarla Karşı Belirlenmiş Standartlara Uygunluk	22	XI İç Kontrol Sistemi	22	XII Hissedarlar, Yatırımcılar ve Diğer Paydaşlarla İlgili	23	XIII Çalıřanlara İlgili	24	XIV Müşteriler ve Tedarikçilere İlgili	25	XV Kamu Sektörü ve Diğer Kurumlara İlgili	27	XVI Genel Çevre Toplantısı İlgili	28
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CODE OF ETHICS IN TURKISH



The companies in the CSI published the joint CSI Interim Report 2005 in 2005. The CSI Full Report will be published in early 2008, announcing results achieved in the first five years of Our Agenda for Action.

The CSI project sets a 20-year time frame for monitoring the evolution of the sector, divided into four five-year cycles. The programme established in Our Agenda for Action corresponds to the first. Until the next action plan is formally launched, new initiatives approved by the CSI companies are already under way.

The initiative will continue under the auspices of the WBCSD. Its website (www.wbcscdcement.org) will continue to publish updates on the progress of its work and the issue of sustainable development.

On 27 February 2007, the Group acquired a majority shareholding in Yibitas, in Turkey.

One of our first concerns was to ensure that our employees at CIMPOR Yibitas had the CIMPOR Group's Code of Ethics in their own language, which was achieved by mid-year. This ensured that they knew all the Company's rules of conduct with which its employees must comply as an essential instrument in guiding their work.



1.3. THE SUSTAINABLE DEVELOPMENT STEERING COMMITTEE

The Sustainable Development Steering Committee guarantees the implementation and monitoring of sustainable development initiatives. It is presided over by the Chairman of the CIMPOR Group's Board of Directors, who also chairs the Board of Directors' Corporate Governance and Social Responsibility Advisory Committee, which deals with this and other issues.

The Steering Committee consists of the directors from each Operating Area, the CEO of CIMPOR TEC, the WBCSD / CSI Liaison Delegate, the heads of communication, safety and security and the environment and, whenever necessary, representatives of the working groups. Its structure varies according to the issues under discussion at any one time.

Whenever necessary, ad hoc working groups are set up to develop policies, projects, protocols, codes, good practice guidelines and specific measures in this field at the Group's subsidiaries in the different Business Areas.

INTRA-GROUP OVERSIGHT COMMITTEE

In addition to meetings of the Sustainable Development Steering Committee convened by the Group's Chairman, the Intra-Group Oversight Committee meets five or six times a year at the invitation of the Executive Committee of the CIMPOR holding company. These meetings are attended by the members of the Executive Committee and the heads of each of the Group's regions or Business Areas and of central departments at CIMPOR TEC and LD/WBCSD-CSI. They discuss and approve corporate initiatives in fields such as sustainability and assess their progress in relation to the Group's goals.



02

SOCIAL RESPONSIBILITY

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Other Organisations

2. SOCIAL RESPONSIBILITY

2.1. POLICY ON COMMUNICATION AND RESOURCE DEVELOPMENT

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At corporate level, the CIMPOR Group has established and implemented a communication policy based essentially on the principles of integrity and transparency enabling us to meet our commitments to stakeholders and the general public.

In view of the diversity and particularities of the geographical locations in which we operate, CIMPOR encourages the setting-up of special bodies in the Business Areas operating under the coordination and guidance of the holding company's Communication and External Relations Department. This ensures the appropriate, efficient flow and processing of information.

In addition, in line with our communication goals, CIMPOR has adopted a wide variety of means for satisfying needs in this area. We are always up-to-date, especially with technological innovations, in order to guarantee appropriate, efficient communication with in-house and external audiences in all the areas in which we operate.

NEW NC TO KEEP UP WITH OUR GROUP'S SPRINTS ...



Notícias CIMPOR is one of our Group's essential voices and must therefore keep abreast of our continuous advances.

The magazine was thoroughly revamped in 2005 and after that came out in Portuguese and English. It began with a print run of 4,800 copies though it soon proved necessary to increase it to 6,000. The NC's main *raison d'être* is external communication and it is sent directly to around 800 selected outside recipients, though it is available to anyone wishing to subscribe.

In late 2006, we analysed whether the changes made were sufficient to achieve the newsletter's goals and decided that it was necessary to go further to allow greater flexibility of content and, equally important, to improve its potential for communication.

This occurred in the first edition in 2007.

2.2. STAKEHOLDERS INVOLVEMENT

CIMPOR Group's Operating Units (OU) constitute the main industry in many of the communities in which it operates. We seek to work closely and in harmony with these communities, local authorities and other stakeholders in order to minimise costs and losses and work towards common interests.

Projects take a long-term view and are intended to create, cultivate and consolidate relations with all stakeholders by sharing values and making investments that considerably improve the quality of life of the communities in which we operate. The ideas resulting from this dialogue help us to review the way in which we identify important issues and set priorities.

Also in this area, different experiences from the Group's Business Areas have resulted in a more consistent corporate approach so that CIMPOR can develop its strategy and procedures more safely and rationally.

One of the great international meeting points of stakeholders from a corporate point of view is the WBCSD. Under the WBCSD / CSI an initial round of talks with stakeholders was held in the first phase of the project in Curitiba (Brazil), Bangkok (Thailand), Cairo (Egypt), Lisbon (Portugal), Washington D.C. (USA), Brussels (Belgium) and Beijing (China) to identify the main local and global concerns regarding the industry's sustainability.

Our employees were actively involved in the meetings in Curitiba, Lisbon and Cairo, in countries where

PORTUGAL INVOLVEMENT OF STAKEHOLDERS (ALHANDRA OU)



Under its in-house programme for regularly involving stakeholders, like other CIMPOR Indústria plants, the Alhandra Operating Unit has organised initiatives to give the general public, academia, the press, public, social and cultural institutions and the authorities an idea of its everyday industrial activity and new projects in which it is involved. The aim of these campaigns is to understand how people regard the OU and the company and make a note of suggestions for improvement. The following are the most important activities introduced or improved in recent years:

- Regular school visits ;
- Annual Open-House Programme ;
- Quarterly meetings of Vila Franca de Xira region company directors ;
- Training and awareness campaigns on the use of alternative fuels for service providers and regular outsourcers at the plant ;
- Training courses on the use of alternative fuels at the Engineering School ;
- Awareness-raising campaigns on bird flu for 14 service providers ;
- Agreement formalising the regular operation of the Environmental Monitoring Committee at the Alhandra OU, the institutional and civil society members of which include the municipal council, parish councils, the health authority, Associação de Comércio e Indústria (Association for Commerce and Industry), the Municipal Assembly's Environmental Committee and other associations.

the CIMPOR Group operates. The meetings constituted an important source of information and local contacts and helped improve the relevance of approaches and actions in these countries. This Sustainability Report responds to many of the aspects discussed at these meetings.

In addition to these initial talks with stakeholders, new working sessions were held with a wide range of international stakeholders in the cement industry in the second phase of the project. The participants took stock of the project, offered suggestions to be taken into account in the future by the teams at the different companies involved and furthered and validated a significant part of the work done by each current task force.

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As part of these joint projects, a general project website (www.wbcscement.org) was developed to act as a permanent, up-to-date live source of reference of the CSI and its main projects, the question of sustainability in general and a forum for contact with the industry's extended community of local and global stakeholders.

PORTUGAL OPEN HOUSE



Much to our delight, the first open-house period at our cement plants in Portugal was, as anticipated, a “sell-out”. Alhandra was open from 7 May to 1 June, Souselas from 1 to 21 June and Loulé from 5 to 9 November.

The Alhandra Plant continued to beat records receiving more than a million visitors. Local councillors, companies, associations and, as usual, plenty of students and teachers took the opportunity on site to get to know about what is being done to modernise

our facilities, especially in terms of environmental impact.

An initiative in Souselas in 2007 was particularly noteworthy. The plant and Instituto Educativo de Souselas organised a highly educational visit on the environment and safety for the school's students. The students, with the help of their teachers, then formed groups and did projects for entry into a competition.

The Loulé plant was only open for a week but even so received more than 300 visitors.

SOUTH AFRICA



COMMITMENT TO STAKEHOLDERS - COMMUNITY FORUMS -

NPC-CIMPOR decided to facilitate the creation of community forums in the three communities in which it operates, Simuma, Durban and Newcastle. These forums are made up of representatives of political and traditional organisations, NGOs, CBOs – community-based organisations - and local government in each community. Their purpose is to advise companies and ensure that all community improvement projects are properly implemented in each area. They meet twice a month and are chaired by the plant directors.

NPC / BEE TRANSACTION

NPC, the main manufacturer and distributor of cement products in Kwa Zulu Natal, South Africa, sold a 26% shareholding in its cement operations to partners owned by black shareholders in a transaction under the BEE – Black Economic Empowerment programme. The shareholding was calculated on the basis of a company value of 3.5 billion rand.

One of the main considerations behind this BEE transaction was the NPC-CIMPOR EED Trust (Education and Entrepreneurial Trust) with a shareholding of 5.3%, which will benefit the communities living close to NPC's three cement plants.

The transaction will be mostly financed by the selling party by setting up an NPC Staff Fund and its BEE partners, Siyakha Cement Holdings (Pty Limited).

The NPC Staff Fund (with a shareholding of 5.5%) gave employees the opportunity to own stock in the company.

VOLUNTARY AGREEMENTS AND INITIATIVES

Where sustainability is concerned, particularly in the case of capital- and energy-intensive sectors like cement production, voluntary agreements tend to be quite interesting as they introduce greater predictability and endow the industries in question, which are more aware than anyone of the constraints involved, with a higher degree of flexibility in the way they achieve their goals.

It would therefore be desirable for this type of agreement to be the rule when it came to the main instruments in European and national public policies, possibly complemented by others.

In South Africa, the government and the sector's industrial association recently signed a voluntary agreement containing a package of financial incentives aimed at rationalising electricity consumption in member companies' plants, including the three belonging to NPC-CIMPOR.

Several existing voluntary agreements CIMPOR Group plants and the autonomous communities of Andalusia (2004-2008) and Galicia (2005-2008) in Spain are aimed at improving the environmental performance of the cement sector by means of the prevention, reduction and control of pollution.

These agreements include adopting the best economically feasible cement production techniques, recycling and recovering waste, reducing CO₂ emissions, abiding by the requirements of the combined environmental licence and IPPC Directive, using technology for measuring and controlling emissions and implementing environmental management systems for registration with the EMAS (Eco-management and Audit System).

Part of the financial outlay borne by the plants for investments and training under these agreements will be subsidised by the governments of these autonomous communities.

Following the adoption of the Integrated Pollution Prevention and Control (IPPC) Directive, in accordance with a reference document (BREF) published by the European Commission, a set of Best Available Techniques (BAT) was established for the cement industry to minimise its environmental impacts.

Whenever technically and economically possible, we adopt the measures set out in this BREF at our OU in Portugal and Spain in order to obtain environmental licensing (IPPC).

FUTURE LEADERS TEAM (WBCSD) AND YOUNG MANAGERS TEAM (BCSD PORTUGAL) PROJECTS

These programmes are WBCSD and BCSD Portugal annual initiatives designed to involve young company managers in the challenges and opportunities of sustainability in business models and increase their professional skills in this field so that they can apply and foster the principles of sustainability at their companies and in society.

For the CIMPOR Group, employee participation in projects of this kind and membership of alumni networks is an asset in terms of enhancing the skills of our young management staff so that they can share experiences and use contacts to transfer best practices and find in-house development sustainable.

Indeed, many of the BAT were already in place when the European Union published the document. Moreover, whenever there are significant changes in the manufacturing process at our OU in other countries in which we operate, we endeavour to introduce some of these BAT on a voluntary basis.

2.3. INTERACTION WITH COMMUNITIES

In 2007, CIMPOR continued to pursue its patronage policy, particularly in the restoration of heritage buildings.

Nonetheless, we are more than willing to sponsor initiatives of a social nature, in the broadest sense of the word, in the different Business Areas, as shown by the cases in this report.

Our general corporate guidelines are adjusted by the management in each geographical area. The kinds of initiative are highly diverse depending on the characteristics of each country or even each region.

CIMPOR is aware that its actions can be made more effective by partnerships with entities that know more about the needs of the communities living near our facilities and has been signing agreements of varying durations with bodies representing local and regional interests, preferably local authorities.

One of the Company's concerns in this regard is encouraging voluntary work by our employees in any Business Area.

In Portugal, CIMPOR set up the "Connosco" (With us) Programme (see inset), a pilot project that began in 2007, to demonstrate our confidence in our employees' choices and further improve our standing in surrounding communities.

HRH THE PRINCE OF WALES'S BUSINESS & THE ENVIRONMENT PROGRAMME (BEP), CAMBRIDGE UNIVERSITY

The seminars in the HRH The Prince of Wales's Business & the Environment (BEP) Programme organised by Cambridge University, which have been attended from the start by several CIMPOR Group senior managers, are one of the most important international forums for reflection on sustainable development issues. They are for senior managers at benchmark companies, opinion leaders and representatives of global NGOs, international political organisations, government and non-governmental organisations, trade unions and academia.

They are intended to open these managers' eyes to the inescapable need to include sustainable development considerations in organisations' management systems in this context of change in the global economic environment, showing that it is a crucial aspect of growth, competitiveness and long-term earnings.

They also encourage networking between people with different careers in different kinds of organisations so that they can share experiences of the challenges and opportunities posed by sustainable development, inspire them to foster the necessary changes inside and outside their organisations and help train managers whose examples can guide the business world towards a sustainable economy.

PORTUGAL
CONNOSCO PROGRAMME HELPS 80 INSTITUTIONS



By the end of 2007, CONNOSCO had helped 80 Portuguese institutions recognised as being in the public interest.

This programme supporting employee volunteer work multiplied donations from 112 employees by seven. Our employees gave EUR 52,080 from their own pockets and then CIMPOR respected its CONNOSCO commitment (52,080 x 7) and donated EUR 346,560 so that our employees were able to hand over a total of EUR 398,640 to their chosen institutions.

This was the programme's first year and its basic goals were achieved. With the help and direct participation of our employees, the Company was able to make a bigger, better social contribution.

In 2008, CIMPOR's ceiling for CONNOSCO will be one million euros.

PORTUGAL AGREEMENT WITH MONASTERY OF THE ORDER OF CHRIST



In 2007, CIMPOR signed an agreement with IPPAR (now known as IGESPAR - Institute for the Management of Architectural and Archaeological Heritage) for the restoration of the Charola Chapel in the Monastery of the Order of Christ, classified as a UNESCO World Heritage Site.

The agreement will last until 2011, when the conservation and restoration work should be completed. Out of a total budget



PORTUGAL

AGREEMENT CERTIFIES COMMITMENT TO DEVELOPMENT

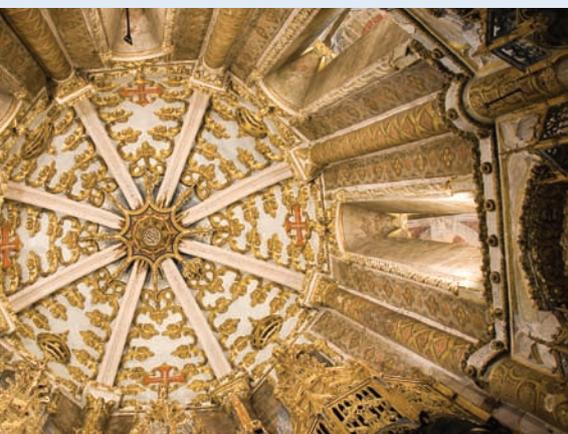
On 23 February 2007, at Palácio do Sobralinho, CIMPOR signed a social responsibility agreement with Vila Franca de Xira Town Council, in the municipality in which the Group's most emblematic plant is located, the Alhandra plant.

Under this agreement, CIMPOR will contribute one million euros over a five-year period to sponsor initiatives undertaken by the municipality, thereby playing a direct role in social, cultural, environmental, scientific, educational and sports patronage programmes.

The Mayor stressed the importance of this agreement to the community. "With this support, it is possible to provide solutions that have been impossible until now." CIMPOR's contribution in 2007 totalled EUR 709,379.



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of EUR 1.5 million, CIMPOR will contribute EUR 750,000, the largest amount ever donated by a Portuguese company under the patronage law.

The chapel will be restored by the IGESPAR, with the work lasting from 2007 to 2011. It will involve studies and research, followed by the conservation and restoration of paintings, murals and stucco in the exterior ambulatory exterior and the central circle. Conservation and restoration of the triumphal arch and paintings, sculptures and carvings will begin in 2010.

This will be followed by the installation of interior lighting in the chapel and protection and maintenance work. CIMPOR contributed EUR 175,000 in 2007.

2.4. CUSTOMER RELATIONS

RESPONSIBILITY FOR PRODUCT – CUSTOMER HEALTH AND SAFETY

In all our Business Areas and in all products and markets, customer focus as a critical success factor has led us to adopt methods allowing CIMPOR to achieve extremely positive recognition from all those involved in construction processes, be they customers, prescribers, consultants or even clients. This customer focus is based on CIMPOR's business outlook and favours durable, long-term relationships that are naturally satisfactory and fruitful for all parties. We use technical and management tools, such as knowledge of customers' needs, satisfaction and concerns and expectations almost universally by competent, attentive, hard-working professionals to maintain this degree of satisfaction. We are thus able to set guidelines and concrete goals for commercial activities and make improvements in order to pursue these goals.

We normally assess customer satisfaction at different points of mutual interest, including correct customer care, respect for delivery times, efficient post-sales service, product quality and strength of packing in all Business Areas, with any necessary adaptations to local markets and practices.

Although the results are positive and most of them show growing satisfaction, we do not consider our mission to be complete, because the near future will always be more competitive with greater challenges for which CIMPOR must be prepared. The results of satisfaction assessments are useful mainly in preparing for the future so that we can meet customers' expectations by guiding all aspects of activity.

LABELLING OF PRODUCTS AND SERVICES

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CAPE VERDE CIMENTOS DE CABO VERDE ENCOURAGES ARCHITECTURE



The biannual National Cimentos de Cabo Verde Architecture Prize was set up on 25 May 2007 by the Cape Verde Architects' Association with the sponsorship of Cimentos de Cabo Verde. The company and the association signed a partnership agreement for five prizes.

The prize is the first of its kind in the country and is intended to reward and promote national and international public recognition for the best fully completed works in concrete by Cape Verdean architects.

In 2007, the prize was awarded to the architect Pedro Gregório, an old hand in Cape Verde and member number one of the association, for the Banco Comercial Atlântico building on the island of Maio.

The ceremony, where the entries were presented, was held on 21 July and was attended by the Prime Minister of Cape Verde, José Maria Neves.

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MARKETING COMMUNICATION

CIMPOR scrupulously abides by legislation in the different countries in which it operates, in all fields, such as safety, human rights, the environment and quality of products and packing, and advocates this compliance as the only way of defending and maintaining its values. Where communication is concerned, in countries where legislation is more lenient or non-existent, the Group generally abides by national requirements in Portugal, thereby playing an active part in local development.

2.5. RELATIONS WITH OTHER ORGANISATIONS

The CIMPOR Group wishes to join organisations with recognised representativity that will aid us in establishing relations that will help us play our accepted role as a social partner more effectively and extensively.

The CIMPOR Group, at corporate level and through its companies in the Business Areas in which it operates, is an associate and full member of regional, national and international institutions working in professional and socio-professional fields, technological research and development and social responsibility. They are listed under "Additional Information" in this Report.

PORTUGAL "DRAWING THE EARTH" COMPETITION



In early October 2007, CIMPOR launched a competition for schools close to its cement plants in Portugal, on the "2008, International Year of Planet Earth". It was a great success.

Eight schools participated from three municipalities - four from Vila Franca de Xira (Alhandra Plant), two from Coimbra (Souselas Plant) and two from Loulé (Loulé Plant) involving around 500 students who submitted a wide variety of highly creative drawings.

After the 10 best had been selected, in addition to well-deserved prizes they received for the quality of their work, CIMPOR decided to publicise them and their artists by producing not one but 10 Christmas cards with the winners' names.



03

EMPLOYEES

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- 39 3.4. Occupational Health and Safety

3. EMPLOYEES

3.1. OUR EMPLOYEES

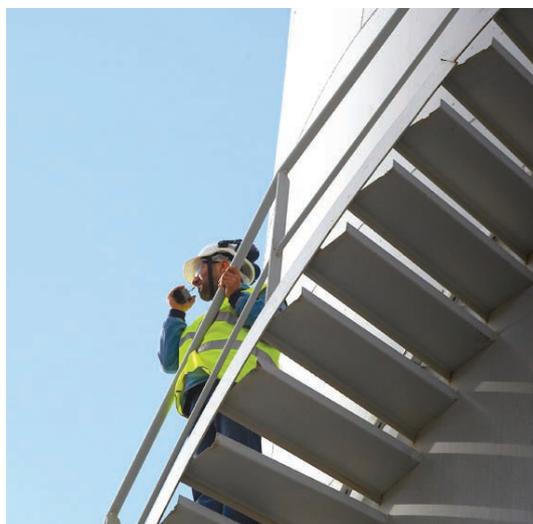
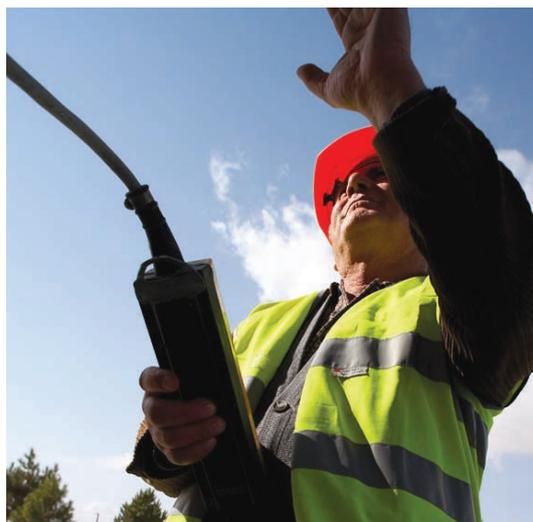
3.1.1. CIMPOR UNIVERSE

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As at 31 December 2007, the CIMPOR Group's cement production and central services employed 5,347 people in 11 countries - Portugal, Spain, Cape Verde, Morocco, Tunisia, Egypt, Turkey, Mozambique, South Africa, Brazil and China.

Of these, 4,270 employees were permanent (80%), 1,007 had fixed-term contracts (19%) and the other 70 were on temporary loan or expatriates.

The acquisition of plants in two countries, Turkey and China, in 2007 contributed significantly to the increase in the Group's human resources.



CIMPOR GROUP

		Permanent	Fixed-term contract	Others (on loan)	Total
Iberian Peninsula and Cape Verde	Portugal	830	70	41	941
	Spain	529	40	0	569
	Cape Verde	17	46	0	63
Mediterranean Basin	Morocco	180	0	1	181
	Tunisia	231	1	0	232
	Egypt	273	175	13	461
	Turkey	653	4	0	657
South Africa	Mozambique	350	27	13	390
	South Africa	321	79	0	400
Latin America	Brazil	840	0	0	840
Asia	China	46	565	2	613
CONSOLIDATED		4270	1007	70	5347

The CIMPOR Group also has more than 4,500 indirect employees who provide short-term (construction, silo cleaning, major repairs) and long-term services (maintenance crews, cleaning, canteens, etc).

The fact that the CIMPOR Group operates in different countries with diverse cultures, laws and values poses a great challenge to human resource management.

PERCENTAGE OF EMPLOYEES BY COUNTRY



EMPLOYEES

3.1.2. CHARACTERISATION

The majority of the CIMPOR Group's employees are male (86% men, 14% women) and are aged over 35 (65% of total). Their average schooling is situated between basic and secondary education (63% of total).

