



2011
Corporate
Social
Responsibility
& Sustainability
Report

Full Edition



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and the 5th one independently verified

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€36,550,000

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Concerning 2011 Report

This is the 9th annual TITAN Group CSR and Sustainability Report and the 5th to be independently verified according to international standards and best practice. The printed version of this Report is in condensed format and covers key economic, social and environmental performance for the period from 1st January 2011 to 31st December 2011 in one single document. It also serves as a guide to all key stakeholders directing them to more detailed information available on our web site.

The 2011 Report covers all TITAN Group activities (p. 12-13, ) in nine countries and underlines a new period of development, following the ten years of commitment to the U.N. Global Compact () initiative and the Cement Sustainability Initiative (CSI) of the WBCSD. ( 

Since 2003 the TITAN Group Report has followed the Global Reporting Initiative Guidelines () and this year the Report was developed following the latest G3.1 version. Since 2007 the Report has been independently assured against the Group's commitments, goals and achievements, in line with the international standards AA 1000 SES, WBCSD/CSI, U.N. Global Compact and GRI G3.1. This Report has therefore been rated A+ for GRI G3.1 assurance level, and as meeting the "advanced" level for U.N. GC CoP.

The Auditors' Report provides a statement on these achievements as well as conclusions and recommendations for further improvement. The annual TITAN Group CSR and Sustainability Report is available on the following web site: www.titan-cement.com.

Useful symbols for users



For additional information please refer to previous CSR and Sustainability Reports



For additional information please refer to TITAN's website: www.titan-cement.com



For additional information please refer to the online version of the 2011 Annual Report



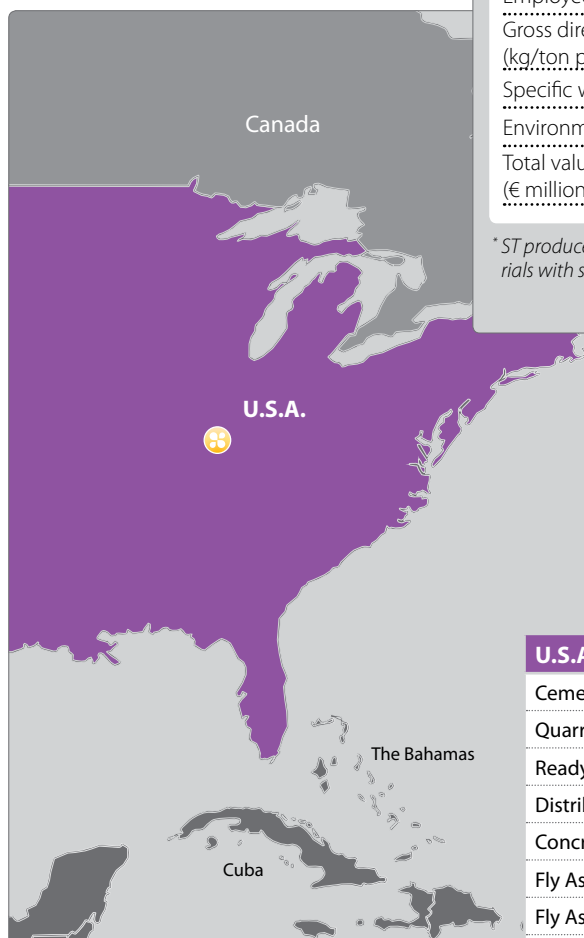
For additional information please refer to relevant links

Non-financial Performance

	2011	2010	2009
Direct employment	5,640	6,161	5,903
Employee lost time injuries frequency rate (LTIFR)	1.49	2.33	2.64
Gross direct CO ₂ specific emissions (kg/ton product) including ST*	625.1	655.3	633.0
Specific water consumption (lt/ton/cement)	340.1	362.3	447.8
Environmental expenditures (€ million)	36.6	27.1	20.0
Total value created and distributed to stakeholders (€ million)	1,026.6	1,235.3	1,323.2

* ST produces ProAsh® a cementitious product that can be used for the production of construction materials with smaller carbon footprint. The reference is based on specific year equity.

NORTH
ATLANTIC
OCEAN



U.S.A.		Greece and Western Europe	
Cement plants	2	Cement plants	4
Quarries	6	Quarries	29
Ready-mix plants	96	Ready-mix plants	28
Distribution terminals	14	Distribution terminals	4
Concrete block plants	9	Dry mortar plant	1
Fly Ash Processing plants in the U.S.A.	6	Fly Ash Processing plant	1
Fly Ash Processing plant in Canada	1	Personnel	1,208
Personnel	1,733		

2011 at a glance

In 2011 the TITAN Group focused on a process of adjusting its operations to the financial downturn influencing cement sector worldwide. The Group CSR Committee revisited CSR priorities at country and local levels incorporating feedback received from key stakeholders with emphasis given to meet local needs.