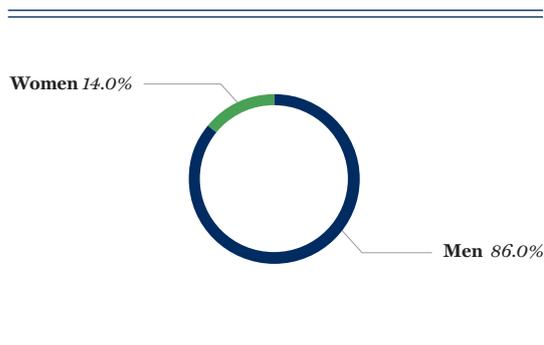
The largest age groups at CIMPOR are 21 to 30 (20% of the total) and 51 to 60 (19%).

Where schooling is concerned, 29% of the Group's employees have completed basic education, 34% secondary education and 22% higher education. Portugal, Spain and Brazil are the Group countries with the highest number of employees with university degrees.

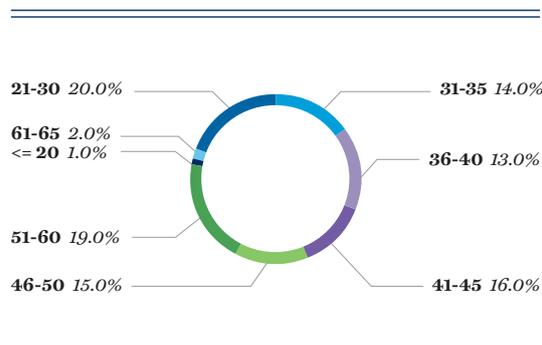
Regarding years of service, the majority of employees have 2 to 5 years (24%) and 16 to 20 years (18%). At the end of 2007, 177 Group employees held management positions, i.e. 3% of the total.

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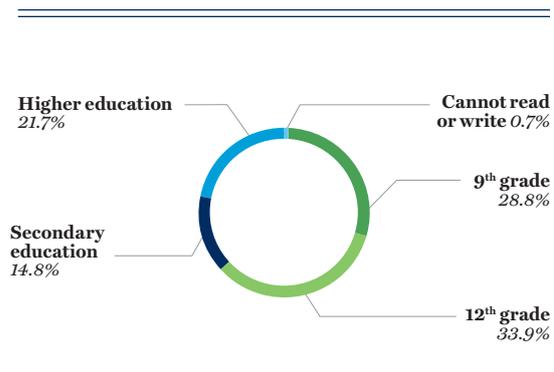
EMPLOYEES BY GENDER



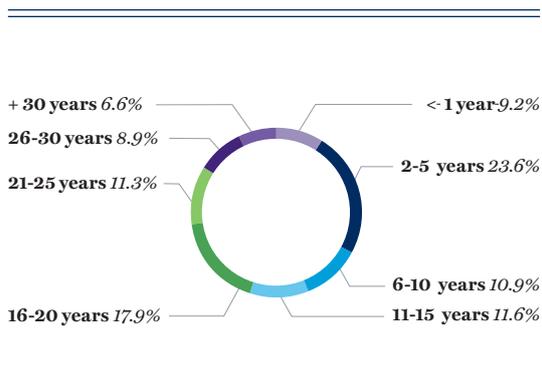
EMPLOYEES BY AGE GROUP

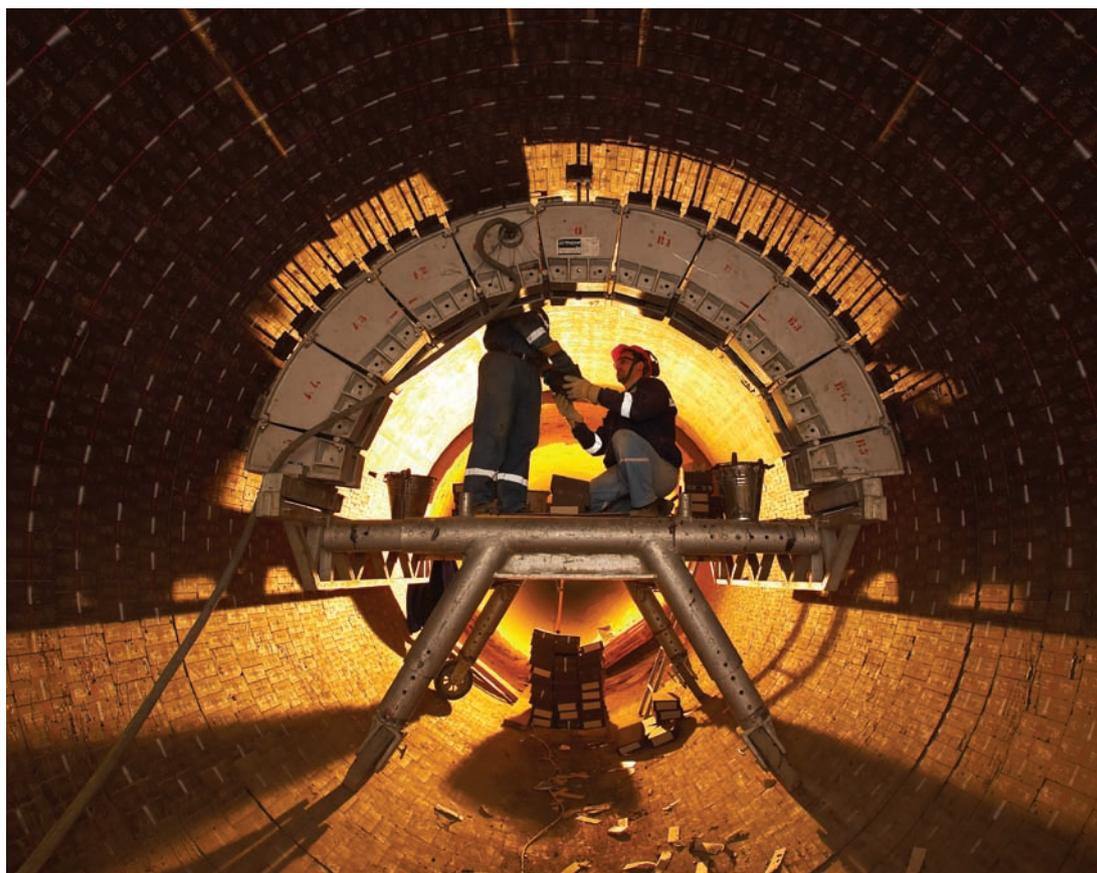


EMPLOYEES BY LEVEL OF SCHOOLING



EMPLOYEES BY YEARS OF SERVICE





CIMPOR GROUP

		Total	Managers	Non-Managers
Iberian Peninsula and Cape Verde	Portugal	941	26	915
	Spain	569	23	546
	Cape Verde	63	2	61
Mediterranean Basin	Morocco	181	4	177
	Tunisia	232	7	225
	Egypt	461	4	457
	Turkey	657	43	614
South Africa	Mozambique	390	6	384
	South Africa	400	37	363
Latin America	Brazil	840	14	826
Asia	China	613	11	602
CONSOLIDATED		5 347	177	5 170

3.2. MANAGING OUR HUMAN RESOURCES

3.2.1. INVOLVEMENT

CIMPOR Group values and respects its employees' rights and seeks to establish the best possible relations with them and their representatives. More than 4,000, i.e. over 70% of Group employees are covered by collective regulation instruments. In Brazil and Tunisia, 100% of the Group's employees are covered by collective bargaining.

In 2007, a company agreement was signed in Tunisia and for one of our associates in Portugal. They are both three-year agreements.

In 2007, CIMPOR conducted two social climate audits to gauge employee satisfaction:

- In March and April in South Africa with an 86% participation rate.
- In November in Egypt with a 98% participation rate .

CIMPOR's goal for the next few years is to use this tool in all Group companies in the different countries.

3.2.2. PAY POLICY

One of the CIMPOR Group's concerns has always been a competitive pay policy suited to the reality in the countries where it operates. The lowest salaries in Group companies are at least 20% higher than the national minimum wage.

The CIMPOR Group also offers an attractive package of benefits, such as health insurance, personal accident insurance, loans and gifts on festive occasions, among others.

CIMPOR GROUP

		Health Insurance	Personal Accident Insurance	Loans	Gifts on Religious Holidays	Medical Centre	Stock Options	Others
Iberian Peninsula and Cape Verde	Portugal	Yes	Partial	Yes	Yes	Yes	Partial	(1)
	Spain	No	Yes	Yes	Yes	Yes	No	
	Cape Verde	No	No	Yes	No	No	No	
Mediterranean Basin	Morocco	Yes	Yes	Yes	Yes	Yes	No	(2)
	Tunisia	Yes	Yes	Yes	Yes	Yes	0	
	Egypt	Yes	Yes	Yes	Yes	Yes	No	
	Turquia	Partial	Partial	No	No	Partial	No	
South Africa	Turkey	Yes	No	Yes	Yes	Yes	0	(3)
	South Africa	Partial	Yes	No	No	Yes	Yes	
Latin America	Brazil	Yes	Yes	Yes	Yes	No	No	
Asia	China	Yes	Partial	No	No	No	No	

(1) Pension Fund

(2) Back to school

(3) Study grants, bonuses for years of service



3.2.3. MOBILITY MANAGEMENT

Mobility is currently an issue of particular importance for CIMPOR, in view of the size that the Group has attained in recent decades.

The internal mobility rate was around 3% and Brazil was the country with the most transfers in 2007 (48).

The Group's turnover was 2%, with 555 employees admitted and 364 leaving. Brazil had the highest number of admissions (274) and Portugal was the country where the most employees left (69).

In 2007, we continued the Young Engineer Pool, which meant its 10th edition in Portugal, another in Brazil and the beginning of technical training for the Mozambique Pool at plants in several countries.

The Young Engineers Pool programme involves recruiting young graduates and giving them practical and theoretical training to develop their technical skills and behaviour and prepare them for future jobs with the Group. While they are in the pool, the young engineers are accompanied by a coordinator, a senior Group manager and a local coordinator. They are assessed again at the end of the period and those who pass are given jobs with the Group.

EMPLOYEES

A Financial Manager Pool was set up in Portugal following the same philosophy as the Young Engineer Pool. The idea is to develop the skills of young graduates in the areas of finance, trade and IT.

3.2.4. EXPATRIATE EMPLOYEES

In a scenario of constant growth and progressive geographical diversification, Group employees' international mobility is particularly worthy of CIMPOR's attention, in view of the proven mutual benefits since the practice was first implemented.

As at 31 December 2007, the Group had 57 expatriate employees, which is 35.7% more than in 2006. Portugal (37) and Brazil (13) were the main contributors.

All the Group's Business Areas, without exception, had expatriate employees on their payroll in 2007, the main countries being Mozambique (16), Egypt (14) and Portugal (7).

Around 91% of expatriate employees have university degrees, the majority in engineering (65.3%) and management (27%), reflected in the jobs for which they were recruited – business management (17.5 %), senior management (33.3%) and technology (47.4%).

3.3. DEVELOPMENT – TRAINING AND EDUCATION

3.3.1. DEVELOPMENT OF SKILLS AND QUALIFICATIONS

Our main goal is currently to promote performing employees who identify with and are strongly committed to the Group, thereby guaranteeing standards based on the principles of efficiency, quality and participation. CIMPOR has developed support programmes for academic education and initial and ongoing vocational training.

In 2007, CIMPOR provided support for its working students, promoted the certification of its training staff, sponsored the recognition, validation and certification of competences (RVCC), which enables candidates to certify qualifications acquired through lifelong learning outside formal education and training systems, and began the certification of equipment handlers. At the same time, through CIMPOR TEC, we continued our training programme for all specialised staff, which covers a wide variety of aspects of the cement production process, raw materials, products and quality,

CIMPORNET ONE OF THE GROUP'S COMMUNICATION CHANNELS



The internationalisation strategy that the Group has pursued in an environment of constant change, and at a time when communication is fast and interactive, requires an in-house communication network for sharing information, regardless of geographical location and cultural differences.

The need to foster communication, in which speed is of the essence, resulted in the extension of our intranet - now called CIMPORnet - to other countries where the Group operates, so as to create synergy, increase cooperation and share values.

The platform for CIMPORnet was set up in July 2007. Today, in addition to Portugal, employees in Spain, Brazil and Mozambique have access to the Group's internal communication network which allows them to set up permanent and efficient communication procedures among themselves, thereby encouraging a sense of belonging.

Because our goal is ongoing improvement, our suggestion box is always open to contributions. It is a platform to help communication, in which everyone is always welcome to participate.



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maintenance, the environment and occupational health and safety, among others.

All together, CIMPOR provided more than 130,000 hours of vocational training in the different countries, totalling an average of 25 hours training per employee.

3.3.2. TRAINING OF SPECIALISED STAFF

The Group has a Technical Training Department at CIMPOR TEC to implement the Group's technical training programme for specialised staff and ensure the in-house transfer of knowledge and the sharing of experiences, develop specific training programmes and monitor the Group's specialised staff.

Its target population consists of specialised staff in cement production and employees with university degrees in engineering, geology and chemistry working in cement production, regardless of their jobs.

We may, however, include other employees, who do not have the required qualifications but have recognised professional experience.

In 2007, 87 employees from seven countries received training in process quality, maintenance and the environment.

There were also two specific training programmes: one for operators recruited for the new line at the Simuma plant in South Africa and the other for operators at the Niebla and Cordoba plants in Spain.

We also acquired two training tools, a process simulator and software for knowledge development and assessment.

In 2008, there will be a second edition (see inset on technical seminars) of the Group's Production Seminar entitled Process & Quality.

We will also develop a specific training programme for operators on the new line at the Hasanoglan plant in Turkey and prepare contents for a new training course on driving and control.

PORTUGAL
TECHNICAL SEMINARS – GUARANTEEING TECHNOLOGICAL PROGRESS



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CIMPOR TEC has been holding technical seminars for the Group's specialised staff in order to guarantee the Group's technical progress through transfer of know-how, develop methodologies and best practices and allow synergies. These meetings have not only served to convey the Group's policies and methods but have also fostered the sharing of knowledge and interactivity among its staff, allowing them to share experiences in the areas of processes, quality, environment, maintenance and safety.

In November 2007, the Group's first maintenance seminar was held in Skhriah (Morocco). Forty-three staff from nine countries - South Africa, Brazil, Egypt, Spain, Morocco, Mozambique, Portugal, Tunisia and Turkey took part in this meeting on Reliability and Safety. Magotteaux, a company with know-how on wearing materials also attended as a guest. Its programme included interesting presentations on recent experiences of

organisation, new maintenance tools, good practices in improving equipment reliability and, of course, good safety practices.

The Group's first production seminar was held in Lisbon in November 2006. Its main theme was aspects and problems of burning coke and alternative fuels in cement kilns. It was attended by more than 30 Group staff from South Africa, Brazil, Spain, Morocco, Portugal and Tunisia. Two companies shared their know-how on refractories and combustion. Experience of the use of coke and alternative fuels at Group plants, atmospheric emissions, refractories, the influence of alternative fuels on final product quality and the results of CIMPOR staff placements at plants outside the Group were the subject of analysis and lively debate.

The results of these seminars show that they constitute a solid initiative and should continue every year.

3.4. OCCUPATIONAL HEALTH AND SAFETY

The Battelle Memorial Institute report, drafted under the Cement Sustainability Initiative (CSI), has shown that the cement sector has one of the highest rate of fatal accidents and accidents with loss of working hours on an international scale and it is also among those that most use service providers, where the incidence of these types of accident tends to be much higher.

Determined to change this state of affairs, the CIMPOR Group launched its Occupational Health & Safety Plan so that these aspects would be systematically included in its management and decision-making systems, enshrining them as a fundamental value at all the Group's companies through best practices and correct behaviour.

2007 witnessed the consolidation of the Group's Occupational Health and Safety (OH&S) Policy thanks mainly to the implementation of the plan in 2005. Several factors have contributed to achieving the plan's goals, including the commitment and dedication of the whole leadership and decision-making chain from top to bottom at each company and of all the Group's employees in general.

In recent years, an increase in contracts with service providers has led to a substantial increase in indirect employees in the Group. This type of contract does not mean the outsourcing of risks because, as part of its social responsibility, the CIMPOR Group voluntarily includes social and environmental concerns in its activities and its dealings with other stakeholders, considering the needs of its own employees and those of society in general, therefore indirect employees and third parties.

At CIMPOR, we consider the involvement of all to be essential in guaranteeing healthy, safe, comfortable working conditions at all workplaces and making the organisation more competitive.

BIRD FLU INFORMATION, PLANNING AND CONTROL



When the Portuguese Red Cross (CVP) announced bird flu as an emergency priority in 2006, an awareness campaign was launched to mitigate the risks of a pandemic. Information for planning is the warning to which all companies and organisations should respond if they wish to reduce the risks in their areas of activity.

The CVP's coordinating physician has been helping the CIMPOR Group prepare its in-house plan for awareness of bird flu, the key word being information.

As part of this plan, in 2007 CIMPOR drafted guidelines and appropriate sources of information (e.g. brochures, posters, etc) and they will be updated as necessary. With each change, employees will immediately be given information, on the intranet, for example.

Given the Group's geographical dispersal, cybercafés equipped with PCs and printers will be set up in places with no computer access, which is one of the reasons why the campaign coordinator considered the CIMPOR Group a truly exemplary case-study.

OHS SUPPORT NETWORK (OH&S NETWORK)

In 2007, the Executive Committee approved the CIMPOR Group's guidelines on the Occupational Health and Safety Support Network (OH&S Network) for provide sustainable, qualified support for all those involved in guaranteeing working conditions. It covered the following

- **Organisation** - defining an organisational model to support the Occupational Health and Safety Management System (OH&SMS), which includes a strategy and action plan representing a true preventive attitude. The definition of the organisational model took into account: - specialists in the Occupational Health and Safety Support Network, who have been defined as competence centres with advanced qualifications in OH&S issues and are at the disposal of their company's corporate structure, providing technical support and making the OH&SMS work; The structure, based on the company's leadership and decision-making chain (from top to bottom): - and the OH&S Monitoring Committee, which coordinates the OH&SMS and ensures the involvement of all in a health and safety culture.
- **Establishing human resources**, in terms of specialists to be assigned to the leadership and decision-making structure in each Business Area and Operating Units. Several requirements were defined: - Minimum forecast team of OH&S specialists (taking into account the number of direct and indirect employees at the unit, the severity of the risks, etc); - Profile (taking into account the specialists' qualifications, skills, personality and behaviour); - type of employment contract; - Availability / dedication (OH&S specialists working complete full time, accumulated full time, part time, accumulated part time and reduced time).
- **Defining an OH&SMS chart of activities** and its responsibilities in order to clarify each person's participation and interrelation in the Group's Occupational Health and Safety Management System and ensure its implementation and development.

GOALS AND PLANS OF ACTION

In 2007, all the Group's Operating Units separately or jointly submitted their occupational health and safety goals to be achieved by 2010. They defined their OH&S action plans or included their OH&S activities in the PPIPs (Plant Performance Improvement Plans), which are tools in the CIMPOR performance programme and include OH&S.

COMMUNICATION

Given that communication is one of the main pillars of any management system and CIMPORnet is the best channel for circulating Group information, we began setting up a place in the channel for sharing occupational health and safety information with all employees. In addition, employees' access to this intranet was facilitated by the installation of multimedia kiosks at operating units and the provision of contents in several languages.

STAFF TRAINING

In 2007 training of in-house occupational health and safety auditors began with a seminar in Morocco for senior staff on Audits and Risk Assessment Training given by a specialist in safety in the cement sector. It was attended by eight employees from different countries.

IDEAS COMPETITION

We set up a competition for slogan and logo ideas in order to involve and motivate all employees in occupational health and safety and publicise activities. It was open to all and the aim was to create a unique image alluding to the values and benefits of OH&S and acting as a Group communication banner fitting in with the policy and principles defined for this area.



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The 97 participants underwent a pre-selection process based on the general, graphic and communication criteria established in the rules, resulting in eight finalists to be assessed on the basis of creativity, appeal, memorable slogan, Group-compatible message and easily identifiable logo.

BRAZIL

2007 OCCUPATIONAL HEALTH & SAFETY (OH&S) PROGRAMME IN CAJATI

An average of 36.6 hours of OH&S empowerment, qualification and awareness training per worker was given in 2007.

The safety dialogue and work permit tools also went into effect and an emergency team was set up to provide assistance in environmental and OH&S emergencies.

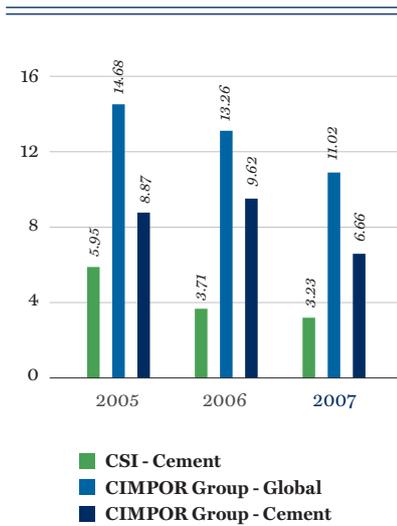
All the safety signage was also reviewed and the areas in the operating unit's different sections were identified.

As a result of these measures and other activities highly oriented towards employee awareness and behaviour that have been in practice for some years, we brought down the number of accidents resulting in sick leave for indirect employees to three (all with minor injuries). January 2008 marked 18 months without accidents resulting in sick leave for direct employees.

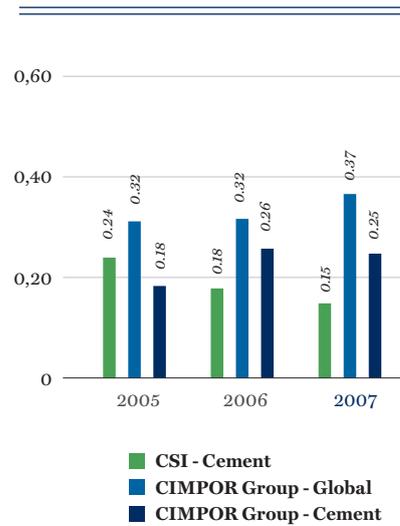
MONTHLY PERFORMANCE INDICATORS – SAFETY

The monthly safety performance indicators for 2007 were audited by an independent body in accordance with the auditing criteria established by the Cement Sustainability Initiative (CSI), based on the Data Measuring and Reporting Protocol (Version 2.0/Oct2005).

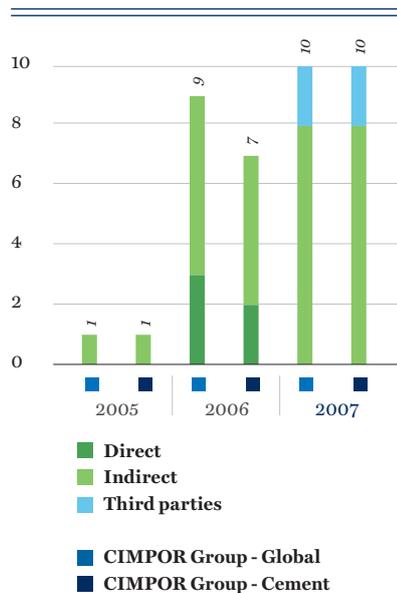
**FREQUENCY RATE
(DIRECT EMPLOYEES)**



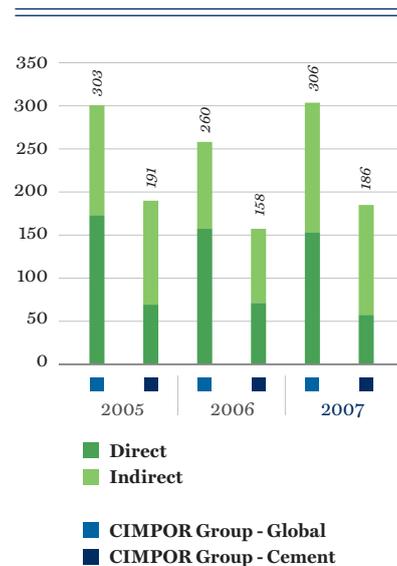
**SEVERITY RATE
(DIRECT EMPLOYEES)**



FATAL OCCUPATIONAL ACCIDENTS



NUMBER OF ACCIDENTS WITH LOSS OF DAYS





PORTUGAL

EUROPEAN AGREEMENT ON RESPIRABLE CRYSTALLINE SILICA

In 2006, the members of the NePSI platform, 15 representing employers and two representing trade union federations, signed the first European multi-sector social dialogue agreement for the prevention of occupational exposure to respirable crystalline silica (RCS).

The aim of the agreement is to improve protection from RCS of around two million workers employed in the European Union in the sectors that signed it, and improve conformity between workers' health and safety legislation in the EU and Member States.

One of the sectors involved is the cement industry. Although there is no record of occupational diseases associated with RCS in Portugal, CIMPOR – Indústria de Cimentos has already conducted awareness campaigns to warn workers of the risks of exposure.

It has a monitoring plan for several jobs, from extraction of raw materials to cement despatch.

SAFETY – TOP PRIORITY



IN SOUTH AFRICA

Operations at the NPC Simuma plant have the highest score for safety, health and environment (SHE) in South Africa. NPC regards occupational safety, health and environment as one of the Group's top priorities and has been working towards firmly instilling attitudes in its staff and workers.

It was as part of this position that all safety measures in the expansion of the Simuma plant were undertaken. Operating in accordance with the highest standards, the two suppliers hired to work at the site were required to adopt extremely strict, comprehensive safety measures and implement a chain of command to manage the whole expansion programme.

Although suppliers are obliged to have their own on-site safety programmes, with their safety managers assisted by independent safety companies, all their procedures were inspected and audited by NPC. NPC also hired an independent service provider to monitor and audit Simuma's and suppliers' safety records.

AND EGYPT TOO!

After 100 days of refurbishment, cement production line one at Amreyah Cement Company (AMCC) in Egypt produced its first clinker on 23 May 2007.



The goal of this project was to increase the performance and restore the original capacity of this production line, built in 1983, using some of the newest and best technology available to ensure high levels of operational efficiency.

In all, more than a thousand employees were involved in the project: 900 for the mechanical areas, 180 for electricity and 120 for the refractories.

All activities were based on the strict requirements of the AMCC. Working in parallel throughout the refurbishment was a dedicated team to supervise extraordinary health and safety measures.

MOROCCO ROAD SAFETY AWARENESS CAMPAIGN



Significant progress has been made in safety regulations recently for the better protection of people and property. These goals can only be achieved by developing a culture of safety. This involves raising awareness and monitoring company and outside employees.

Asment de Témara conducted an important road safety awareness campaign for its customers' and main service providers' drivers to convince them of the need to respect road safety and accident prevention rules.

The initiative included two presentations. The first, given by the company's safety officer, addressed the plant's in-house safety instructions. The second, given by specialists from the National Road Accident Prevention Centre, dealt with regulations and techniques for driving heavy vehicles. At the end, Asment de Témara distributed safety helmets and footwear to all participants.

MEASURING PROGRESS

OCCUPATIONAL HEALTH & SAFETY

→ *Fatal accidents*

1. Number of fatal accidents for direct employees: 0 (2 in 2006) (target 0 achieved).
2. Mortality rate per 10,000 hours worked for direct employees: 0 (5.16 in 2006) .
3. Number of fatal accidents for indirect employees (contracts and sub-contracts): 8 (5 in 2006) (missed target 0).
4. Number of fatal accidents for third parties: 2 (0 in 2006) (missed target 0).

Four of the 10 fatal accidents were due to road traffic accidents outside the plant, four to road accidents inside the plant area, one to a fall from a great height and one a to electrocution.

→ *Accidents with loss of working hours*

1. Number of accidents with loss of working hours for direct employees: 58 (72 in 2006)
2. Frequency rate of accidents with loss of working hours per 1,000,000 hours worked for direct employees: 6.66 (9.62 in 2006) (below the target of 5.68 for 2007)
3. Severity rate for direct employees: 0.27 (0.26 in 2006) (missed target of <0.12 for 2007).
4. Number of accidents with loss of working hours for indirect employees (contracts and sub-contracts): 129 (87 in 2006).

NOTE: As in 2006, the perimeter considered is the Group's cement production, which includes the operating units and management structure of each Business Area (e.g. head office) associated with cement production. Turkey was included in the perimeter in 2007. China has not yet been included.

→ *Goals and future measures*

Targets for 2007 were reached in the case of the number of fatal accidents for direct employees, frequency rate and severity of accidents with loss of working hours for direct employees.

In spite of the degree of priority given to OH&S in the Group, there were, unfortunately, eight fatalities among indirect employees and two among third parties in the CIMPOR Group's cement production in 2007. In 2006, there were seven fatal accidents involving two Group employees and five workers from outsourcers.

There was also an increase in the number of accidents with loss of working hours for outside workers: from 87 to 129.

There was significant progress in the remaining safety figures, i.e. frequency and severity rates, even though the targets were not reached.

As part of its OH&S Plan, the CIMPOR Group will continue to implement its corporate OH&S policy and organisational structure, set up teams, draft codes of good practices and procedures, define in-house methods for assessing risks and conducting audits, include OH&S in in-house training for staff, supervisors, and operators, among other aspects. Plans for 2008 include the following actions:

- Alteration of the chart for collecting monthly safety performance figures to include more information on occupational health & safety;
- Completion of operating instructions on very-high risk activities: silo cleaning, cyclone cleaning, working at height, consignment and fastening of equipment and driving vehicles;
- Adoption of validated methods for audits and risk assessment;
- Theoretical and practical training in audits and risk assessment for country or activity coordinators;
- Establishment of methods for self-assessment of safety performance.

Sharing knowledge and best practices with other international companies in and outside the sector and circulating them within the organisation will continue to be one of the fastest ways of improving the CIMPOR Group's performance in this field.

OHSAS 18001 certification of the OH&SMS at different plants will continue in future years and 2010 is the target for certification at all plants.



04

THE ENVIRONMENT

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Systems and Other Tools

4. THE ENVIRONMENT

4.1. INVESTMENTS IN SUSTAINABILITY

The CIMPOR Group considers sustainable development to be a crucial goal and has made countless investments in this area. Cement production is the Group's core business and it has received 81.1% (77.3% in 2006) of the total investment in sustainability for all activities – cement, concrete, aggregates, mortar and others. (Graph 1).

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Investments in cement production were divided into four groups called Acquisitions (acquisitions of participations in existing companies), Company Growth, Sustainability and Current Investments.

Investments in sustainability now represent 30.6% (23.7% in 2006) of all investments (Graph 2) and increased around 190% from 2004 to 2007 (Graph 3), which underscores the Group's commitment in this area.

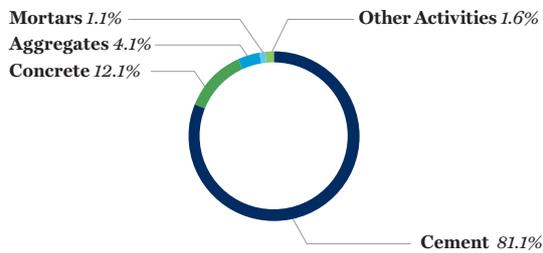
In accordance with the Group's criterion, investments in sustainability are investments that do not directly increase turnover, but are aimed at continuity of business in a sustainable form.

- Investment in land and quarries: guaranteeing the supply of raw materials (e.g. purchase of new reserve, defence and protection areas, new access roads to quarry faces and other investments in quarries that are not directly associated with environmental or social aspects but aim at the long-term continuity of the business);
- Environmental and social investment: abiding by the Group's sustainable development policy, i.e. protecting and/or improving the environment, rehabilitating quarries, preventing loss of biodiversity, re-landscaping, improving internal and external social conditions, ensuring safety and occupational health and other measures to meet the company's social responsibilities;
- Investment in modernisation: increasing efficiency at plants and reducing their costs and/or increasing product quality by introducing or replacing manufacturing equipment, systems or processes to ensure the continuity of operations;

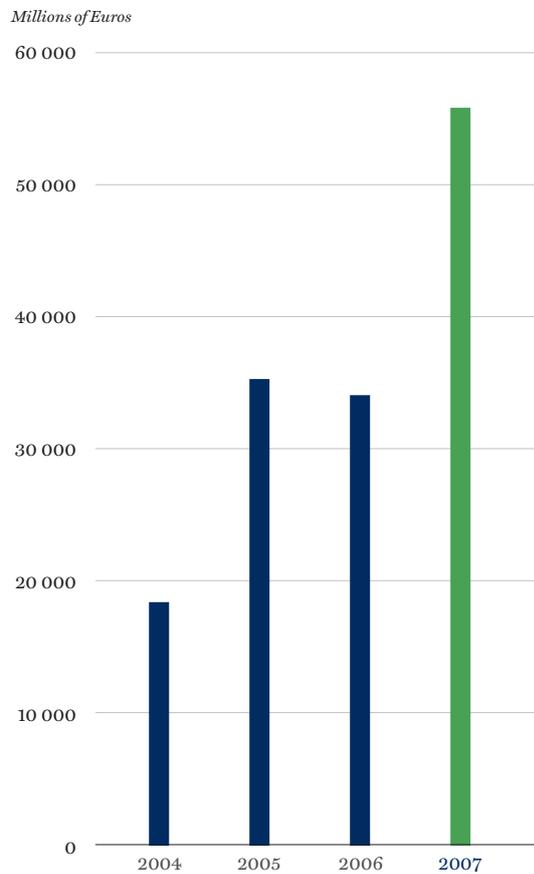




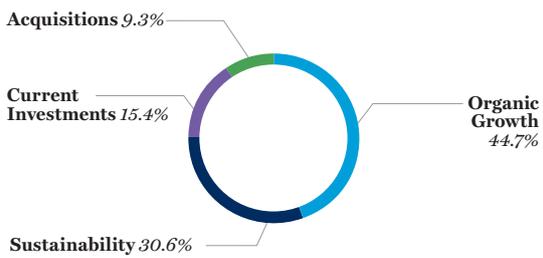
**1. INVESTMENTS
IN SUSTAINABILITY BY ACTIVITY**



**2. INVESTMENTS
IN SUSTAINABILITY**



**3. INVESTMENTS
IN CEMENT PRODUCTION**



4.2. EMISSIONS I : CLIMATE PROTECTION AND CO₂ EMISSIONS MANAGEMENT

As one of the pillars of the CIMPOR Group's sustainable development policy, we monitor, control and mitigate consolidated CO₂ emissions.

For reporting purposes, only the operating units in which the CIMPOR Group held a management control until the end of 2007, were considered. The recently acquired Shree Digvijay OU (India) will therefore only be included in the perimeter next year.

Since 2005, the CIMPOR Group's CO₂ emissions have been audited and certified by SGS, an independent body following the IETA Verification Protocol Version 2.0 for verification of EU ETS emissions reports and meeting the requirements of ISO 14064-3 standard.

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→ *The CIMPOR Group's policy on the reduction of CO₂ emissions per tonne of cement product is based on a number of short, medium and long-term strategies:*

SHORT-TERM STRATEGIES

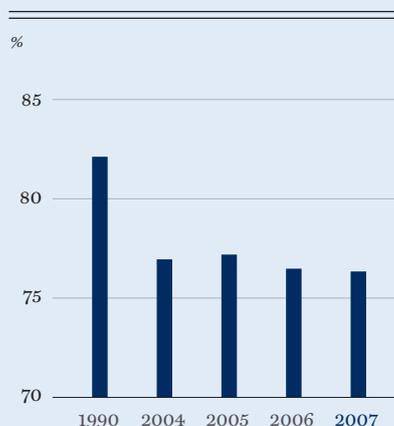
Reducing the quantity of clinker needed to manufacture cement by producing blended cements: clinker / cement factor

The clinker / cement factor indicates the fraction of clinker present in the cement. Clinker can be partly replaced by other materials, normally known as cementitious materials. Reducing this factor means reducing the amount of fuel needed to produce one tonne of cement. As cement manufacture is governed by very strict quality rules, the variety of additions available is very limited.

Normal Portland cement is the basis type and has a clinker / cement factor of around 95% (added gypsum accounts for the other 5%). The CIMPOR Group's average clinker / cement factor shown in the graph is 76.3% (76.5% in 2006 like-to-like/ 76.9% without Turkey or China). Between 1990 and 2007 The average rate of incorporation of clinker in cement at the CIMPOR Group went down by about 7%.

Market factors and rules in each country can influence capacity to improve performance in this field. The Group's good results are due to its high exposure to markets like those of the Iberian Peninsula, Brazil, South Africa and, more recently, China, where the use of blended cements has been a great success. The adoption of the European standards in other markets, such as Tunisia and Egypt in the future will enable us to go a little further.

CLINKER / CEMENT FACTOR



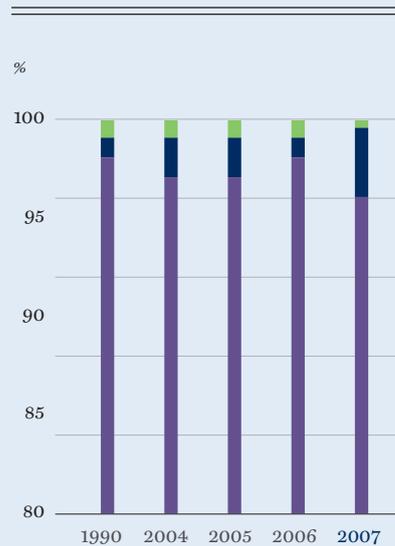


Increasing the percentage of energy from alternative fuels: thermal substitution rate

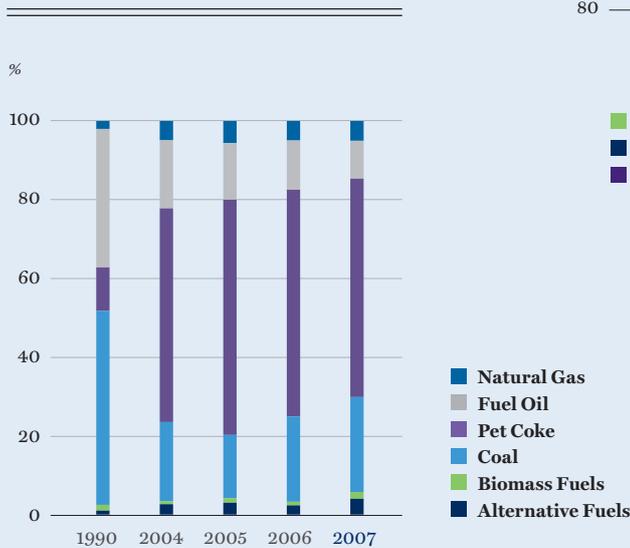
Ground car tyres are still the main alternative fuel used in the Group.

In 2007, the replacement rate of non-renewable fossil fuels by alternative fuels in the Group was just over 4% (2.33% in 2006 like-to-like / 2.73% without Turkey or China), which is still far below the average of some international cement groups and the average in several European countries.

FUEL MIX EVOLUTION



FUEL MIX EVOLUTION



Replacing fuels with higher CO₂ emission factors by fuels with lower CO₂ emission factors: kg CO₂/GJ emission factor.

The increase in petroleum coke (92.8 kg CO₂/GJ) to replace coal (96.0 kg CO₂/GJ) at several Group plants and ground tyres (85 kg CO₂/GJ) to replace both at plants in Brazil and the start of burning animal meal at the Alhandra plant in Portugal helped reduce CO₂/t of clinker emissions between 1990 and 2007. However, the suspension of tyre burning at the Oural plant in Spain reduced the expected improvement.

The use of natural gas in the new production line in Egypt as of 2004 had the same effect (56.1 kg CO₂/GJ). The process will be completed with the conversion of the other two lines. (See EGYPT – 2006 Sustainability Report).

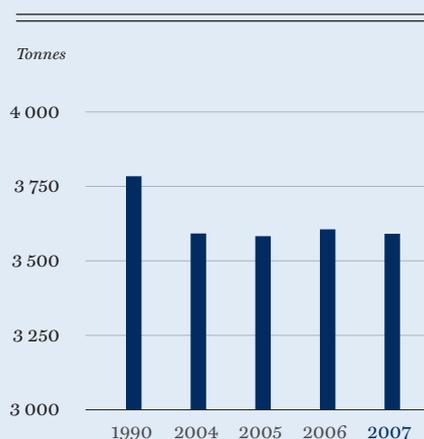
Increasing the energy efficiency of the clinker production process: specific thermal consumption.

The thermal efficiency of the Group's kilns has improved by around 5.1% since 1990 (4.7% in 2006 like-to-like / 2.2% in 2006 without Turkey or China) and reached 3,590 MJ per tonne of clinker in 2007 (3,605 MJ in 2006 like-to-like / 3,647 MJ in 2006 without Turkey or China). This important progress, although still not considered sufficient, is due mainly to ongoing improvements at different operating units (OU) (e.g. improving reliability and operability of kilns, optimising heat recovery in clinker coolers at several operating units, among others), work on some lines and, last but not least, inclusion in the Group's consolidation perimeter of the OU in Turkey and China, which have slightly higher energy efficiency than the Group's other OU.

The impact of the start-up of one new line (South Africa) and three remodelled lines (2 in Spain and 1 in Brazil) in 2008, as part of ongoing operational improvements under the CIMPOR Performance Programme launched four years ago will continue to improve this and other directly related indicators next year.

The analyses of informations recorded on the "Getting the Numbers Right" data base has revealed that, with the technology now available, we are achieving the possible limit.

SPECIFIC THERMAL CONSUMPTION
MJ/t CLINKER
(CLINKER PRODUCTION)



Increasing the energy efficiency of clinker and cement production to reduce indirect CO₂ emissions: specific electricity consumption

Electricity consumption represents a substantial part, around 12 to 15%, of total energy used in cement production. The Group's policies have therefore always included reducing electricity consumption by constantly adopting measures to rationalise energy use and investing in more modern equipment to improve the energy performance of industrial equipment. Over the years, it has been the subject of voluntary agreements with the governments of many countries in which we operate (See SOUTH AFRICA).

Although it does not mitigate direct CO₂ emissions, reducing specific electricity consumption is an important way for the cement industry, as an intensive electricity user, to help reduce its indirect emissions, i.e. those from electricity generators upstream from the operating units, especially in countries where energy generation is based on fossil fuels resulting in higher CO₂ emissions by their national grids.

MEDIUM-TERM STRATEGIES

Modernising the oldest clinker lines and building new ones: specific thermal consumption

The slight improvement in specific thermal energy consumption is thanks mainly to the closing of the old line at Campo Formoso and the construction of new, more efficient lines at Campo Formoso, Brazil, to be followed by others (Cajati, Campo Formoso and João Pessoa), and at Amreyah CCC, Egypt, and the renovation of production lines in Portugal, Spain, Morocco and Tunisia.

The trend towards better specific thermal energy consumption will continue in the future after the start-up of two fully remodelled lines at the Cordoba and Niebla plants (going from semi-dry to a dry process at Niebla) in Spain, the remodelling of one of the lines at Amreyah Cement Company, Egypt, in 2007 and the remodelling of the other by the end of 2008 and the opening of a new clinker production line at Simuma, South Africa in 2008.

The remodelling and increase in capacity of one of the lines at Cezarina, Brazil in 2008 and the construction by 2010/11 of new production lines in Morocco, Tunisia, Turkey, Mozambique and China will complete the projects that will soon be contributing to maintaining this positive trend.

Increasing the use of totally or partially decarbonated alternative raw materials: raw material replacement rate

This is one of the Group's future courses of action to further reduce specific CO₂ emissions per tonne of cement product, although its impact is limited. Given the vital importance of available natural resources to its activity, the group will make it part of its long-term quarry management policy to monitor trends towards the growing use of totally or partially decarbonated alternative raw materials and the recycling of construction waste – using it as

an alternative raw material in cement manufacture and thereby continuing to provide services to the community provided that it is available in the Business Areas..

CDM (Clean Development Mechanism) projects

The Group is continuing to study the feasibility of projects of this kind in six of its Business Areas (Morocco, Tunisia, Brazil, South Africa, Mozambique and China), with a view to possibly obtaining carbon credits for use in the European Union Emission Trading Scheme (EU ETS).

In order to detect potential for this type of project in the Group's different Business Areas, internal relationships involving the Business Area have been set up for contacts with local bodies and detection of project opportunities, the Group's Technical Centre (CIMPOR TEC) for technical support and the Corporate Financial Department for market aspects of CO₂.

In 2007, the Group acquired a share in the Luso Carbon Fund for the same purpose and also as a way of diversifying risk. It gives access to a varied portfolio of CDM projects in different parts of the world and makes it possible to obtain carbon credits at lower prices.

In addition, the Group has occasionally been resorting to the CO₂ emissions market to buy allowances to make up for the insufficiency of its emission allowances in relation to the production capacity of its OU in Portugal and Spain.

 LONG-TERM STRATEGIES

Adopting alternative technologies

The Group plans to continue to study ways of reducing the amount of cement kiln dust sent to landfills and improving the energy efficiency of the bypasses of the kilns using them, as in 2007 in the three kilns in Egypt and ways of recovering the residual heat from hot process gases for different purposes.

The residual heat from process gases (pre-heating tower and/or kiln cooler) can in many cases be used to dry raw materials, solid fuels and cement additives without using fossil fuels.

When this heat is used to generate electricity (projects that we monitor constantly to check on their economic and technical feasibility), CO₂ emissions are indirectly reduced, as less is consumed from the national grid.

The recovery of residual heat from process gases to generate electricity has been studied for several years.

The CIMPOR Group will award the contract for the first project of this type in the first quarter of 2008.

Producing clinkers and alternative products (e.g. belitic clinker)

We have to study technically and economically feasible solutions making it possible to use a mixture of raw materials with lower CaCO₃ and higher SiO₂ content without affecting the quality of the final product.

This will help reduce consumption of the thermal energy necessary to decarbonate raw materials and therefore CO₂ emissions.

It is also necessary to identify ways of substantially increasing clinker reactivity, with a view to incorporating more additions, and to study the production of clinker from new raw materials.

Analysing and adopting end-of-line measures

The CIMPOR Group continues to assess the technical and economic risks and opportunities of emerging technologies such as carbon capture and sequestration, though many of these technologies are not yet sufficiently developed nor is there a clear idea of their pros and cons.

The Group has been involved in and has monitored international projects studying these matters.

→ **Verification of the CIMPOR Group's CO₂ emissions**

The Group's CO₂ emissions from cement production are calculated in accordance with WRI/WBCSD Cement Industry CO₂ Emissions Protocol Version 2.0 / 05Jun2005 and have been checked by SGS since 2005. CIMPOR has developed a system for managing, measuring monitoring and reporting CO₂ emissions and related indicators. Emissions were checked and certified using an approach similar to that of IETA Verification Protocol Version 2.0 of 2005 for EU ETS emissions reports and in accordance with the requirements of recent ISO 14064-3 standard.

Between 1990 and 2007, the CIMPOR Group grew from a company with six operating units in Portugal, two of which ceased to belong to the company, to become an international group with 37 operating units (23 cement plants and 14 grinding plants) and operations in another nine Business Areas - Spain, Morocco, Tunisia, Egypt, Turkey, South Africa, Mozambique, Brazil and China.

In late 2007/early 2008 the Group acquired a new operating unit in India, which will not yet be included in the consolidation period this year.

The checking of the 2007 data used a sampling system based on risk analysis devised by the verifier and CIMPOR. Fourteen cement plants and two grinding plants were visited, representing around 68% of the Group's absolute consolidated emissions from the 37 operating units.

Twenty-six percent of CO₂ emissions are generated out of the remaining 32%, from facilities covered by the EU ETS, for which checking is mandatory and performed by duly accredited inspectors, which is why the audit was not duplicated.

The information generated in the CIMPOR Group was checked at different levels:

→ **At corporate level (consolidation of Group's data):**

- Assessment of the Group's CO₂ emissions reporting system (e.g. central data collection methods and the way in which data are gathered at operating units, compiled and set out in the final report), analysis of the different reporting perimeters, analysis of calculation protocol, consolidation procedure and corporate tools and documents used and made available to the different operating units.