Accordingly in 2011, TITAN's achievements in respect to its social and environmental endeavors can be summarized to the following:

Do less harm

- > On target to improve water management and consumption.
- > New IPPC permits obtained by TITAN in Serbia and in F.Y.R.O.M.
- > 360° Safety Reviews and "STEP Change" program continued and expanded.
- > Expanding the scope of monitoring improvement, quarries serving the production of aggregates were included in updated performance indicators.

Stakeholder Engagement

- > Incorporation of self-assessment process initiated by U.N. Global Compact in respect to Communication on Progress (see Blueprint).
- > Engagement in WBCSD/CSI task forces:
 - TF1 – Climate change
 - TF3 – Health and Safety
 - TF4 – Air emissions
 - TF5 – Biodiversity
 - TF8 – Sustainability with concrete
 - TF9 – Water
- > Development of new opportunities for co-operation among national Global Compact and CSR Networks at regional level.
- > Implementation of innovative management training to improve stakeholder engagement at local level.
- > Publication of 2nd annual CSR Report by TITAN Cement in F.Y.R.O.M.
- > Publication of 1st annual CSR Report by TITAN Cement in Serbia.
- > Completion and communication of 1st Stakeholder Mapping and Profiling

Survey, in line with AA1000 SES, by TITAN in Bulgaria.

- > Establishment of Local Stakeholder Advisory Panels in Serbia and Kosovo.
- > Co-operation and establishment of CSR Business Network in Kosovo.
- > Participation in Multi-Stakeholder Forum organized by the Albanian Government for the development of a national CSR strategy.
- > Continued engagement in the framework of implementation of CSR Europe's ENTERPRISE 2020 Initiative and join the collaborative venture for responsible supply chain and human rights.

Global recession, uncertainty and austerity measures in Greece, **political challenges** in Egypt and a new effort 20 years after Rio to combat climate change in a collective way were among the prevailing issues in 2011

Participation in Global Compact, CSR and Sustainability Networks

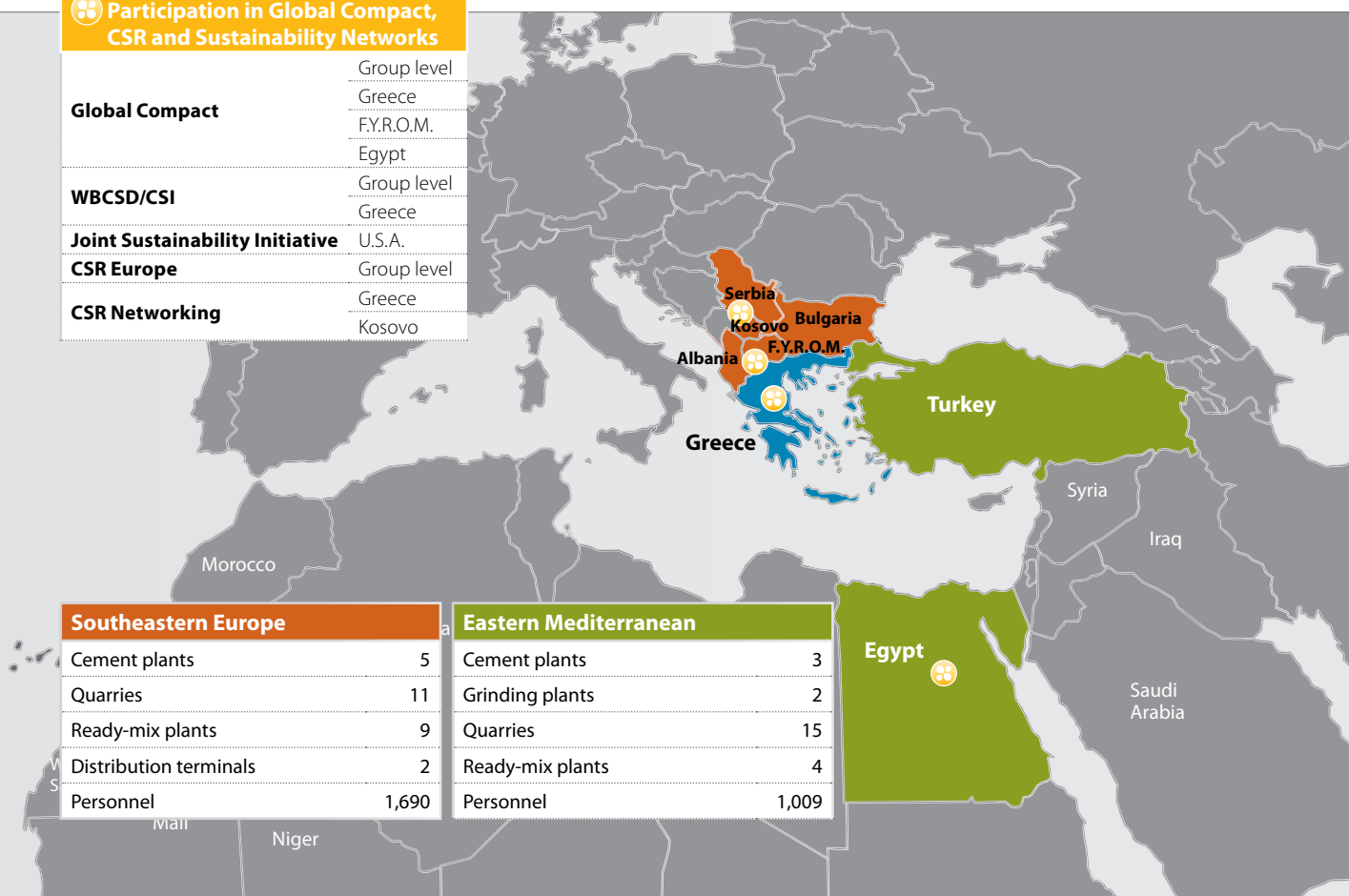
Global Compact	Group level
	Greece
	F.Y.R.O.M.
	Egypt
WBCSD/CSI	Group level
	Greece
Joint Sustainability Initiative	U.S.A.
CSR Europe	Group level
CSR Networking	Greece
	Kosovo