→ **At intermediate level (consolidation Business Area data):**

- Analysis of controls at intermediate consolidation data.

→ **At operating unit level (facility):**

- Analysis of information gathering procedures at operating units (e.g. data collection, handing and reporting).
- Checking support documents and internal control processes .
- Analysis of the Group's annual CO₂ emissions report.
- CPreparation of a report and information checks.

The verifier confirmed that emissions had been calculated in accordance with the voluntary WRI/WBCSD Cement Industry CO₂ Emissions Protocol Version 2.0 / 05Jun2005 and abided by its principles in terms of relevance, integrity, consistency, transparency and accuracy.

The verifier found that the data submitted for validation were free of material errors on the 5% materiality threshold agreed upon at the beginning of the process.

Although the 1990 baseline was recorded, it is not included in the scope of the verification process and is used as a best estimate (Kyoto Protocol) to measure changes in the CIMPOR Group's overall emissions.

→ *The CIMPOR Group's CO₂ emissions*

The CIMPOR Group's overall consolidated specific CO₂ emissions at its operating units show a frontline performance on an international scale. The fact that only one its 23 cement plants used semi-humid processes (no longer the case since the close of 2007), while the others were dry processes contributed to this performance.

Performance in 2007 does not yet reflect the latest acquisition of a plant in India in late 2007/early 2008, but unlike 2006, it does include the Turkey and China Business Areas.

It was calculated in accordance with the do WRI/WBCSD CO₂ Protocol (Version 2.0) and is summarised in the graphs in this section.

Total emissions

→ *Total gross emissions: 16.2 (16.2 in 2006 like-to-like/13,1 without Turkey or China) million tonnes of CO₂*

→ *Total net emissions: 16.2 (16.2 in 2006 like-to-like/13,1 without Turkey or China) million tonnes of CO₂*

The increase in total CO₂ emissions in 2007 against those in the 2006 Sustainability Report was due to the inclusion in the consolidation perimeter of six operating units (OU) in Turkey and two in China.

The graphs below do not reflect this effect, however, because they show emissions from these new OU as of 1990 and the 1990 baseline has also been updated to this new scenario.

In spite of a 70% (45.2% in 2006) increase in cement production between 1990 and 2007, considering the current consolidation perimeter, our overall total gross CO₂ emissions only rose 49,1% (34.6% in 2006) in the period, thanks to a substantial improvement in energy performance in the process, changes to fuels with lower emission factors and, especially, a significant increase in cement additives.

In spite of an increase in the CIMPOR Group's overall clinker and cement production from 2006 to 2007, overall total CO₂ emissions remained stable.

Specific emissions

→ *Specific gross emissions: 662 (672 in 2006 like-to-like / 668 without Turkey or China) kg of CO₂ per tonne of cement products (8.6% less than 1990).*

→ *Specific net emissions: 662 (672 in 2006 like-to-like / 668 without Turkey or China) kg of CO₂ per tonne of cement products (8.6% less than 1990).*

In 2007, the improvement trend continued thanks to better operating performance of most kilns reflected in lower specific thermal energy consumption and the inclusion of the Turkey and China OU in the Group's perimeter.

Progress was, however, much more substantial when it came to specific (gross or net) CO₂ emissions per tonne of cement or cement product produced, due to a large increase in cement additives that the regulations in several of the countries where we now operate have allowed.

The Group has increasingly focused on the development of new types of blended cements with less clinker (replaced by fly ash from thermoelectric power stations, steelworks slag and a series of other additives as available in each geographical area).

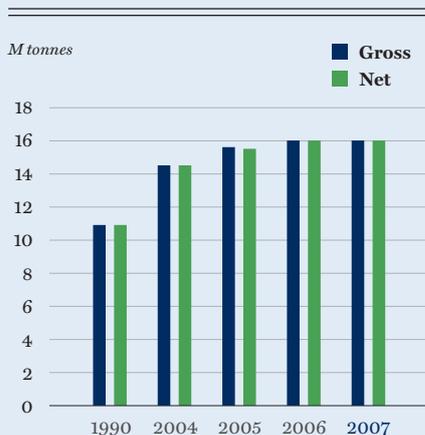
The gradual replacement of non-renewable fossil fuels by alternative fuels (e.g. Brazil), the use of biomass as an alternative fuel (e.g. Portugal and soon Spain) and the use of alternative raw materials, preferably decarbonated, are decisive ways of reducing CO₂ emissions and also offer business advantages, provided that they are available and economically feasible.

Their potential is being studied in the countries where the Group operates.

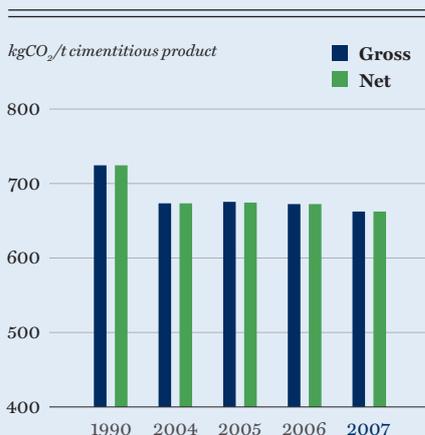
In 2007, the Alhandra plant began recovering animal biomass as an alternative, carbon neutral fuel. This will increase in 2008.

The conversion of combustion systems to fuels with increasingly lower CO₂ emission factors (e.g. from fuel oil to natural gas in Egypt in 2004 and in upcoming years and from coal to natural gas in Mozambique in 2008, and growing use of petroleum coke instead of coal) is another path we will continue to follow.

TOTAL CO₂ EMISSIONS



SPECIFIC CO₂ EMISSIONS



PROGRESS

CLIMATE PROTECTION AND CO₂ EMISSIONS MANAGEMENT

→ **OVERALL CO₂ EMISSIONS**

1. Number of CIMPOR Group operating units: 37 (29 in 2006) - 23 cement plants (19 in 2006) and 14 (10 in 2006) grinding plants.
2. Percentage of operating units using the WRI/WBCSD CO₂ Protocol to inventory emissions: 100% (100% in 2006).
3. Overall gspecific gross CO₂ emissions per tonne of cement product: 662 (672 in 2006 like-to-like / 668 without Turkey or China) kg CO₂/t cement product
4. Overall specific net CO₂ emissions per tonne of cement product: 662 (672 in 2006 like-to-like / 668 without Turkey or China) kg CO₂/t cement product.

→ **Goals and next steps**

The CIMPOR Group's CO₂ emissions in 2005, 2006 and 2007 were checked by an independent body, which will continue in the future, at least every two years. The CIMPOR Group will endeavour to improve its performance with a view to mitigating CO₂ emissions and achieving the overall goal of reducing overall specific net CO₂ emissions per tonne of cement product by 15% by 2015 against 1990. The CIMPOR Group had reduced them by 8.6% by the close of 2007.

**SPAIN RATIONALISATION OF ELECTRICITY CONSUMPTION
(TORAL DE LOS VADOS)**



A LIMESTONE CONVEYOR BELT THAT GENERATES ELECTRICITY

At the Toral de los Vados plant's quarry, we reached the final extraction face planned for a particular area and had to open new faces at a higher level. It was necessary to transfer the whole crushing and screening plant to that level in order to reduce the distance between future faces and the plant. Following this expansion of the quarry and in order to maintain the delivery point of the crushed limestone to the conveyor between the quarry and the plant, a new belt with the following characteristics was installed:

- Descending 173 m over 1.23 km.
- Drive equipped with a brake due to the descent so that it can be stopped in case of emergency or a power cut.

- Drive fitted with frequency variator, an acceleration and braking ramp, speed control and a disk brake 2 m in diameter to dissipate the heat generated by braking in a normal stop with the deceleration ramp in an emergency stop.

When it is operating without a load, which normally happens in the start-up phase, the belt uses about 80 kW of power, but as soon as it is loaded, it actually generates around 250 kW, depending on its load. This energy is used to power the other equipment in the quarry.

In 2007, the net balance of energy, the difference between power produced and used by the conveyor belt, was 320 MWh (0.24kWh/t), which helps reduce indirect CO₂ emissions to around 140 t CO₂ per year.

**MOZAMBIQUE REPLACING COAL BY NATURAL GAS / REDUCING
DIRECT CO₂ EMISSIONS (MATOLA)**



Cimentos de Moçambique, which owns the Matola plant and Dondo and Nacala grinding plants, is the only clinker producer in Mozambique. The Matola plant currently produces around 250,000 tonnes of clinker and 400,000 tonnes of cement a year and is responsible for some 83% of all cement produced in Mozambique. MGC (Matola Gas Company) is the company that operates the gas pipeline coming from the main gas pipeline between Mozambique and South Africa and crosses the Mozambique border at Ressano Garcia (MGC take-up point). This branch pipeline carries around 5,500 m³/h of natural gas at high pressure (40 bar) from Ressano Garcia to Matola, where the cement plant is located, and supplies industries that have contract with MGC.

In 2007, in order to take advantage of this opportunity, Cimentos de Moçambique undertook a project to exchange coal for natural gas as the fuel used in the clinker kiln, since natural gas has a lower emission factor. All the necessary equipment was acquired and installed. Taking the potential for generating carbon credits arising from the approval of

a CDM project for exchanging one fuel for another, Cimentos de Moçambique negotiated with MGC Matola Gas Company a favourable price for the supply of natural gas taking into account this aspect and the expected benefit in terms of revenue from the reduction in CO₂ emissions. The installation of the necessary equipment was completed and use of natural gas as the new fuel began in April 2008. From now on, gas will completely replace the coal and diesel used until now to produce clinker. According to a study, Cimentos de Moçambique will reduce its carbon dioxide emissions by about 350,000 tonnes in the next five years, i.e. around 70,000 tonnes a year. This measure will help Mozambique save foreign currency as it will no longer need to import coal, reduce stocks of raw materials (as there will be no need to store coal or diesel) and lower the risk of fire associated with stored fuels. In addition, there are also the indirect environmental advantages arising from the elimination of dust generated during the transport of coal from South Africa to the plant and its unloading and transfer from to storage pile at the plant.

4.3. EMISSIONS II : MONITORING AND REPORTING OF OTHER EMISSIONS (PARTICLES, NO_x, SO₂ AND MICRO-POLLUTANTS)

Many of the emissions from the CIMPOR Group's operating units (OU) are strictly monitored and reported in compliance with local, national, regional and often international environmental regulations.

MONITORING OF EMISSIONS

In addition to CO₂, cement production is responsible for emitting other pollutants into the air. Local authorities in most of the countries in which the Group operates have been regulating these emissions in an increasingly restrictive fashion. As the Group increases the replacement of non-renewable fossil fuels by alternative fuels (waste and by-products from other industries), public scrutiny of our emissions is also increasing. Quite rightly, regulators and local communities demand that we prove that the use of these alternative fuels does nothing to change the way our kilns operate, thereby not affecting the environment or public health. The Group devotes a substantial part of its industrial investments to reducing emissions of dust, SO_x and NO_x, in accordance with its multi-annual planning and investment cycle.

The source of emissions subject to the WBCSD/CSI Emissions Monitoring and Reporting Protocol is the kiln's main chimney and monitoring is carried out in accordance with generally accepted rules (e.g. national and ISO standards, among others).

Monitoring of the main pollutants is preferably continuous (if not it is done at least once a year), while other pollutants are measured intermittently (fingerprint measurement).

New measurements should be made whenever there are significant changes in processes, raw materials or fuels.

We have established three key indicators to evaluate the performance of the Group's operating units in monitoring emissions and the overall amounts of main pollutants.

We gathered the necessary information and calculated the CIMPOR Group's three overall indicators so that changes in emissions can be analysed and reduction targets can be set.

In 2007, eight operating units - the four cement plants and four grinding plants in Turkey and China were included in the CIMPOR Group's consolidation perimeter. The three indicators are as follows:

- The Overall Coverage Rate (KPI 1) indicates the percentage of clinker produced in kilns in which particles, NO_x, SO₂, heavy metals, dioxins and furans (PCDD/F) and volatile organic compounds (VOCs) are occasionally or continuously monitored. This indicator was 80% for the Group in 2007.
- Coverage Rate Continuous Measurement (KPI 2) assesses the percentage of clinker produced in kilns in which the main pollutants (particles, NO_x and SO₂) are continuously monitored.. This indicator was 99,1% for the Group in 2007.
- Main Pollutant Emissions Data (KPI 3) gives an evaluation of emissions of main pollutants in absolute (t/year) and specific (g/t clinker) units. The table below shows the figures since 2004:

The overall balance of action taken in December 2006 fell short of our goals, as 100% was not achieved for KPIs 1 and 2.

However, all the necessary actions were under way and were completed in the first half of 2007. The only exception was the Matola plant, where occasional measurements of heavy metals, PCDD/F and VOCs will be conducted later, following the decision to change the fuel from coal to natural gas in April 2008, to portray only the plant's future reality.

In addition, the admission of another four plants in the Group (Turkey and China), with six kilns, also contributed to non-compliance with targets in 2007.

EMISSIONS

Main Pollutants	2004		2005		2006		2007	
	Absolute units (t/year)	Specific units (g/t clinker)	Absolute units (t/year)	Specific units (g/t clinker)	Absolute units (t/year)	Specific units (g/t clinker)	Absolute units (t/year)	Specific units (g/t clinker)
Particles	1 819.3	130.9	2 020.8	137.9	2 712.0	179.7	4 523.1	243.1
NO _x	19 852.1	1 721.7	22 139.0	1 895.1	28 997.0	1 921.2	35 808.0	1 924.4
SO ₂	2 338.3	202.8	4 822.7	412.8	5 195.9	344.3	6 991.1	375.7

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This did not, however, affect KPI 2, as the main pollutants are continuously monitored in the six new kilns.

In terms of KPI 3, overall specific emissions, the following goals were set for 2007: 150 g/t of clinker for particles, 1,900 g/t of clinker for NO_x and 300 g/t of clinker for SO₂.

As shown in the above table, the targets for 2007 were not met.

This was due mainly to the fact that there was a change in the analysis perimeter, i.e. emission data from another six kilns were being considered (Turkey and China, recently included in the Group) which affected overall performance.

In China in particular, emissions were very high and, as they are kilns with high production (×950,000 t/year), the plant's contribution reflects significantly on the overall emission figures.

CIMPOR EMR (EMISSIONS MONITORING & REPORTING) MANUAL

Ongoing improvement in environmental performance requires reliable information on emissions from operating units.

This information makes it possible to make decisions in line with company policy, assess performance and set environmental goals.

In order to conduct a better environmental assessment of its activities and following the work done under the CSI, the CIMPOR Group EMR Manual was drawn up.

This manual describes the general principles of an emissions monitoring and reporting system and procedures to be followed at Group plants when calibrating and maintaining equipment for continuous monitoring of emissions.

The manual will standardise criteria for accepting and reporting figures for a consolidated database, which will help define emission reduction goals.

The EMR Manual has been distributed to all Group operating units and is currently being implemented.

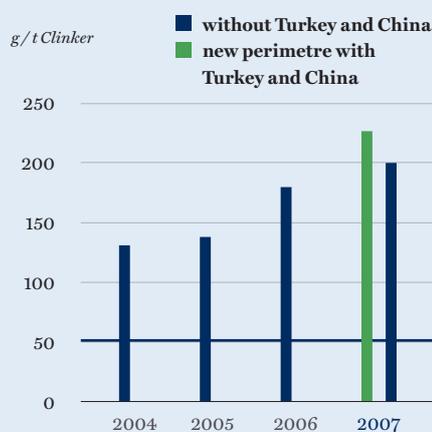
WBCSD/CSI EMISSIONS MONITORING
AND REPORTING PROTOCOL

The WBCSD/CSI Emissions Monitoring and Reporting Protocol is a source of reference for fixing a series of environmental commitments regarding pollutant emissions. It is a high-quality document that is comprehensive, precise, clear and concise and therefore easy to use. The CIMPOR Group has measured, monitored and reported emissions in accordance with the protocol since 2004. The new operating units in Turkey and China began using it in 2007.

Dust

Thanks to the installation of hi-tech cloth tube filters in many kilns and their coolers, 32% (40% in 2006, without Turkey or China) of our production lines have emissions much lower than 50 g/t of clinker. However, as there are some older plants in the Group that are not fitted with more modern electro-filters or cloth tube filters, the average is a little higher at 243.1 g/t of clinker.

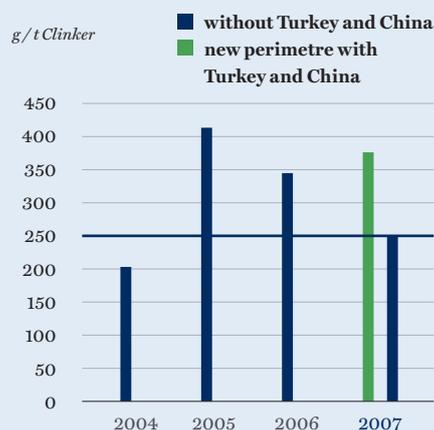
SPECIFIC EMISSIONS OF DUST



Sulphur compounds (SO_x)

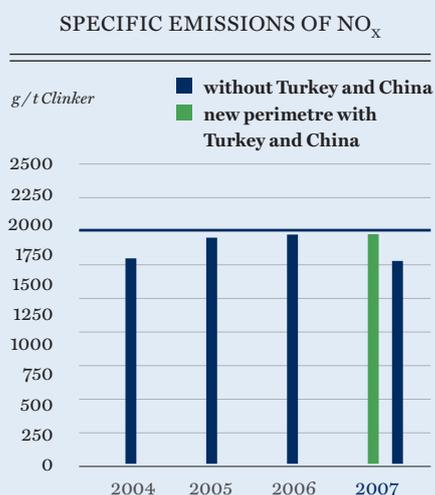
Today, 65% (63% in 2006, without Turkey or China) of our production lines have SO₂ emissions much lower than 250 g/t of clinker. As the Group has some older plants with a very high sulphur content in their raw materials, however, the average is higher at 375.7 g/t of clinker.

SPECIFIC EMISSIONS OF SO_x



Nitrogen compounds (NO_x)

Emissions of nitrogen compounds in the cement production process come mainly from the combination of atmospheric nitrogen with oxygen in combustion at the high temperatures in the kilns (thermal NO_x). It is possible to achieve emissions of around 2,000 g/t of clinker through careful process control. However, lower emissions usually require the use of chemical techniques to reduce nitrogen compounds already formed. Today, 45% (54% in 2006, without Turkey or China) of our production lines have NO_x emissions much lower than 2,000 g/t of clinker, though the Group has some older plants with higher emissions. The average is still 1,924.4 g/t of clinker.



Volatile organic compounds (VOCs)

In the cement industry, emissions of this type of compound depend largely on the quantity of organic compounds in the raw materials from quarries, which cannot be modified. It is, however, possible to reduce the level of this type of emission by replacing part of the natural raw materials used by alternative raw materials with a lower organic content, guaranteeing their proper combustion. Legislation in most countries does not require the measurement of VOCs, except when alternative fuels or raw materials are used. Moreover, emission limits are often applied to total organic carbon (TOC) or total hydrocarbons (THC) but not to VOCs.

Metals

The presence of heavy metals in emissions is due to the fact that they are found in raw materials and fuels. The behaviour of metals in a cement kiln basically depends on their volatility. Only a few countries have established maximum limits for emissions of these compounds and different values are often defined, depending on whether or not the plant uses alternative fuels.



Dioxins and furans (PCDD/F)

Dioxins and furans (PCDD/F) belong to a group called persistent organic pollutants (POPs), the adverse effects of which are associated with their toxicity and consequent impact on the environment and public health. Emissions of these compounds is fairly low in the cement industry. All occasional measurements conducted in the chimneys of our kilns have shown that PCDD/F emissions are well below the limit of 0.1 ng TEQ/Nm³ established by the European Union.

PROGRESS

MONITORING AND REPORTING OF OTHER EMISSIONS

→ *The performance indicators for 2007 (KPI1, KPI2 and KPI3) shown are for the CIMPOR Group's current perimeter, which included Turkey (6 OU) and China (2 OU) in 2007, the so-called current scenario, and the previous year's (like-to-like), i.e. that for which the goals were set, the baseline scenario.*

1. Percentage of clinker produced by kilns with an occasional or continuous monitoring system for the main pollutants and micro-pollutants (KPI 1):
Current scenario: 80 %
 Baseline scenario: 98.4% (target 100%)
2. Percentage of clinker produced by kilns with a continuous monitoring system for the main pollutants (KPI 2):
Current scenario: 99.1%
 Baseline scenario: 100% (target 100%)
3. Overall total and specific emissions of main pollutants (KPI 3):

	Overall total emissions (t/y)		Overall specific emissions (g/t ck)	
	Current scenario	Baseline scenario	Current scenario	Baseline scenario
Particles	4 523.1	3 119.5	243.1	206.2
NO _x	35 808.0	26 57.2	1 924.4	1 756.2
SO ₂	6 991.1	3 938.9	375.7	260.3

→ *Goals and next steps*

In view of the baseline scenario, for which the target of 100% for KPI 1 and KPI2 was set by the end of 2006, only KPI 1 was not met. This exception applies to the Matola operating unit in Mozambique, where we decided to change the fuel used from coal to natural gas, which meant that the occasional measurement of heavy metals, dioxins and furans and VOCs was postponed so that only the future reality of the kiln was reflected.

If we consider the current scenario, after the entry of another kiln (São Miguel dos Campos OU) and four new OU (4 kilns in Turkey and two in China), the target was not met for two indicators. KPI 1 will be met with the occasional measurement of micro-pollutants at the operating units in Mozambique (Matola), Turkey (Çorum, Sivas and Yozgat) and China (Zaozhuang). KPI₂ will be met when the continuous main pollutant analysers go into operation in the kiln that was out of service and started up at the São Miguel dos Campos OU in 2007. In 2008, the operating units will take the necessary action to meet the 100% target for both indicators.

The following goals were set for KPI₃ (overall specific emissions for 2007: 150 g/t of clinker for particles, 1,900 g/t of clinker for NO_x and 300 g/t of clinker for SO₂). Fulfilment of these goals was penalised in the current scenario, i.e. after the OU in Turkey and China were included and in 2007, overall specific emissions of these three pollutants were above the target. In the baseline scenario, only the target for specific particle emissions was not met, due to an abnormal situation at two Group OU. Nonetheless, there were also some limitations on obtaining KPI 3 figures, such as the use of figures based on occasional measurements and some inconsistencies in the figures given by the continuous analysers. In addition, a few continuous analysers went into operation only in the first half of 2007 and so it was not yet possible to achieve reliable consolidated results for setting more coherent reduction goals.

By applying the rules and definitions in the CIMPOR Group's EMR Manual, we will soon be able to standardise criteria for accepting and reporting figures, which will deal with some of the current discrepancies.

In Group terms, taking into account the dynamics of the number of kilns considered, we decided to set the same goals for 2008 as those for 2007:

- Particles: 150 g/t clinker;
- NO_x: 1,900 g/t clinker;
- SO₂: 300 g/t clinker.

As new plants are expected to enter the Group's consolidation perimeter and on the basis of their emission data, new reduction goals will be set for a longer period at year end (e.g. 2015).

SPAIN MODERNISATION OF CORDOBA AND NIEBLA PLANTS



In compliance with CIMPOR's strategic plan for Spain the modernisation of the clinker production lines at the Niebla and Cordoba plants in Andalusia were successfully completed by the end of 2007.

Alterations at the Niebla plant consisted of replacing the obsolete semi-dry clinker manufacturing process with an installed capacity of 940 t/day by a more modern dry process. Raw meal and cement grinding was also changed to achieve an installed production capacity of 1,500 t/day. The Cordoba plant's installed clinker production capacity was increased from 1,500 to 2,200 t/day. The raw meal and coal grinding were redesigned for balanced operation of the whole line.

This modernisation will considerably mitigate the main environmental impacts on the plants' surroundings associated with old technologies, as shown in the table below:

The environmental impact of either plant is not insignificant, especially as the Cordoba plant is situated in the city and the Niebla plant is located around 500 metres from the city walls, a protected monument of cultural value. The CIMPOR Group has therefore had to pay special attention to dealing with local issues and sensitivities.

MAIN EXTERNAL IMPACTS

	NIEBLA %	CORDOBA %
Reduction of atmospheric emissions:		
Dust	80	80
SO ₂	94	n/a
NO _x	56	20
CO ₂	7	4
Noise reduction	20	20
Reduction in consumption of natural resources		
Thermal energy	17	17
Electricity	7	4
Water	80	n/a

4.4. USE OF RAW MATERIALS AND FUELS

The recovery, reuse and recycling of industrial by-products or waste in order to reduce consumption of virgin raw materials and fuels are accepted industrial practices followed all over the world, as long as very strict criteria, such as the waste management hierarchy, are respected.

In the cement industry, due to the unique technical characteristics of the process, there is a clear trend towards adopting the principles of so-called industrial ecology or symbiosis, which consist of the use of by-products from other industries as fuels and raw materials, inspired by the closed-circuit behaviour of most of the ecosystems in nature, where the concept of waste does not exist.

ALTERNATIVE RAW MATERIALS

The conventional, natural raw materials used during the whole cement production process are essentially limestone, marl, clay and schist for clinker and gypsum, limestone and pozzolana for cement.

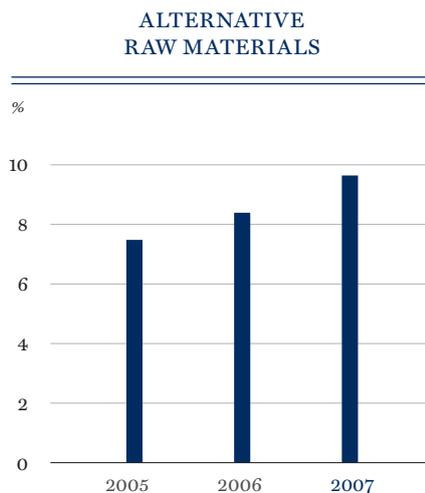
Today, however, more and more use is made of alternative raw materials because they often reduce the volume of virgin natural resources used and can therefore be used as correctives in the clinker production process and also can, in certain circumstances, constitute a good alternative in terms of cost/benefit to conventional raw materials.

Provided that their chemical composition is appropriate and some of their compounds have been decarbonated, some of these alternative raw materials can contribute, albeit on a small scale, to reducing the direct CO₂ emissions associated with the decarbonation process.

The mining industry, iron and steel works and thermoelectric power stations generate some of the mineral by-products used most in cement production.

The main alternative raw materials used in the CIMPOR Group are: - Fly ash from thermoelectric power stations, pyrite ash from sulphuric acid factories, industrial desulphurisation gypsum from thermoelectric power stations, shale from coal mines, refractories from clinker kilns, bauxite from the manufacturing industry and filter ash from thermoelectric power stations.

In addition to these raw materials, dust from the electric filters in clinker kilns can be used as additives in the production of some types of cement.



In 2007, the CIMPOR Group used around 2.9 million tonnes of alternative raw materials, representing around 9.6% (8,4 in 2006 like-to-like / 9.33% without Turkey or China) of all raw materials used in our products (clinker and cement). This percentage is expected to increase a little more in the future, exceeding the 10% goal.

ALTERNATIVE FUELS

One of the most important non-renewable natural resources used by the cement industry is fuel.

The conventional fossil fuels used most in the industry are coal, petroleum coke, fuel oil and, to a lesser extent, natural gas. They are, however, being replaced more and more by alternative fuels.

The main alternative fuels used in the Group include some with high energy contents like animal and vegetal biomass, ground or whole used tyres, rubber waste from different industries, used oils, homogeneous mixtures of industrial waste, vegetal coal waste and others with less calorific power like some types of sludge and oil emulsions. Fractions of household, industrial or agricultural waste can also be used as fuel in clinker kilns to partially replace conventional fuels.

The Group expects to continue to increase the percentage of alternative fuels in the mix that it currently uses. When compared to other cement groups, it is at a rather incipient level.

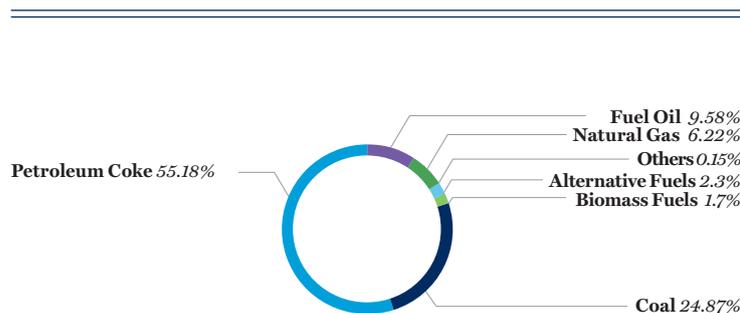
Although the issue is very important and many of our operating units have already prepared programmes for introducing alternative fuels and raw materials, the CIMPOR Group has not yet made any noteworthy progress in their use the place of conventional materials, when compared with other groups in the sector. It was only in 2004, at its operating units (OU) in Brazil and one OU in Spain, that the Group began, highly successfully, to take the first steps in replacing conventional fossil fuels by alternative fuels.

In 2007, a number of investments were made in increasing the quantity of alternative fuels used in co-processing production, in particular at OU in Portugal.

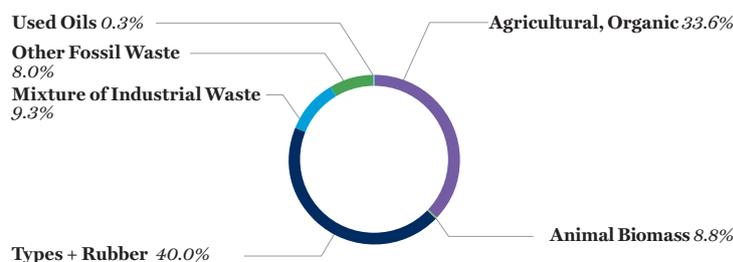
Alhandra began using animal biomass. Some progress was also made in this field in Morocco and South Africa in 2007, although co-processing has not yet begun.

The types of fuel used in 2007 are shown in the graphs.

TYPES OF FUEL 2007



ALTERNATIVE FUEL + BIOMASS FUEL 2007



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The use of alternative fuels in the Group abides by very strict criteria, including the prohibition of using a variety of waste. The Group's policy also takes into account the Cement Sustainability Initiative (CSI) guidelines on responsible use of raw materials and alternative fuels, in accordance with current best practices in the industry, which abide by the principles of sustainable development. According to these guidelines, the use of these raw materials and alternative fuels by the cement industry must first pass a waste management hierarchy exam.

SOUTH AFRICA PRODUCTIVITY OF RESOURCES

Cement production naturally uses large quantities of energy and natural resources. NPC is committed to substantially improving the productivity of resources by identifying industrial symbiosis processes. The innovations that might drastically reduce the amount of resources used are sometimes held up by rules and specifications. Here is an example.

FINE ORES FROM IDWALA (NPC | SIMUMA)

Idwala Carbonates is a quarry and power

station near the Simuma plant in Oribi Gorge, which also extracts and processes limestone. The limestone processing produces another, of lower quality, that is considered waste. However, NPC conducted a feasibility study for recovering this by-product and today, this waste is included in the raw mix to produce clinker. The advantages are: a reduction in limestone needs (in 2005 384,530 tonnes were used, i.e. 48.73% of the total limestone); less waste; smaller landfill for waste from the Idwala mine, thereby increasing its useful life.

PROGRESS

USE OF RAW MATERIALS AND FUELS

→ *Energy use*

1. Specific energy consumption in clinker production: 3,590 (3,605 in 2006 like-to-like / 3,647 without Turkey or China) MJ tonnes of clinker
2. Use of alternative fuels as a percentage of total thermal consumption: 4.02% (2.33% in 2006 like-to-like / 2.73% without Turkey or China)
3. Use of biomass (i.e. quantity of biomass as a percentage of total thermal energy consumption): 1.7% (0.91% in 2006 like-to-like / 1.10% without Turkey or China)

→ *Use of raw materials*

1. Use of alternative raw materials as a percentage of total consumption of raw materials: 9,63% (8,38% in 2006 like-to-like / 9,33% without Turkey or China).*
2. Clinker / cement factor calculated in accordance with the WRI/WBCSD CO₂ Protocol (i.e. ratio between clinker used and cement produced): 0.763 (0.765 in 2006 like-to-like / 0.766 without Turkey or China).

**NOTE: This rate is calculated by dividing the total quantity of alternative raw materials, by-products from other industries used as correctives of raw meal for clinker production (e.g. slag, filter ash, pyrite ash and foundry sand used as correctives) and as additives for cement production (e.g. blast-furnace slag, fly ash and synthetic gypsum) by the total quantity of raw materials used, which also includes conventional raw materials (e.g. limestone, marl, schist, clay and sand).*

→ *Goals and next steps*

The CIMPOR Group's main goals in this field are 10% overall use of alternative raw materials, 15% overall use of alternative fuels (including biomass) and 5% overall use of biomass in Portugal, Spain, Morocco, Brazil and South Africa by 2008.

Our goal for the use of alternative raw materials has almost been reached, as the rate is now around 9.7%.

However, we do not expect to achieve our most ambitious goals for the use of alternative fuels within the original timeframe due not only to bureaucratic obstacles raised by local authorities (e.g. Oural in Spain and Loulé in Portugal) after their approval but also due to delays in starting up the projects in Morocco, South Africa and Spain and shortages and rises in price of some of these fuels.

Given these difficulties and although progress has been made in relation to the 2.73% in 2006, we were very far from achieving the 15% thermal replacement goal by the end of 2008, with only 4.02% (Group) and 6.46% (five Business Areas) in Portugal, Spain, Morocco, Brazil and South Africa, the only Business Areas with projects of this type.

This is why we had to lower the targets for these five Business Areas at the close of 2007.

We decided to maintain the goal of biomass usage rate, which was, in 2007, 1.7% (Group) and 2.9% (five BA) of 5% but for 2010, and the aim for an overall alternative fuel rate (including biomass) of 10% until the end of 2010.

Achievement of these targets will naturally have a highly positive effect on the CIMPOR Group's total CO₂ emissions.

PORTUGAL USE OF ALTERNATIVE FUELS / RECOVERY OF ANIMAL BIOMASS (ALHANDRA)

Following several contacts between the authorities and CIMPOR Indústria and in line with the CIMPOR Group's strategy on raw materials and alternative fuels, we decided to assist the government in solving the environmental problem caused by the storing of animal feed produced since the beginning of the crisis caused by the appearance in Portugal of bovine spongiform encephalopathy (commonly known as mad cow disease). Following prohibition of the use or sale of this so-called high-risk material, around 100,000 tonnes of animal feed were being stored in "big bags".

We also decided to assist in disposing of animal feed for ruminants currently produced by two authorised companies, at the same time as the operation to destroy the feed stored under the authority of the Ministry of Agriculture.

In January 2005, we submitted a licence application for a facility in Kiln 7 at the Alhandra plant to use around 30,000 tonnes a year of animal feed, completing a prior application made in May 2004. The plans included building a sealed intake silo for feed delivered in tanker trucks and unloaded pneumatically and an extraction and measurement system with a maximum capacity of 5 t/h in a sealed building.

The feed would be sent to the main burner in Kiln 7.

Although the plan provided for the unloading, measurement and injection of the feed in a sealed system, with no contact with the exterior, we also decided to build a specific system for treating rainwater draining from the facility.

After some issues raised by the regional and municipal authorities had been cleared up, we obtained a building permit and once the assembly work had been completed and

the final inspection carried out by the licensing authorities, the operating licence was granted in March 2007.

The initial phase of adapting to the new working conditions then began and a stable work regime was soon achieved.

In 2007, around 12,500 tonnes of animal feed were destroyed, thereby helping to solve an environmental and public health problem.

At the same time, the use of animal biomass as an alternative fuel instead of around 7,000 tonnes of petroleum coke, made it possible not only to reduce the use of non-renewable fossil fuels but also to use a neutral fuel in terms of CO₂ emissions.

This achieved a fossil fuel replacement rate of 7.4% in 2007 and may reach an expected maximum of 17.7%.

As expected, gas emissions were not negatively affected by the use of the animal feed and there was actually a substantial reduction in NO_x emissions.

Because of the good results achieved and the need for a capacity to continuously dispose of animal feed, it was decided to extend this project to Kiln 6 and the application process began in late December 2006. It should be completed in early 2008.

The new equipment will be similar to the other and will also have capacity to burn 30,000 tonnes of animal feed per year.

BRAZIL CO-PROCESSING OF WASTE IN CAJATI



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ALTERNATIVE FUELS

In 2007, the CETESB (Environmental Technology Sanitation Company/Secretary of State for Environment) granted a licence to increase the co-processing of tyres from 1.4 to 3 tonnes per hour, which raised the replacement rate from 11.7 in 2006 to 20.5% in 2007. Also with CETESB's authorisation, a transport and kiln feed system was installed for the co-processing of whole tyres of any type and the input of waste generated at the plan for co-processing in accordance with the authorised list. Work is currently finishing on a 1,470 m² warehouse divided into special bays appropriate for storing, handling and feeding waste into the kiln tyres, plant waste and mixtures of industrial waste.

PLANT WASTE

The Cajati OU was granted a licence by CETESB for co-processing its own waste (refractories, glass, wood, textiles, plastic, paper, cardboard, food waste, several types of rubber, non-recyclable oils and lubricants, etc and some rubble from building sites). A warehouse was built in 2007 to store plant waste from the internal selective collection system. This investment and the in-house awareness campaign on the need for selective collection improved the sorting of materials for co-processing and recycling. Also with CETESB's authorisation, the OU is assisting the Jacupiranga and Eldorado Forums and the Federal Police in the incineration of documents and other items.

PORTUGAL
USE OF WASTE AS ALTERNATIVE RAW MATERIAL (LOULÉ)



Following the Group's strategy on alternative fuels and raw materials, a successful test was conducted at industrial level of the use of filter ash, a by-product of thermoelectric power stations, to reduce the amount of schist used in the manufacturing process and thus rationalise the use of natural mineral resources.

Schist is an abundant natural mineral resource, but its extraction in the Algarve is limited by spatial planning policy (e.g. RAN, REN, Rede Natura 2000). Since the chemical composition of filter ash contains some of the same components as schist, it was tested in

different percentages in the formation of the pre-homo pile. After around three months of use, we found that an added percentage of 4% to 7% reduces the use of schist by 5% to 8%, resulting in a maximum reduction in annual schist consumption of some 50,000 tonnes. It does not significantly change the production process and the quality of the final product is guaranteed. Given the difficulty in finding extractable schist in the region, the Loulé plant plans to continue to use this by-product and has requested and received industrial licensing for its inclusion in the cement manufacturing process.

4.5. IMPACTS ON LAND USE

The CSI has developed relatively comprehensive guidelines on factors to be taken into account in Environmental and Social Impact Assessments (ESIAs). These guidelines will enable the Group's companies and their stakeholders to work together in the normal cycle of setting up, developing, operating and closing plants. They have already been distributed to all the CIMPOR Group's companies and are being incorporated in the Group's own guidelines for different operating units.

OPERATION AND REHABILITATION OF QUARRIES

Today, 73% of the CIMPOR Group's quarries have environmental recovery plans (ERPs) and 66% are implementing them (see graphs). With the Group's takeover of new operating units in new markets like Turkey and China in 2007 and India in 2008, we face new challenges to the environmental rehabilitation of quarries.

Considering the diversity of situations in the Group today, due not only to the quarries' intrinsic characteristics but also the different geographical, socioeconomic and legislative realities, the CSI Environmental and Social Impact Assessment (ESIA) Guidelines are being analysed and implemented case by case, although they will be included in the CIMPOR Group guidelines, currently being drafted. In 2007, the creation of a task force was approved to standardise criteria in the CIMPOR Group and also speed up the implementation of the CSI guidelines. The taskforce will begin work more systematically in 2008.

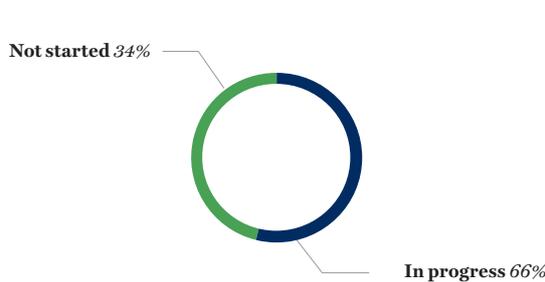
Two groups are being considered for the assessment of ERPs: - Areas where reserves are exhausted or nearly exhausted; - Areas with a long lifespan.

For the areas where reserves are exhausted or nearly exhausted, the potential final use of the land on the basis of the region's socio-economic setting will be a capital gain to be considered in the ERP. For the areas with a long lifespan, environmental recovery is being analysed on the assumption that a region's socio-economic circumstances change over time and so does the potential use of the land.

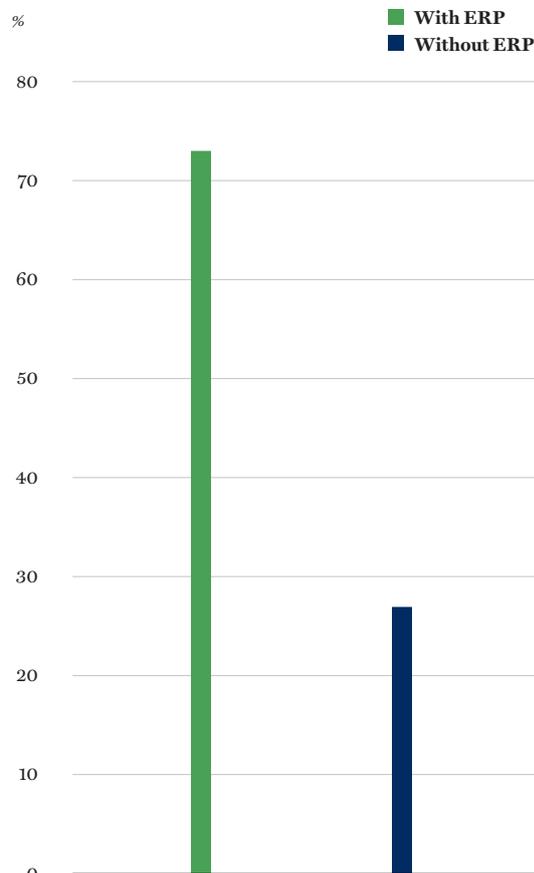
Over time, the CIMPOR Group has developed environmental rehabilitation work methods based on defining optimised modelling techniques in accordance with the specificities of the site, while always considering sustainable development, biodiversity and balanced ecosystems.

In order to systematise processes and goals, a CIMPOR Group standard is going to be prepared and adopted. It will be a combination of different laws and CSI guidelines and will act as a general guide.

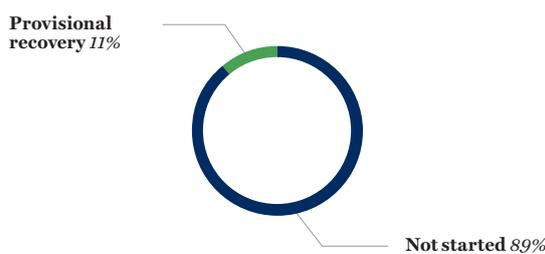
SITUATION OF PLANTS WITH ENVIRONMENTAL REHABILITATION PLANS



SITUATION OF PLANTS REGARDING ENVIRONMENTAL REHABILITATION PLANS



SITUATION OF PLANTS WITHOUT ENVIRONMENTAL REHABILITATION PLANS



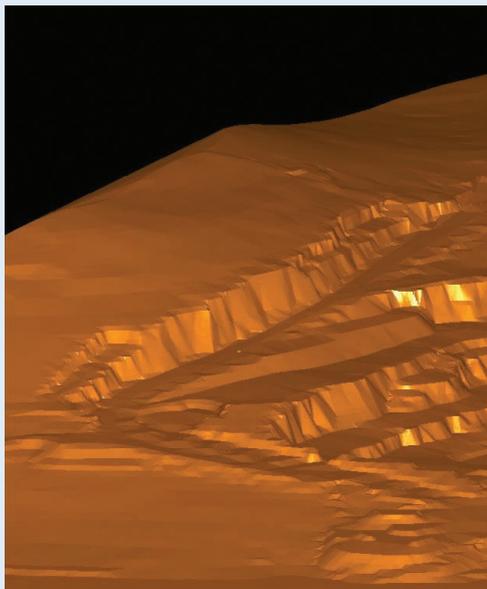
More specifically, local legislation should be applied whenever it is stricter than the Group standard. This standard, together with the guidelines developed and approved by CIMPOR under the CSI must, in any case, serve as the basis for any commitment by the Group in this field.

Before the publication of the first CSI Final Progress Report, the CIMPOR Group made a commitment to, by the close of 2007, draft rehabilitation plans for quarries at all operating units currently active and in already operation when Our Agenda for Action was released. These plans will be circulated to stakeholders and regularly revised and updated. This goal will not, however, be achieved by the original deadline, which will be extended to 2010.

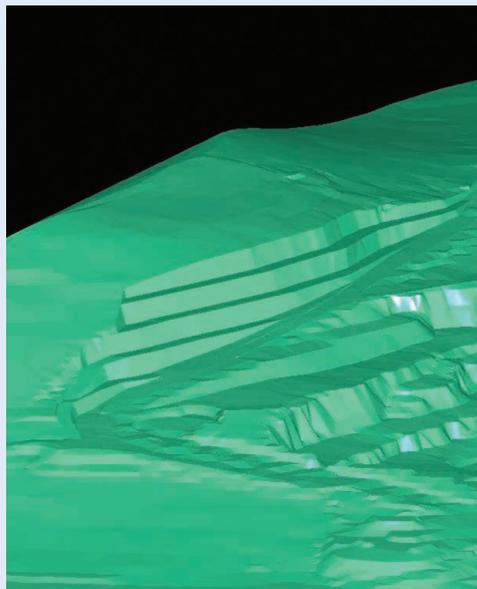
For quarries acquired after the launch of Our Agenda for Action, each operating unit will have three years in which to do so. This is the case of the quarries at operating units in Turkey and China acquired in 2007.

PORTUGAL

STABILISATION OF WESTERN SLOPE OF CERRO DA CABEÇA ALTA (LOULÉ)



The stabilisation of the western slope of the Cerro da Cabeça Alta quarry, one of the Loulé operating unit's sources of raw materials is part of its environmental rehabilitation plan. The 40 m high slope is unstable and there is a risk of blocks of rock falling onto the quarry's main access road, posing a risk to people and machinery. The three figures below show a general view of the slope before and after stabilisation and rehabilitation.



The project includes modelling the slope by creating terraces to stabilise it and allow its environmental rehabilitation. The material removed is being used in production. This is an example of symbiosis between environmental rehabilitation and the operation of the quarry. It was also decided that the last cut would remain in situ and be covered with vegetal soil for easy re-vegetation with native species and minimal visual impact of the terraces built to stabilise the slope.

PROTECTING ECOSYSTEMS AND BIODIVERSITY



The CIMPOR Group has been regularly developing and implementing a wide range of practices to minimise um pressure on natural habitats, even in areas that are often not under its direct control but are regarded as neighbouring its industrial operations.

→ In Portugal, the operations at quarries were adapted to the new laws on prospecting for and extracting mineral masses. Some of the extraction terraces that were non-compliant were adapted, species suited to the soil conditions and local climate were planted and the right conditions were created for spontaneous re-colonisation of the land by native species. The idea is to recreate the plan cover to attract the original fauna.

→ In Spain, the start-up of the Cordoba operating unit's new Navaobejo limestone quarry in Espiel in 2007 will, among other important aspects, bring forward the rehabilitation of the three existing quarries, as their operation and recovery can run simultaneously with that of the new quarry.

→ In Morocco, in 2007, the Asment

de Témara plant began an EIAS of the rearrangement of the quarry during and after operation. At the same time, more than 30,000 trees were planted in 2006 and 2007, thereby helping to improve the quarry's appearance and the local ecosystem through the benefits of reforestation.

→ In Brazil, we continued a project with São Paulo University at the Candiota plant to study new technologies for recovering large quantities of raw materials from the high amount of shale generated during operation of the limestone quarry.

→ In South Africa, in addition to preserving nature reserves adjacent to the Simuma plant (Oribi Conservancy and Idwala), which are rich in animal species (e.g. nyalas, kudus, antelopes, pythons and zebras) and plant species, great emphasis has been placed on programmes for eradicating pests. Not only have specialised companies been involved but recreational volunteer activities have been organised for company employees and the local communities.

SPAIN COMMUNITY INVOLVEMENT IN ENVIRONMENTAL REHABILITATION OF BALANZONA QUARRY (CORDOBA)



A group of students and scouts from the Mafeking 500 troop participated in the environmental rehabilitation of native species at the Balanzona limestone quarry, which has now closed, but for many years supplied the Cordoba plant with raw materials. The old limestone quarry is in Loma de los Escalones. Soil was laid and native species planted over an area of around 2.5 hectares. The group participated in the rehabilitation as part of an initiative encouraging contact with nature. Under the guidance of monitors and specialists, they planted species native

to the Sierra de Córdoba after preparing soil preparation work done by the Cordoba plant.

This project is part of a much larger environmental rehabilitation plan in the area, which includes planting more than 28,000 native shrubs and trees over an area of 160 ha. In addition, we will also make full use of the mineral reserves, avoiding the formation of pools or spoil heaps and allowing the native vegetation to re-establish itself in the different ecosystems in Sierra de Córdoba. The plants came from a nursery the students were given detailed training before planting.

MOROCCO CHILDREN'S PLAYGROUND

In early 2007, Asment de Témara signed an agreement with the Témara Prefecture and the High Commission for Water, Forests and the Fight against Desertification under which it will finance the reforestation and restoration of the Harhoura forest. The project also included building a children's playground, where the local children will be able to foster relationships and develop their physical and social skills.

SOUTH AFRICA



In 2007, NPC's Simuma plant continued to take important steps in its ongoing battle to rid its magnificent 230-hectare nature reserve in Oriibi of invasive plants. Considered one of the greatest threats to the biodiversity of game reserves and protected land, the company began this expensive task seven years ago and has dealt with the threat with considerable success. Ten hectares of land were added to the 110 hectares already cleared, meaning there are now around 120 hectares free of Chromalina and triffid weed, i.e. more than half the total area of the nature reserve.

PROGRESS

IMPACTS ON LAND USE

→ *Local impacts*

1. Active operating units with approved quarry rehabilitation plans (circulated to local stakeholders) according to CIMPOR Group guidelines: 73% (71% in 2006), with new perimeter including Turkey and China.
2. Active operating units where biodiversity issues are taken into account: 4.

→ *Goals and next steps*

Before the publication of the first CSI Final Progress Report, the CIMPOR Group set a target of 80% of active operating units' quarries with rehabilitation plans prepared, distributed to stakeholders and implemented (subject to regular reviews and updates) as per the model approved by CIMPOR by the close of 2008 and 100% by the close of 2009. This is an ambitious plan that we decided to maintain in spite of the entry into the Group in 2007 of eight new operating units in Turkey and China and the expected inclusion of a new operating unit in India in 2008.

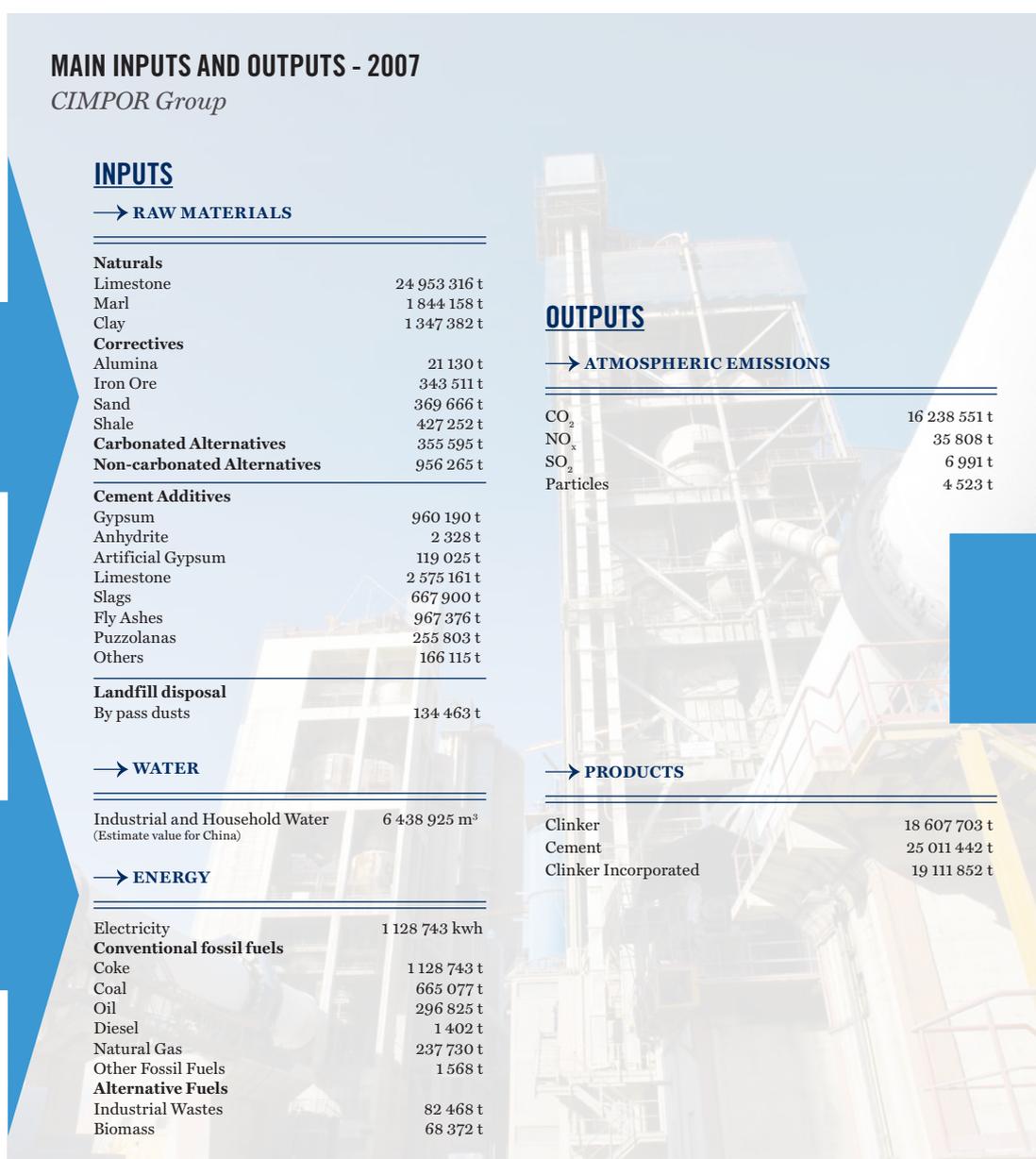
Issues related to loss of biodiversity will continue to be taken into account at operating units where this is warranted. This includes the preservation of some animal species and protected forest areas (e.g. Atlantic forest, mangrove forests, riparian forest, nature reserves, etc) on land neighbouring operating units or farther away provided that the Group's companies recognise them as being of possible natural interest, reorganisation of forests on company land and elimination of infesting species possibly jeopardising biodiversity.

4.6. IMPACTS ON LOCAL COMMUNITIES

Mitigating impacts caused by the cement production process is a constant concern of employees at all CIMPOR Group companies. In order to minimise the environmental risks, the Group's general policy has been to invest in the technological modernisation of its plants by adopting the best available techniques in order to abide by the strictest environmental requirements. This action has been reinforced with the scheduled implementation of international certification programmes under standards ISO 14001:1996 and, more recently, ISO 14001:2004, adopted by the CIMPOR Group as the one achieving greatest international consensus.

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The chart below gives a quantitative global vision of the main inputs and outputs of all 37 Group Operating Units and information relating to our most material impacts. In this chapter and on the back cover are shown, in a quality way, the associated impacts to the cement production process.



SOUTH AFRICA CLEANING THE BEACH



Since 1996, volunteers from Kwa-Zulu Natal Province have been cleaning the coastline. In 2005, NPC-CIMPOR employees and their families began to join these volunteers on the annual beach cleaning day. In 2007, 7,878 volunteers managed to cover 502 kilometres

(including 2 km of submerged areas and 20 km of rivers) and collect 6,233 bags of rubbish weighing 44 tonnes. The final target is to cover the 620 kilometres of Kwa-Zulu Natal's coastline. NPC's volunteers collected 111 bags of rubbish, around 80% of which was plastics.

BRAZIL THE ENVIRONMENT - SOCIAL RESPONSIBILITY (CAJATI)

A landscaping plan was executed at the operating unit to mitigate the visual impact and improve employees' working conditions, and hydro-geological and hydro-geochemical studies were conducted in the whole industrial area along with a study of the atmospheric dispersal of waste gases, which will serve as guidelines for future environmental actions.

150 new native trees and 500 ornamental plants were also planted along with 270 new native trees in re-vegetation project areas, in the recovery of damaged areas and riparian forest on the banks of the River Jacupiranguinha near the OU. 2007 also witnessed the construction of a nursery of native plants for re-vegetation projects and the "Amiguinhos do Meio Ambiente" (Friends of the Environment) project, which will begin in 2008. The company also sponsored ongoing community projects, such as the recovery of the Jacupiranguinha riparian forest".

OPERATING UNIT LANDSCAPE INTEGRATION OR RECOVERY AND INTERIOR AND EXTERIOR RESTORATION

We have painted operating units in special patterns, painted or covered building façades with heat-coated sheets, planting screens of trees and plants around them and created large gardens inside and outside plants, set up new internal and access roads, improved lighting and signage and designed new architectural frameworks studied by specialists in order to improve the exterior and interior visual impact of the CIMPOR Group's operating units. This has contributed substantially to improving the integration of buildings and plants into their environment.

When new operating units are being built, one of the aspects deserving special attention during the planning of the best location, environmental and social impact studies (ESIAs) and the design is aesthetics and their integration into their surroundings in order to mitigate their visual impact as much as possible.

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TURKEY

CONSTRUCTION OF A NEW PLANT (HASANOGLAN)



In Turkey, a new CIMPOR operating unit to produce 2,500 tonnes of clinker a day (first phase) is being built a few kilometres from Ankara, in Hasanoglan, where there was once an old grinding plant. The engineering and architectural plans for the new facility, which should be finished by the close of 2009, considered not only technical performance requirements but

also went beyond a conventional approach of the mere integration of the plant into the surrounding landscape, focusing on the aesthetic aspect and the type of materials used, ease of maintenance and operation of industrial equipment and facility of access and internal traffic in order to mitigate its effects. Consideration was also given to some older buildings, which will undergo some technical and aesthetic improvements before joining the more modern complex. The architectural design was the work of a specialised Turkish firm, which paid attention to the aesthetic use of concrete as a construction material and adapted not only to all the technical conditions of the production line but also the local topography in order to minimise the volume of earth moved. This new plan is expected to transform the existing facility into a modern, innovative, more environmentally friendly plant that will be a point of reference in the future local landscape.

NOISE

In 2007, we regularly updated the Group plants' noise charts so that we could continue to assess the efficacy of many of the measures taken and choose a new range of possible ways of continuing to minimise future noise pollution.

AIRBORNE DUST

Dust is generated and released during loading and unloading, transport, storage and extraction of raw materials, clinker and cement. We have been implementing very tough action plans at all our operating units in order to mitigate this problem. They include covering conveyors, improving dust removal at material transfer points, sealing several raw material and clinker storage buildings and, whenever possible, eliminating open-air storage areas by building silos and warehouses equipped with automatic handling systems and effective dust removal equipment. Continuous training of employees and raising their awareness of concerns related to airborne dust emissions is an unimportant part of our policy on reducing particle emissions at our operating units.

WATER

The CIMPOR Group's total specific consumption of industrial and domestic water was 0.304 m³/t of clinker in 2007. By raising the awareness of the workforce at plants, improving sprinkler systems in the conditioning towers, remodelling some industrial water networks, optimising and temporising quarry irrigation systems and making more use of rainwater, it is possible to achieve a reference figure of around 0.2 m³/t of clinker, as shown by CIMPOR Indústria in Portugal (see 2006 Sustainability Report), which made great progress with all these measures.

Most of the Group's OU have systems and wastewater treatment stations to preserve the quality of water and prevent contamination. The quality of water discharged is monitored regularly according to plans abiding by the law in terms of analysis and sampling intervals.

WASTE

The main by-product from cement plants in terms of volume, and only some of them due to the composition of the raw materials, is by-pass dust, which, by law, must be disposed of in landfills after being extracted

MOROCCO FIGHT AGAINST DUST EMISSIONS



Under ISO 14001:2004 certification: in 2005, Asment began a vast anti-dust programme, which will be completed in 2008/2009. It involves three projects:

—> **Installation of industrial extractors for equipment**

A dust extractor system was installed in the main line crusher to recover airborne dust at different levels and reduce the equipment's environmental impact.

—> **Landscaping of green areas inside the plant**

After the expansion of the plant, some areas used by the subcontractors as work sites were replaced by green areas. Other areas were landscaped, especially around the new canteen.

—> **Paving of production area**

The project to pave the plant's main roads was studied in 2007. It will begin in 2008 and is scheduled to finish in 2009. The production area's surroundings will be paved soon.

from the circuit by a by-pass filter. Otherwise, whenever possible, it is recirculated and used to make clinker.

All other waste from the normal operation of our operating units is managed, recovered or disposed of as required by the law in the countries where the CIMPOR Group operates. Part of the waste can be used in the clinker kilns and part, especially maintenance and repair waste, receives the most appropriate treatment for its composition under the law, if it cannot be reused.

ENVIRONMENTAL AND SOCIAL MONITORING

As of 2007, around 100% the chimneys of the Group's kilns, including the recently acquired operating units, have continuous monitoring of emissions of dust, NO_x, SO_x and VOCs. The fingerprints of 80% of kiln chimneys have also been determined by occasional measurement of heavy metals and PCDD/F to characterise current micro-pollutant emissions. These measurements will be repeated whenever there are any substantial changes in the manufacturing process, fuels or raw materials used or whenever considered necessary. Due to the extremely low concentrations of volatile organic compounds (VOCs), heavy metals and other micro-pollutants in the gases from the main chimneys at our plants, they can only be detected with relatively sophisticated equipment and advanced testing methods.

In addition to this monitoring, most operating units and their quarries monitor consumption of water for industrial and domestic purposes from their own subterranean and or surface water sources and the mains water supply, levels of water tables at the quarries, vibrations and noise.

Several of CIMPOR's operating units regularly conduct surveys of the Company's Impact on Society in local communities, one of our main ways of finding out more about the economic, environmental and social effect of the company's activity and enable us to monitor changes, maintain a fruitful dialogue with these entities and take any necessary corrective measures.

TRANSPORT

Clinker, cement and raw materials used to make cement (e.g. limestone, correctives, fly ash and slag) are usually transported by road over short distances, up to 200 km. For journeys over 200 km, whenever the infrastructure exists, we favour rail, river and sea transport, as they are more economical and have a lower environmental impact in terms of traffic congestion at the entrance to plants and surrounding areas and CO₂ emissions per tonne of cement transported.

The Group's operating units often discuss with their neighbouring communities alternative routes and preventive measures (e.g. training and raising awareness of the drivers of heavy goods vehicles regarding safety and good practices)..

Raw materials are usually transported by conveyor belt from quarries located within a 5 km radius of our units, which is the case of most of them.

ENVIRONMENTAL TRAINING AND AWARENESS

In-house training and awareness on the subject has been mainly directed at managers and supervisors whose decisions may have an important impact on the environment. There is a definite plan to extend these initiatives to all employees in the future. Several of the Group's operating units regularly hold environmental courses and awareness-raising campaigns, often in cooperation with professional associations in the sector, consultants, universities, companies and NGOs, for employees and also for the public (e.g. local schools and communities).

REGIONAL ECONOMIC DEVELOPMENT

The extent of our contribution to the economic development of the regions in which we operate depends on their national and regional economies. Several young CIMPOR Group staff have been participating in WBCSD programmes designed to identify ways of contributing to this development. For some years now, some Group operating units have highly successful development and empowerment programmes in several fields in the communities in which they operate. They are described in this chapter.

BRASIL
RESTORATION OF GRAÇA
CHAPEL (JOÃO PESSOA)



The project is to restore a chapel in the heart of Fazenda da Graça, a permanent conservation area of the João Pessoa cement plant, which has been undergoing substantial recovery to make it an interesting ecosystem of great natural and environmental richness.

The chapel has been listed by the IPHAN – Instituto do Patrimônio Histórico e Artístico Nacional since 1938. It was built (around the time of the foundation of João Pessoa - 1759).

Although there are signs that building of the chapel may have begun in the 17th century, further research is required. It was

attached to the big house (owner's residence) and is a fine example of rural religious architecture in the sugar cane cycle.

The chapel has been classified as Brazilian historical heritage by the Ministry of Culture and is in a highly precarious state of repair due to natural causes. It is located on company land near the cement plant.

In 2006, a restoration project including studies and surveys of historical documents and records on the place was submitted to the Ministry of Culture.

The ministry approved the project and also offered a tax benefit through special legislation.

SOUTH AFRICA

INVESTMENT IN SOUTH-COAST SCHOOLS

NPC donated 500,000 rand for toilets at six schools on the south coast of Kwa-Zulu Natal. This was organised by the NPO PROJECT BUILD, a local organisation that the largest cement company in Kwa-Zulu Natal has been helping over the last 11 years as part of its focus on education as a long-term solution to poverty and lack of skills in local communities. So far, NPC has contributed more than two million rand to the project and more than 3,000 children have attended school.

The sanitation programme was one of the first to be approved by the South Coast Community Forum, a body that includes representatives of the local community, NPC and other stakeholders in the area, like the Department of Education and Ugu Municipal Council. The Director of the Port Shepstone District Section of the Department of Education, Mr Maphumulo, expressed his appreciation to NPC, stressing the company's "decades of inestimable contribution" to learning.

SOUTH AFRICA

ENVIRONMENTAL EFFORTS IN A NATURE RESERVE



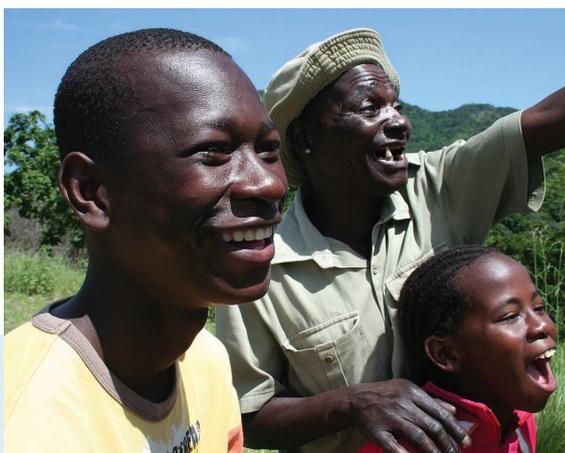
One of the most exciting, progressive environmental efforts made by a company in a nature reserve in KwaZulu-Natal", this was the praise given to NPC-CIMPOR in Kwa-Zulu Natal by the province's nature conservation body, KZN Ezemvelo Wildlife.

The Umzimkulu district nature

conservation head made this comment during one of his many visits to the cement plant, as part of his ongoing efforts to fight the spread of harmful vegetation in the nature reserve where the plant is located. "It has, indeed, been an extraordinary effort. The responsibility you have shown with regard to the environment in general in Oribi and the opening of the nature reserve to underprivileged people and the general public is a step towards the conservation of nature to be followed by others," he said.

NPC-CIMPOR has spent the last five years clearing this type of vegetation in its 230 hectares of nature reserve and has now cleared 130 hectares. In addition, it has also undertaken the following activities: - Encouraging disadvantaged school-age children to pay monthly visits to the nature reserve

Sponsoring the reintroduction of the African python.



Setting up a large annual school art contest based on bird watching.

Having the nature reserve included in the South KwaZulu-Natal Bird Watching Route

Together with its neighbour, Idwala Carbonates, building a large tourist centre in the nature reserve, the Ezingoleni Tourism Office, to operate as a base for tourists and a focal point for community art work.

The company also expresses its concern for other environmental issues, such as the reintroduction of the cerval cat and Oribi antelope on the company's largest 1,600 hectare property and thereby protect its pastures. Both species are highly endangered in Kwa-Zulu Natal, as they are losing their habitat. The company also commissioned a management plan for the area to ensure future conservation and better business practices for NPC-CIMPOR and the nature reserve and expand the reserve and fence in the whole area for a programme with much greater biodiversity.

MOROCCO CAMPAIGN TO ELIMINATE PLASTIC BAGS



As part of World Environment Day, the Cement Association and Ministry of Land Use, Water and the Environment organised a nationwide campaign to collect empty plastic bags in June 2007.

In the Rabat-Zammour-Zaër region, the collection took place on Saturday 9 June and was sponsored by Asment de Témara, which dealt with all the necessary logistics – t-shirts, caps, gloves, tongs, large and small bags and meals, among other material. The bags collected by hundreds of volunteers from all the region's communities were sent to the company's plant where they were incinerated in the kiln. Around seven tonnes of plastic bags were disposed of in the campaign.

PROGRESS

IMPACTS ON LOCAL COMMUNITIES

→ *Local impacts*

1. Active operating units with quarry rehabilitation plans approved and distributed to local stakeholders as per CIMPOR Group guidelines: 73% (71% in 2006), considering new perimeter with Turkey and China
2. Overall specific water consumption: 0.304 m³/t of clinker

→ *Goals and next steps*

Before the publication of the first CSI Final Progress Report, the Group set a goal of ensuring that 100% of its operating units had plans for regular involvement of local communities by the end of 2009. In 2007, the Group improved its systems for monitoring and gathering information on water use and consumption so that it could report it regularly. In future, we will launch initiatives to reduce specific consumption to about 0.2 m³/t of clinker in the next four or five years, which is similar to the figure already achieved at plants in Portugal.



4.7. INTERNAL MANAGEMENT SYSTEMS AND OTHER TOOLS

INTERNAL MANAGEMENT SYSTEMS

The CIMPOR Group's backbone must continue to be an effective corporate governance system and robust, auditable management systems. Although the Group's operational, environmental, quality and occupational health and safety management are still decentralised, corporate rules and guidelines have been adopted to quickly develop a common language and practices.

We have gradually been developing and implementing, for certification quality, environment and health and safety management systems abiding by international standards to monitor and improve the Group's performance in production and some main aspects of sustainable development. The standards adopted by CIMPOR were ISO 9001:2000 (quality management), ISO 14001:2004 (environmental management) and OHSAS 18001:1999 or OHSAS 18001:2007 (occupational health and safety management).

Selected parameters are included in the CIMPOR Group's management systems. Measurements of performance in relation to goals and indicators on these parameters are included in annual reports and monthly corporate flash reports for executive committees in Business Areas and operating units (OU) and for the preparation of business plans and investment decisions. These parameters refer to specific thermal energy and electricity consumption, replacement of raw materials and conventional fuels by alternative fuels, clinker replacement rate and emissions, among other aspects. One of our main tasks is to continue to implement these standards at all Group operating units, because we recognise that robust, auditable management systems are crucial to improving operational management performance, facilitating relations with customers and local authorities and progressing towards sustainable development.

In 2007, for the first time, the CIMPOR Group's consolidation perimeter includes Turkey and China, meaning another eight new OU. Today 34 of the CIMPOR Group's 37 operating units have ISO 9001:2000 certification, 17 ISO 14001:2004 certification and 10 OHSAS 18001:1999 certification, or equivalent. In 2007, CIMPOR TEC, the Group's corporate technical centre, which provides technical assistance to the Group's OU, began procedures for ISO 9001:2000 certification of its quality management. This should be completed during 2008.

QUALITY MANAGEMENT SYSTEMS (QMSS)

In 2007, 34 Group operating units, including those acquired that year, had quality management systems meeting the requirements of ISO 9001:2000. The operating units in Mozambique are working on the process. One should be certified in late 2008 and the other two by the end of 2009.

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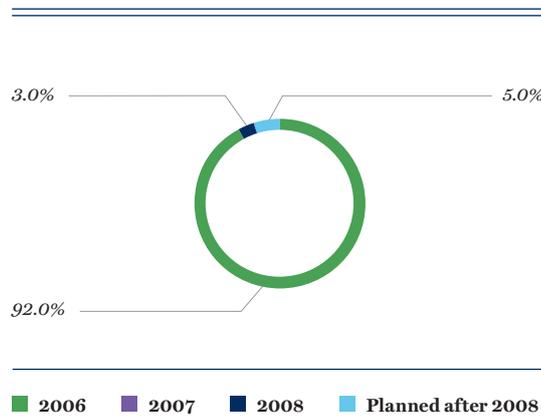
CERTIFICATION OF QUALITY MANAGEMENT SYSTEMS (CEMENT PLANTS)



CERTIFICATION OF QUALITY MANAGEMENT SYSTEMS (CEMENT GRINDING UNITS)



CERTIFICATION OF QUALITY MANAGEMENT SYSTEMS (CEMENT PLANTS AND CEMENT GRINDING UNITS)

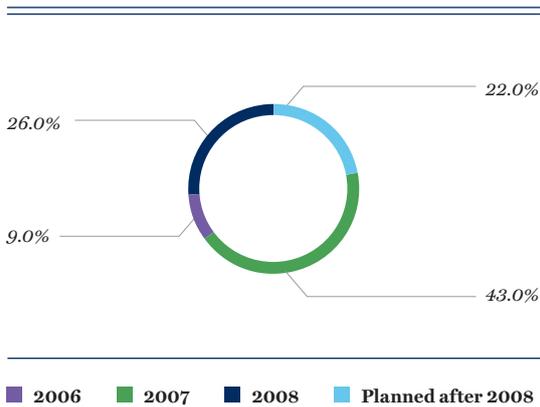


ENVIRONMENTAL MANAGEMENT SYSTEMS (EMSS)

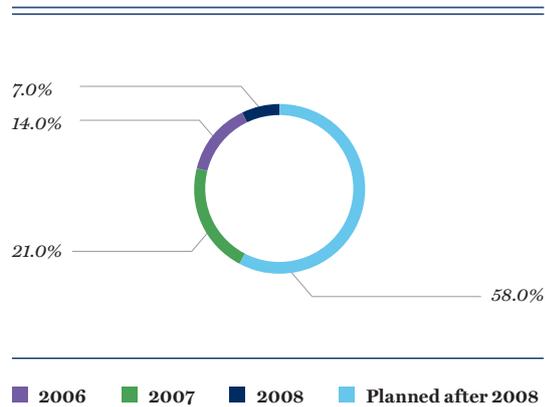
Almost all the CIMPOR Group's operating units have begun adapting their environmental management systems to ISO 14001:2004 requirements. By the end of 2007, the environmental management systems of 17 of our 37 operating units had obtained ISO 14001:2004 certification. Another seven should be certified in 2008 and another 13 after 2008. Six of these 13 operating units in Turkey and one of the two in China, being included in the Group's consolidation perimeter for the first time, will not be in a position to obtain this until 2009, the deadline set in 2004 for the CIMPOR operating units at the time.

The environmental management systems at Cajati and Brumado operating units in Brazil and the Huelva operating unit in Spain obtained ISO 14001:2004 certification in 2007 and those at the Cordoba and Niebla OU in Spain are expected to do so in the first quarter of 2008.

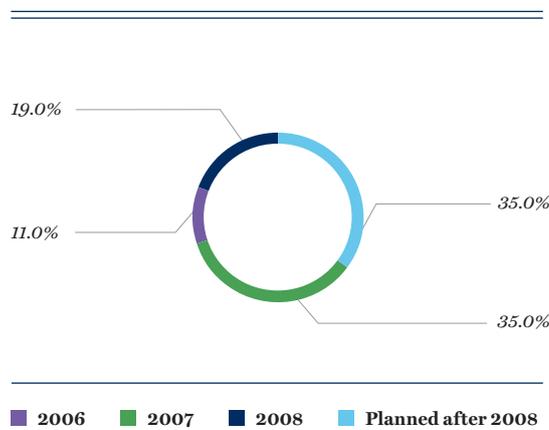
CERTIFICATION OF ENVIRONMENTAL MANAGEMENT SYSTEMS (CEMENT PLANTS)



CERTIFICATION OF ENVIRONMENTAL MANAGEMENT SYSTEMS (CEMENT GRINDING UNITS)



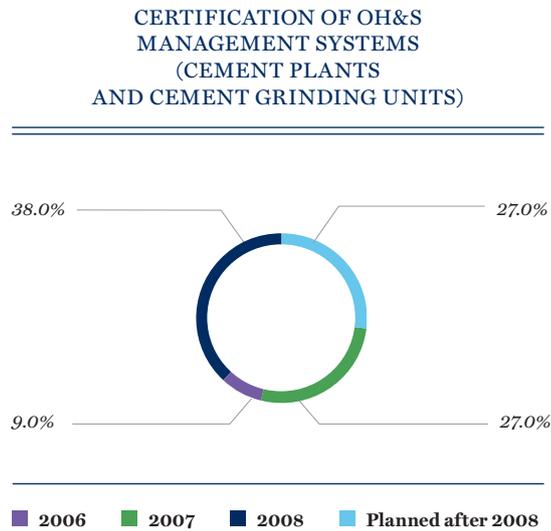
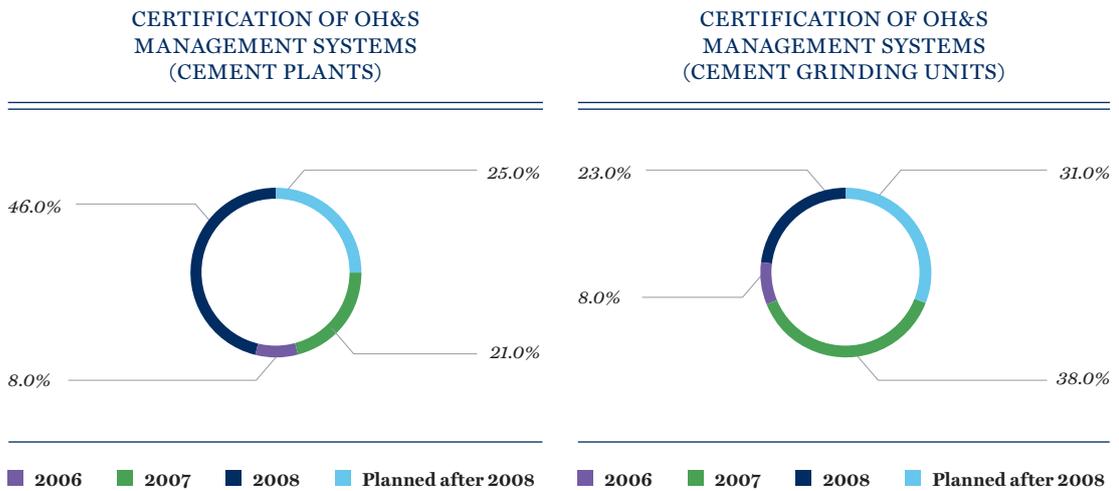
CERTIFICATION OF ENVIRONMENTAL MANAGEMENT SYSTEMS (CEMENT PLANTS AND CEMENT GRINDING UNITS)



OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEMS (OH&SMS)

In 2007, the OH&S management systems of three of our 37 operating units received equivalent OHSAS 18001:2007 certification, to add to the 10 that had already obtained it (three in South Africa, six in Turkey and one of the two in China). Another 14 should be certified in 2008 and 10 by the close of 2010. The three operating units whose occupational health and safety management systems were certified in 2007 were João Pessoa, Cajati and Brumado in Brazil.

The CIMPOR Group has been developing and implementing other tools to standardise processes and practices in order to consolidate a common technical and management language.



CIMPOR PERFORMANCE PROGRAMME

CIMPOR TEC provides technical assistance to Group OU and develops tools to improve operating performance. The preparation of the Benchmarking Data Dictionary and a number of IT protocols have enabled us since 2002 to systematically gather and centralise operating information on the annual performance of the CIMPOR Group's operating units so that a wide range of key performance indicators can be calculated.

After the launch of the CIMPOR Performance Programme, a global initiative that uses standardised tools, it was extended to all the Group's operating units, including those recently acquired.

One of its main goals is to identify and disseminate best practices in the Group, while also challenging each operating unit to follow a path of continuous improvement by drafting implementing action plans aimed at achieving international-level performances.

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CHINA

ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEMS



In 2007, NLG - Zaozhuang successfully obtained ISO 14001 and OHSAS 18001 certification of its management systems. The company set ambitious goals for the plant in 2007 in order to improve existing environmental and occupational health and safety processes and their management systems. A total of 142 environmental problems and 172 risks were identified, including 12 serious environmental problems and 13 serious risks on the basis of previous in-house and external environmental audits

and risk assessments. Considering the weaknesses identified, seven environmental and five safety improvement action plans were launched to solve the problems and risks in question. The implementation rate of the action plan before the certification audit was 100%, according to an assessment made by the Yicheng local authorities' inspection departments.

In 2007, NLG - Zaozhuang achieved its goals of zero wastewater discharges, no serious environmental accidents, zero environmental complaints, no occupational diseases, zero fatalities and zero time lost for accidents. It thus achieved the so-called double zero goal, which means no deaths or time lost owing to accidents.

In 2007, thanks to the extraordinary results in occupational health and safety management, the company and its clinker plant received the "Leading Company in Safety in Production" award and the employees of Liu Tiewen and Zheng Zhao won the special "Leading Employees in Safety in Production" prize awarded by the local Yicheng authorities.



WRI/WBCSD CO₂ EMISSIONS PROTOCOL

(standard for monitoring and reporting of the Group's CO₂ emissions)

The protocol complies with the rules of the GHG Protocol Initiative and was developed as part of the WBCSD / Cement Sustainability Initiative (CSI). It has been validated by KPMG, which means that our CO₂ emissions can be reported in accordance with an internationally accepted standard.

WBCSD/CSI PROTOCOL FOR MONITORING AND REPORTING OF EMISSIONS

(standard for monitoring and reporting of the Group's other emissions)

This protocol is a universal standard developed for continuous measurement of dust, SO₂, NO_x and volatile organic compounds (VOCs) and occasional measurement of micro-pollutants such as heavy metals and dioxins / furans.

CODE OF CONDUCT FOR THE USE OF ALTERNATIVE FUELS AND RAW MATERIALS

*(Guidelines on responsible use
of raw materials and fuels
in cement kilns)*

Developed under the CSI, this code of conduct is a mandatory guide for the whole CIMPOR Group on the selection and use of alternative fuels and raw materials from different sectors, industry, agriculture or urban waste, in the manufacture of clinker. This generic code is supported in each Business Area using waste, by manuals with more details on the implications of its use for engineering projects, procedures and occupational health and safety, among others.

TRAINING PROGRAMME FOR SPECIALIST STAFF / SEMINARS

The specific training programme for all specialist staff in the organisation covers a wide range of aspects of the cement production process, raw materials, products and quality, maintenance, the environment, and occupational health and safety, in order to guarantee that the Group's policies and procedures are properly implemented and that experiences are shared. In addition to the specific technical aspects of each training course, the courses also include the environment and occupational health and safety.

PROGRESS

INTERNAL MANAGEMENT SYSTEMS AND OTHER TOOLS

→ *Management systems*

1. Percentage of operating units with quality management systems with ISO 9001:2000 certification: 92% (90% in 2006).
2. Percentage of operating units with environmental management systems with ISO 14001:2004 certification: 46% (42% in 2006)
3. Percentage of operating units with occupational health and safety management systems with OHSAS 18000:1999 or equivalent certification: 35% (10% in 2006)

→ *Goals and next steps*

The CIMPOR Group will continue the annual reporting of its performance in a large number of sustainability indicators and goals. At the same time, it will continue the certification of management systems in order to get all its QMSs certified by 2008, EMSs by 2009 and OH&SMSs by 2010.

The inclusion of new, recently acquired operating units in the CIMPOR Group's perimeter may, in some cases, delay the targets, though they will be properly identified. For the moment, the targets set in 2004 will not be changed, however. As part of its Cement Sustainability Initiative commitments, the Group will continue to improve the degree of implementation of the joint guidelines. OH&S data were checked for the first time in 2007. In the near future, if possible as of late 2008, the CIMPOR Group wishes to extend the checking process to consolidated CO₂ emissions and consolidated OH&S data to the whole Sustainability Report.



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PROGRESS AND COMMITMENTS

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100 5.1. Action Plan

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GRI Indicators

106 5.3. Additional
Information

- Glossary
- Organisations with
which the Group
Relates
- Contact Details

114 5.4. Cement Production
Process



5.1. ACTION PLAN

2007 - 2011

ACTION/OBJECTIVE		2007		
		Progress	Ref.	
Sustainability	Annual publication of Sustainability Report following GRI (Global Reporting Initiative) criteria.	Panel sustainability indicators. Sustainability Report 2006.	- -	
Environmental Performance				
Climate Protection and CO ₂ Emissions Management	15% reduction in all net specific CO ₂ emissions (reference year 1990) by 2015.	Group achieved overall reduction of 8.6% in 2007.	p. 59	
Fuels and Raw Materials	10% overall use of alternative raw materials (2008). 10% overall use of alternative fuels (including biomass) in 2010 (five BA). 5% overall use of biomass (2007) (Group).	In cement production, Group used: 9.7% alternative raw materials, 6.46% alternative fuels (Portugal, Spain, Morocco, Brazil, South Africa), and 4.02% (Group) including biomass; and 2.9% of biomass (5 Business Areas) and 1.7% (Group).	p. 72, 73	
Monitoring and Reporting of Emissions	Targets 2008 - Dust emissions: 150g/t clinker; - NO _x emissions: 1900g/t clinker; - SO ₂ emissions: 300g/t clinker.	Assess progress and set goals for limits of pollutants for Group.	p. 66, 67	
Impact on Land and Local Communities	In 2008, 80% of quarries at active operating units have implemented rehabilitation plans. In 2009, 100% of operating units have rehabilitation plans.	73% of operating units have approved quarry rehabilitation plans.	p. 81, 90	
Management Systems	- Certification of Quality management systems of all OU until 2008. - Certification of environmental management systems at all operating units by 2009. - OHSAS 18000 certification of all operating units (2010).	92% of OU have certified Quality Management Systems. 46% of operating units have certified environmental management systems. 35% of operating units have certified OH&S management systems.	p. 97	
Our Employees				
Safety, Health and Hygiene	Corporate OH&S policy - OHSAS 18001 certification of all Group operating units in 2010.	Implement corporate OH&S policy.	p. 47	
Training and Education	All CIMPOR employees are opinion leaders on sustainability (2010).	Set up training plan.		
Social Performance				
Stakeholder Involvement	- Set up regional Stakeholders Committee (2009). - Contracts with sustainable suppliers (2009).	Local committees. Definition and publication of supplier selection criteria	p. 19	
Interaction with Local Communities	- Community support policy focusing on in-house volunteers - Social support policy favouring agreements with local bodies	Assessment of results of "Connosco" Agreements with municipal council and IPPAR	p. 24 p. 23, 24, 25	
Relations with Other Organisations	Join GRI and Global Compact in 2008.			

PROGRESS AND COMMITMENTS

■ Final ■ Ongoing

	2008	2009	2010	2011
	Progress	Progress	Progress	Progress
	Sustainability Report 2007. In-house and external publication of Final CSI Rep.	Sustainability Report 2008 (cement and concrete).	Sustainability Report 2009 (whole Group).	Sustainability Report 2010.
			10% overall use of alternative fuels (including biomass).	
	Targets - particles: 150g/t clinker; NOX: 1,900g/t clinker; SO2: 300g/t clinker.			
	80% of operating unit quarries have rehabilitation plans	All Group operating units have rehabilitation plans for quarries and involvement plans with local communities .		
	All OU have certified Quality Management Systems.	All Group operating units have certified Environmental Management Systems.	All Group operating units have certified Occupational Health and Safety Management Systems.	
	Implement corporate OH&S policy .		All Group operating units have OHSAS 18001 certification.	
	Training programme and start-up resources.	Training and control methods	Assessment of project's in-house and external success - widely publicised.	
	Local committees. Selection of sustainable suppliers.	Regional committees. Business only with sustainable suppliers.		
	Progressive implementation of in-house volunteer programme in other business areas. Implement model in other Business Areas.	Progress in applying corporate social support policy to each business unit.		
	CIMPOR member of GRI and Global Compact.			

5.2. PANEL OF GRI INDICATORS *

(*)- Version of new G3 Global Reporting Initiative guidelines.

1. ECONOMIC PERFORMANCE		2. ENVIRONMENT/ ENVIRONMENTAL PERFORMANCE		
EC1	Direct economic value generated and distributed.	EN1	Materials used by weight or volume.	EN10 90 Percentage and total volume of water recycled and reused
	<i>page</i> 10		<i>page</i> 82	
EC2	Financial implications and other risks and opportunities for the organisation's activities due to climate change.	EN2	Percentage of materials used that are recycled input materials.	EN11 88 Location and size of land in protected areas and areas of high biodiversity value outside protected areas.
	n.p.		72	
EC3	Coverage of the organisation's defined benefit plan obligations.	EN3	Direct energy consumption by primary source.	EN12 n.p. Description of significant impacts on biodiversity in protected areas and areas of high biodiversity value outside protected areas.
	34		72	
EC4	Significant financial assistance received from government.	EN4	Indirect energy consumption by primary source.	EN13 88 Habitats protected or restored.
	n.a.		72	
EC5	Range of ratios of standard entry level wage compared to local minimum wage.	EN5	Energy saved due to conservation and efficiency improvements.	EN14 n.p. Strategies, current actions, and future plans for managing impacts on biodiversity.
	34		72	
EC6	Policy, practices, and proportion of spending on locally-based suppliers.	EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements.	EN15 n.a. Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations.
	10		73	
EC7	Procedures for local hiring and proportion of senior management hired from the local community.	EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	EN16 59 Total direct and indirect greenhouse gas emissions by weight
	36		73	
EC8	Development and impact of investments provided primarily for public benefit through commercial, in kind, or pro bono engagement.	EN8	Total water withdrawal by source.	EN17 66 Other relevant indirect greenhouse gas emissions by weight.
	25		85	
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	EN9	Water sources significantly affected by withdrawal of water.	EN18 59 Initiatives to reduce greenhouse gas emissions and reductions achieved
	n.p.		n.a.	

EN19 Emissions of ozone-depleting substances by weight.	n.a.	EN28 Monetary value of significant fines for non-compliance with environmental laws and regulations.	n.a.
EN20 NO _x , SO _x and other significant air emissions by type and weight.	66	EN29 Significant environmental impacts of transporting products and other goods and materials .	86
EN21 Total water discharge by quality and destination.	n.a.	EN30 Total environmental protection expenditures and investments by type	51
EN22 Total weight of waste by type and disposal method.	n.p.		
EN23 Total number and volume of significant spills.	n.p.		
EN24 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention.	n.a.		
EN25 Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by discharges of water and runoff.	n.a.		
EN26 Initiatives to mitigate environmental impacts of products, and extent of impact mitigation.	n.p.		
EN27 Percentage of products sold and their packaging materials that are reclaimed by category.	n.p.		

3. LABOUR PRACTICES AND DECENT WORK	
	<i>page</i>
LA1 Total workforce by employment type, employment contract, and region.	31
LA2 Total number and rate of employee turnover by age group, gender, and region.	32
LA3 Benefits provided to full-time employees by major operations .	34
LA4 Percentage of employees covered by collective bargaining agreements.	34
LA5 Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.	34
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 programmes.	n.p.
LA7 Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities.	42

PROGRESS AND COMMITMENTS

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LA8	47	4. HUMAN RIGHTS		5. SOCIETY
Education, training, counselling, prevention and risk-control programmes in place to assist workforce members, their families, or community members regarding serious diseases.		HR1	page n.a.	SO1
		Percentage and total number of significant investment agreements that include human rights clauses.		Nature, scope, and effectiveness of any programmes and practices that assess and manage the impacts of operations on communities.
		HR2	n.p.	SO2
		Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.		Percentage and total number of business units analysed for risks related to corruption.
LA9	40	HR3	n.a.	SO3
Health and safety topics covered in formal agreements with trade unions.		Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations.		Percentage of employees trained in organisation's anti-corruption policies and procedures.
LA10	37	HR4	n.a.	SO4
Average hours of training per year per employee by employee category.		Total number of incidents of discrimination and actions taken.		Actions taken in response to incidents of corruption.
		HR5	n.a.	SO5
		Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk.		Public policy positions and participation in public policy development and lobbying.
LA11	n.p.	HR6	n.a.	SO6
Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.		Operations identified as having significant risk for incidents of child labour.		Total value of financial and in-kind contributions to political parties, politicians, and related institutions.
LA12	n.p.	HR7	n.a.	SO7
Percentage of employees receiving regular performance and career development reviews.		Operations identified as having significant risk of forced labour or slavery.		Total number of legal actions for anticompetitive behaviour, anti-trust, and monopoly practices.
LA13	32	HR8	n.a.	SO8
Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.		Percentage of security personnel trained in the organisation's policies concerning aspects of human rights.		Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.
LA14	n.p.	HR9	n.a.	
Ratio of basic salary of men to women by employee category.		Total number of incidents of violations involving rights of indigenous people and actions taken.		

6. PRODUCT RESPONSIBILITY

PR1page
26

Life cycle stages in which health and safety impacts of products and services are assessed for improvement.

PR2

27

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.

PR3

27

Type of product and service information required by labelling procedures.

PR4

27

Total number of incidents of non-compliance with regulations and voluntary codes concerning product information and labelling.

PR5

26

Practices related to customer satisfaction, including results of surveys.

PR6

27

Programs for adherence to laws, standards, and voluntary codes related to marketing communications.

PR7

n.a.

Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications.

PR8

n.a.

Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.

PR9

n.a.

Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.

n.a. - *not applicable*n.p. - *information not provided*

5.3. ADDITIONAL INFORMATION

→ GLOSSARY

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→ **Agenda 21:** A worldwide action plan for sustainable development adopted by 178 countries in 1992 at the United Nations Conference on Environment and Development (UNCED), in Rio de Janeiro, Brazil.

→ **Climate change:** Any global climate change caused by an overall alteration in the composition of the atmosphere directly or indirectly attributed to human activities. This expression normally describes climate changes caused by higher atmospheric concentrations of greenhouse gases that cause a gradual increase in average temperatures.

→ **Environment:** All external conditions that affect an organism's life, development and survival.

→ **Assurance Group:** An independent monitoring and advisory group created as part of the study "Toward a Sustainable Cement Industry" to guarantee a high-quality, balanced project and to arbitrate in any conflicts arising between parties. The group consists of internationally recognised experts representing groups of stakeholders and different geographical regions.

→ **Environmental and Social Impact Assessment / ESIA:**

A preventive tool for analysing the potential environmental and social effects of a particular project. It consists of studies and consultations, with active public participation, to identify minimisation and compensation measures and analyse possible

alternatives. In environmental terms, the goal is to reduce pollution and the project's impact on ecosystems and biodiversity. The main social impact areas include public health and safety, employee safety and health, employment and the visual impact of operating units.

→ **Battelle Memorial Institute:** A non-profit organisation founded in 1929, with long experience in sustainable development issues. It was selected as the head consultant in the Toward a Sustainable Cement Industry project.

→ **Biomass:** Vegetal and animal waste used as alternative fuel.

→ **Calcination:** A high-temperature thermal process used in the production of clinker to release water vapour and CO₂ from calcium carbonate and make the C₃O suitable for chemical reactions.

→ **CEMBUREAU:** European Cement Association based in Brussels. It has 27 members, 20 of which are associations and seven are cement companies. The main goal of CEMBUREAU is to fulfil the common objectives of its members by representing them as a lobbyist at European institutions.

→ **CERES/Coalition for Environmentally Responsible Economies:** A network of 70 organisations including environmental NGOs, investors, analysts, advisers, stakeholders and community groups working towards a sustainable future.

It has established the CERES Principles that companies must endeavour to include in their policies.

→ **Cement:** A material with the capacity to bind to solid bodies (aggregates) and that dries and hardens after having been mixed with water (hydration reaction). The main ingredient of cement is clinker and it can be mixed with different types of materials to produce various types of cement. The most common cement used worldwide is Portland cement, which consists of 95% clinker and 5% gypsum.

→ **Fly ash:** A substance composed of very fine particles produced at power plants by coal combustion. It is carried in the combustion gases and collected in particle removal systems (electrostatic precipitators or cloth tube filters). Fly ash is found mostly in a vitreous state and is largely composed of silicone dioxide and aluminium oxides. It has pozzolanic properties, which make it useful in cement production.

→ **Clinker:** intermediate product in cement manufacture consisting basically of limestone that has undergone a process of decarbonisation, heating and sudden cooling.

→ **CO/carbon monoxide:** A colourless, tasteless, odourless, highly poisonous gas resulting from the incomplete combustion of organic fuels.

→ **CO₂/carbon dioxide:** A gas resulting from the complete oxidation of carbon and formed in processes involving combustion,

respiration or decomposition of organic material. It is extremely important to the existence of life on earth, as the greenhouse effect of its presence in the atmosphere is the main cause of global warming.

—→ **Direct employees (OH&S):** Employees hired directly by the company for a fixed term, or not, on a full- or part-time basis, with fixed working hours or in shifts, included on the payroll. All employees under the same management and those in companies with which there are management or technical agreements are included. Part-time employees are counted as full-time workers.

—→ **Indirect employees (OH&S):** Individual employees or those belonging to companies and corporations (contractors and sub-contractors) providing specific services for the company under a written or verbal short-term (construction, silo cleaning, major repairs) or long-term (maintenance and cleaning crews, canteens, etc) contract. Temporary workers hired from temp agencies are also considered to be indirect. All employees are considered full-time workers.

—→ **Third parties (OH&S):** Anyone not classified as a direct or indirect employee. Third parties normally include customers and visitors coming to our facilities (by invitation or not) and other people outside company premises involved in accidents with direct employees, provided that the company admits liability for the accident. This also includes drivers or

passengers involved in accidents outside the company's premises with company motor vehicles but only if the company admits liability.

—→ **Occupational accidents (SO&S):** This is a sudden, unexpected occupational accident involving direct, indirect employees or third parties occurring at the workplace (1) and during working hours (2) directly or indirectly causing bodily injury, functional impairment or a disease reducing the ability to work or earn or resulting in death (diseases caused by accidents are distinguished from occupational diseases).

—→ **Workplace (1 (OH&S):** Any place in which an employee is or to which s/he should go to perform his/her job that is directly or indirectly subject to the employer's control.

—→ **Working hours (2) (OH&S):** This is the normal working period, that preceding its start in acts of preparation or related to it and that following its end, in acts also related to it and normal or forced breaks.

—→ **Occupational disease (OH&S):** This is a disease contracted as a result of exposure for a period of time to risk factors arising from an occupational activity. Diseases that are a necessary, direct consequence of the work done by employees and not the normal wear and tear on the body are considered occupational diseases. Only incidents of occupational diseases in direct employees are reported.

—→ **CSI/Cement Sustainability Initiative:** a voluntary initiative by 18 multinational companies in the sector with the main goal of placing the problems of sustainability on the agenda of the international cement sector. The companies currently belonging to the initiative are Ash Grove Cement (USA), Cementos Molins (Spain), Cemex (Mexico)^(*), Cimentos Liz (Brazil), CIMPOR (Portugal)^(*), Corporación Uniland (Spain)^(*), CRH (Ireland), Gujarat Ambuja (India), Heidelberg Cement (Germany)^(*), Holcim (Switzerland)^(*), Italcementi (Italy)^(*), Lafarge (France)^(*), Secil (Portugal), Shree Cement (India), Siam Cement (Thailand), Taiheiyo (Japan)^(*), Titan (Greece)^(*) and Votorantim (Brazil).
^(*) Core Members of CSI. The remaining companies are called Participating Members.

—→ **Alternative fuels and raw materials:** Economical use for environmental protection of waste as fuel or raw materials in cement production instead of conventional fossil fuels and raw materials.

—→ **C₂S e C₃S:** complex crystalline silicates of calcium and silica known as dicalcium silicate (belite) and tricalcium silicate (alite), which are compounds from the mineralogical stages of clinker.

—→ **Sustainable Development:** generally defined as "development that satisfies present needs without compromising the ability of future generations to satisfy their own needs"; as first defined in the report "Our common future" published by the United Nations Brundtland Commission in 1987.

→ **Eco-efficiency:**

A WBCSD concept that combines economic and environmental performance to create products with greater value added and lower environmental impact. It is a management tool used to encourage companies to become more competitive, innovative and environmentally responsible.

→ **Ecology:** Study of relations between living organisms and between them and their environment; study of ecosystems

→ **Industrial ecology:**

A concept based on improving industrial efficiency by imitating natural ecosystems. Its aim is to prolong the useful life of raw materials and reduce the environmental impact of industrial activity by closing the cycle of materials, making one activity's waste another's raw material.

→ **Electrostatic precipitator:**

Equipment for removing dust from gases using a very powerful electrostatic field to charge particles. Once charged, the particles stick to the metal side plates inside the equipment from which they are released by a vibration cleaning system and collected in a hopper.

→ **EMAS/European Eco-management and Audit Scheme:**

A European system, created in 1993 (Regulation EC 761/2001 of March 19), and later revised, for the voluntary participation and registration of manufacturing companies with an active environmental management system, in compliance with this regulation.

→ **WWTP:** Wastewater treatment plant

→ **Cloth tube filter:** particle-removing equipment consisting

basically of passing a "dirty" gas loaded with solid particles through a filter membrane. The membrane is cleaned regularly to separate and collect the trapped particles.

→ **Greenhouse gases/GHGs:**

Satural or anthropogenic gases in the atmosphere that can absorb and re-release infrared radiation. The Kyoto Protocol identified the six main GHGs responsible for climate change: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HCFs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆)

→ **Global Reporting Initiative (GRI):**

Launched in 1997 as a joint initiative of the NGO Coalition for Environmentally Responsible Economies (CERES) and the United Nations Environment Programme (UNEP) with the aim of improving the quality, rigour and utility of sustainability reports. It has enjoyed the effective support and participation of representatives from industry, NGOs, accounting bodies, investors' organisations and trade unions, among others. They have all worked to achieve a consensus on Guidelines for preparing sustainability reports in order to have them accepted worldwide. The CIMPOR Group's sustainability reports will abide progressively by the general GRI principles.

→ **IETA Verification Protocol, version 2.0/2005:**

Developed by the IETA - International Emissions Trading Association for the verification of annual emissions reports from the facilities involved in CELE / European Union Emission Trading Scheme (EU ETS) and to facilitate transparent, effective verification of their costs. Although this Verification Protocol may be amended as a result of users' comments, the IETA encourages all stakeholders to use it.

→ **ISO 14001:** A set of international standards regulating environmental management systems, evaluation of life cycles, system audits, labelling and assessment of the system's performance. They have been adopted in Portugal and in the rest of Europe. The Portuguese versions of the standards are called NP EN ISO 14000.

→ **Best Available Techniques /BATs:** More advanced, effective stage of development of activities and their operating methods to limit the impact of these activities on the environment.

→ **NO_x/Nitrogen oxide:**

Gases produced in combustion processes, mainly as a result of the combination of atmospheric nitrogen with oxygen. They contribute to the occurrence of acid rain and the formation of photochemical smog.

→ **NGOs/non-governmental organisations:**

Non-profit organisations that lobby governments and companies on a wide range of issues as diverse as nuclear disarmament, human rights or environmental protection. NGOs play an increasingly important role in representing society and should be regarded by companies as active partners in drawing up corporate strategies for Sustainable Development.

→ **Particles:** Small solid or liquid particles in suspension in gaseous emissions. 2. Small solids suspended in water, which may vary in size, shape, density and electric charge and may be retrieved by filtration, coagulation or flocculation

→ **Cement product or material:** a substance that, after being mixed with water, forms a paste that dries and hardens at atmospheric temperature. Natural or artificial pozzolana is considered to be a cement product. Alternative

cement products or materials, composed of by-products from other industries, such as blast furnace slag and fly ash from thermoelectric power stations, may be used to replace part of the clinker in cement.

—→ **Kyoto Protocol:** The Kyoto Protocol was the culmination of the Berlin Mandate adapted by consensus at the 3rd session of the Conference of the Parties (CoP3) in December 1997. It sets forth the new targets for reducing emissions of GHGs (greenhouse gases) for Annex I countries after 2000.

—→ **Brundtland report:** “Our common future” - the report that resulted from the work of the commission appointed by the United Nations in 1987, World Commission on Environment and Development, presided over by the former Prime Minister of Norway, Gro Harlem Brundtland, also known as the Brundtland Report. This work defined for the first time the concept of Sustainable Development and introduced development strategies, social justice criteria and guidelines for environmental protection.

—→ **Senior Advisory Group:** The most recent independent review and advisory group set up under the CSI initiative to ensure the quality and balance of the issues addressed, interim and final CSI reports and arbitrate any conflicts arising between the parties. « As with the Assurance Group, during the development of the Battelle Toward a Sustainable Cement Industry study, this group consists of internationally renowned .

—→ **SO₂/sulphur dioxide:** A gas produced mainly during combustion, resulting from the combination of sulphur from fuel or a raw material with oxygen. It is one of the main causes of acid rain.

—→ **Stakeholders:** Individuals, entities or groups that affect or are affected by the company’s activity (e.g. customers, suppliers, employees, shareholders, local communities, the scientific community and NGOs, among others).

—→ **WBCSD/World Business Council for Sustainable Development:**

an organisation set up on 1 de January 1995 to promote Sustainable Development. Its members are more than 160 multinational companies from over 30 countries and around 20 important industrial sectors. The “Toward a Sustainable Cement Industry” project was undertaken under the auspices of the WBCSD, which has been and will continue to be the development platform for the Cement Sustainability Initiative / CSI.

→ **ORGANISATIONS WITH WHICH THE GROUP RELATES**

CIMPOR – CIMENTOS DE PORTUGAL, SGPS, S.A.

→ *Professional associations*

AEP – Associação Empresarial de Portugal

AIP – Associação Industrial Portuguesa

APCE – Associação Portuguesa de Comunicação de Empresa

BAD – Associação Portuguesa Bibliotecários Arquivistas e Documentalistas

→ *Associations related to the Company's activity*

CEMBUREAU – European Cement Association

ECRA – European Cement Research Academy

→ *Organisations promoting international relations*

Câmara de Comércio e Indústria Luso – Brasileira (Lisbon)

Câmara de Comércio e Indústria Árabe – Portuguesa (Lisbon)

Câmara de Comércio e Indústria Luso – Marroquina (Lisbon)

Câmara de Comércio e Indústria Luso – Sul-Africana (Lisbon)

Câmara de Comércio e Indústria Portuguesa em Marrocos (Casablanca, Morocco)

Câmara de Comércio Indústria e Turismo Portugal Cabo Verde (Lisbon)

Câmara de Comércio Portugal – Moçambique (Lisbon)

→ *Organisations working in sustainability and social responsibility*

WBCSD - World Business Council for Sustainable Development (Geneva)

BCSD – Portugal (Business Council for Sustainable Development – Portugal)

→ *Other organisations*

Fundação Portugal – Africa

Fundação Rei Afonso Henriques

AMBELIS – Agência para a Modernização Económica de Lisboa, S.A.

APOR – Agência para a Modernização do Porto, S.A.

World Monuments Fund - Portugal

In the cement sector in Portugal, the CIMPOR Group keeps in close touch with the organisations listed below and the different Business Areas are aware of the need to promote these relations.

PORTUGAL

→ *Associations related to the company's activities*

ATIC – Associação Técnica da Indústria do Cimento
 APCMC – Associação Portuguesa dos Comerciantes de Materiais de Construção
 RELACRE – Associação de Laboratórios Acreditados de Portugal
 ANUC – Associação Nacional de Utentes Privativos e de Concessionários de Serviço Público de Áreas Portuárias
 APE – Associação Portuguesa da Energia
 ANIET – Associação Nacional da Indústria Extractiva e Transformadora
 APMI – Associação Portuguesa de Manutenção Industrial
 AP3E – Associação Portuguesa de Estudos e Engenharia de Explosivos
 APQ – Associação Portuguesa para a Qualidade
 APIGCEE – Associação Portuguesa dos Industriais Grandes Consumidores de Energia Eléctrica
 APAI – Associação Portuguesa de Arqueologia Industrial
 PRODEQ – Associação para o Desenvolvimento da Engenharia Química
 ISQ – Instituto de Soldadura e Qualidade
 Centro Biomassa da Energia
 AICOPA – Associação Industrial da Construção Civil e Obras Públicas
 INOVA – Instituto de Inovação Tecnológica dos Açores

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→ *Organisations of socio-cultural importance*

Associação Humanitária dos Bombeiros Voluntários de S. Martinho do Porto
 Associação Humanitária dos Bombeiros Voluntários de Alverca
 Alhandra Sporting Club
 Associação do Hospital Civil e Misericórdia de Alhandra
 Liga dos Combatentes
 Sociedade Euterpe Alhandrense
 Santa Casa da Misericórdia de Vila Franca de Xira
 Bombeiros Voluntários de Brasfemes
 Bombeiros Voluntários de Coimbra
 Bombeiros Voluntários da Pampilhosa
 CASS – Centro de Apoio Social de Souselas
 Associação Humanitária dos Bombeiros Voluntários da Figueira da Foz
 Associação Humanitária dos Bombeiros Voluntários da Ribeira Grande
 Bombeiros Voluntários da Praia da Vitória

→ *Organisations promoting regional relations*

Câmara de Comércio e Indústria de Angra do Heroísmo
 Câmara de Comércio e Indústria de Ponta Delgada

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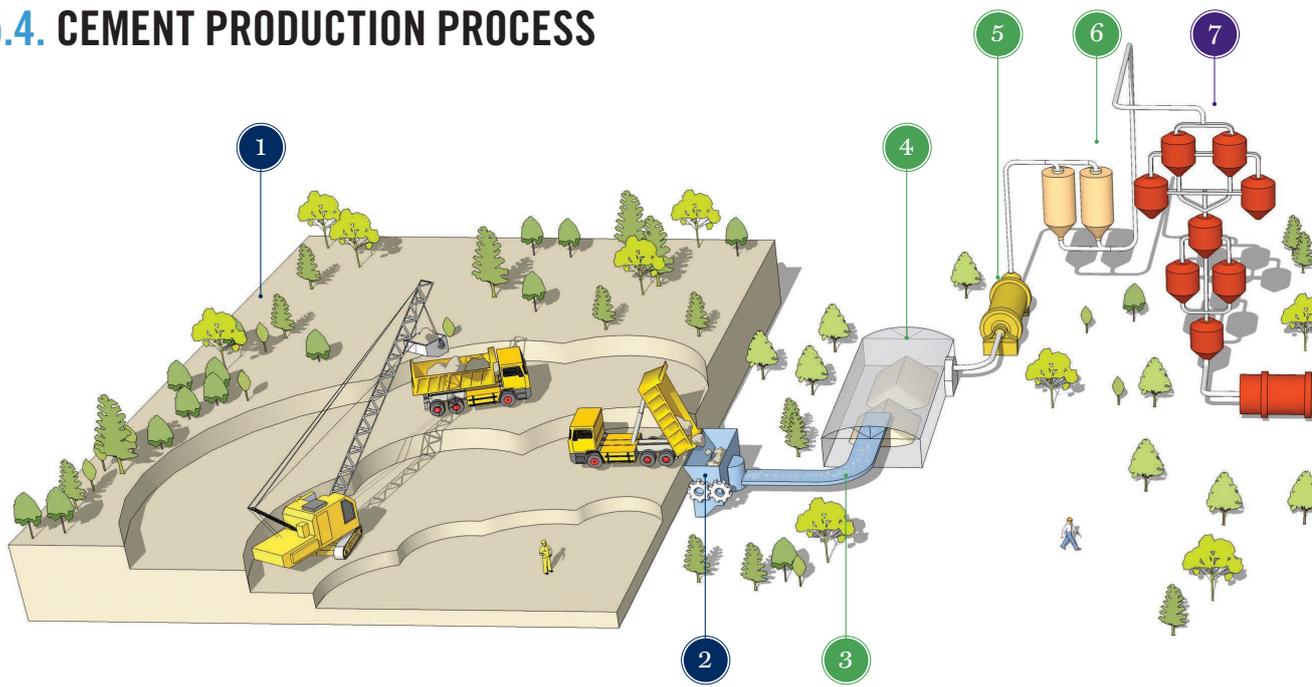
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5.4. CEMENT PRODUCTION PROCESS



QUARRY

1 Quarrying

Limestone and other raw materials are extracted by drilling or blasting or mechanical surface mining.

2 Crushing

The material extracted from quarry fronts (0-1000 mm) is reduced in size (0-30/40 mm) in impact or jaw crushers.

Impacts:

Quarrying → Consumption of raw materials, land use, visual impact, pressure on ecosystems, air emissions of airborne dust, water use, traffic congestion, noise, detonations, and vibrations.

Crushing → Emissions of airborne dust, noise.

PREPARATION OF RAW MEAL

3 Transport

The crushed material is transported to the cement plant by conveyor belt, truck, rail, or river depending on the distance between the quarry and the cement plant.

4 Pre-homogenisation

The limestone, marl, alternative raw materials and chemical composition correctives are mixed and pre-homogenised in various layers that result in the formation of a pile of material, usually in a covered building. The material in the pile is then removed in a special manner to guarantee its homogeneity and sent to the raw meal grinder.

Impacts:

Transport → No significant impacts.

Pre-Homogenisation → Emissions of airborne dust

5 Raw meal grinding

The homogenised raw materials, which we now call raw meal, (0-30/40 mm) are fed into a ball mill or vertical mill where they are dried and transformed into a fine powder (with a residue of around 12% to 18% in a 90 micron mesh). There may be small final adjustments to the chemical composition of the raw meal on entering the grinder.

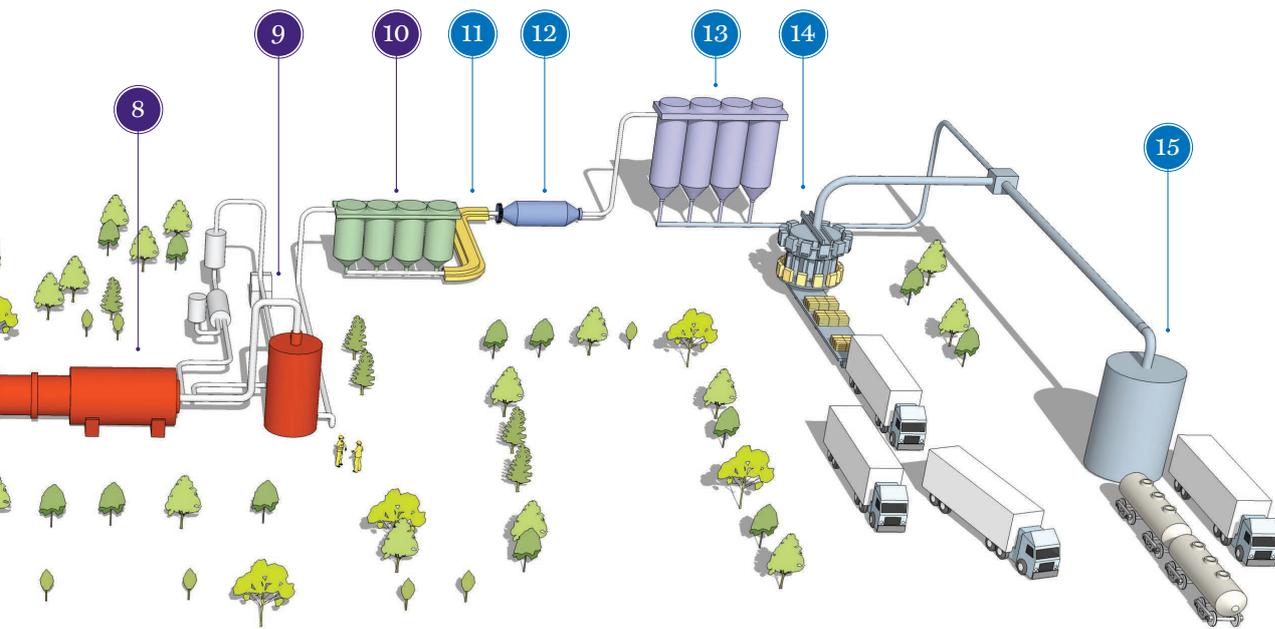
6 Homogenisation silos

The powder from the raw meal grinding undergoes a final homogenisation operation and is stored there until being fed into the baking line.

Impacts:

Raw meal grinding → Energy consumption, noise.

Homogenisation silos → Visual impact.



CLINKER PRODUCTION

8 Pre-heating tower

The meal undergoes pre-heating and a considerable percentage of decarbonisation (>90%) before entering the kiln. Large cloth tube filters or electrostatic precipitators remove dust from the kiln gas circuit and exhaust gas circuit of the grinder.

9 Kiln/cooler

The mostly decarbonised meal fed into the kiln is converted into clinker in a series of chemical reactions taking place at around 1,450°C under the effect of a flame at 2,000°C. The incandescent clinker is cooled quickly in a grate or satellite cooler.

Impacts:

Pre-heating tower → Emission of airborne dust (insignificant), visual impact.

Kiln/cooler → Energy consumption, greenhouse gas emissions, emission of airborne dust, SO₂ and NO_x by-pass gas from the kiln (only in some cases), water use (gas conditioning tower and satellite cooler), liquid and solid waste, noise

10 Clinker storage

After quick cooling to a temperature of between 100°C and 200°C, the clinker is sent to its storage area, which is usually a stockpile or closed silo though in some cases it may be an open-air site

11 Additive storage

Additives for cement production (e.g. gypsum, fly ash, steel slag or limestone) are usually stored in silos or closed.

Impacts:

Clinker storage → Emission of airborne dust.

Additive storage → Emission of airborne dust.

GRINDING, BAGGING AND DESPATCH OF CEMENT

12 Transport

Clinker, gypsum and additives (cement materials) are transported on conveyor belts to the cement grinding.

13 Cement grinding

After the correct proportions have been measured, the clinker is ground with about 5% gypsum and other additives (cement materials) to produce different types of cement.

14 Storage in silos

15 Bagging

The cement taken from the silos is either bagged, bagged and palletised, bagged and covered with shrink wrap or loaded in bulk directly onto tanker trucks, tanker wagons or ships or navios.

16 Despatch

After loading, the cement is despatched by road, rail, river or sea, depending on the location of the plant and its infrastructure.

Impacts:

Transporte → Emission of airborne dust.

Cement grinding → Energy consumption; Emission of airborne dust; Noise.

Transporte → Emission of airborne dust.

Storage in silos → Emission of airborne dust (insignificant), visual impact.

Bagging → Dust emission.

Despatch → Traffic congestion.



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