Southeastern Europe

Cement plants	5
Quarries	11
Ready-mix plants	9
Distribution terminals	2
Personnel	1,690

Eastern Mediterranean

Cement plants	3
Grinding plants	2
Quarries	15
Ready-mix plants	4
Personnel	1,009





CEO Message

Globally, 2011 was another year of economic uncertainty and growing social tensions.

TITAN, like so many other companies, faced new and unexpected challenges. Our industry has been particularly hard hit by the financial crisis, due to its cyclical and capital intensive nature. Furthermore, extraordinary circumstances prevailed in Greece, which is faced with the most severe crisis in its recent history, and in Egypt, which is undergoing a fundamental political transition.

In this context, our priority in 2011 was to effectively manage the implications of the crisis and to secure business viability in all countries where we are engaged. Where necessary, we implemented restructuring programs, while, at the same time, actively seeking to address the impact on our stakeholders. Even more than in normal times, our long-held commitment to engage with our stakeholders and communicate openly proved invaluable.

Meanwhile, twenty years after the Rio agreement on climate change, environmental sustainability and its long-term impact on humanity remain a crucial, yet largely unresolved challenge. Corporate social responsibility and environmental stewardship remain fundamental to our business strategy for sustainable growth. In 2011 we continued our efforts for self-improvement in our three priority areas: Accident prevention, environmental sustainability and engagement with key stakeholders.

In the realm of safety at work, the Group's track record continued on an encouraging positive trend. But, tragically, after two years free of serious incidents, an employee of one of our contractors lost his life in an accident at our recently acquired cement production plant in Kosovo. Despite our progress, there is clearly room for further improvement. New initiatives are being taken to further enhance our safety culture and safety performance.

As part of our sustainability strategy, we endeavor to go beyond legal compliance with local environmental requirements and strive to apply international standards and best practices. In this respect, new environmental permits - meeting exacting European standards - were secured

in both Serbia and FY.R.O.M. The year also saw the successful completion and commissioning of our processing facility for alternative fuels in the Zlatna Panega plant in Bulgaria. Its operation improves the competitiveness of the plant while, at the same time, providing a useful service to society.

A focus on building trust, engaging in meaningful partnerships, fostering new initiatives in our communities, creating and promoting win-win solutions for business and society at large, is acquiring increased significance as society's needs and expectations evolve. Today, the early commitments we undertook almost a decade ago under the United Nations Global Compact pledge and the Cement Sustainability Initiative Charter, seem more important and relevant than ever.

In 2011, we further expanded our engagement at global, industry, and local levels. We accepted the invitation to co-chair the Cement Sustainability Initiative for a two year period. Acknowledging the power of collective action, we have taken a leading role in the development of local business networks for corporate social responsibility and sustainable development in countries where we operate. In addition, during the past year, the U.N. Global Compact Office, recognized TITAN as having reached the "advanced" level against the new criteria defined for communicating progress to stakeholders.

At TITAN, we remain committed to corporate social responsibility as an integral part of our way of doing business. We believe that continuous self-assessment and self-improvement enhance the long-term viability of the Group. We are grateful to all our employees and key stakeholders for their support during these challenging times.

Dimitri Papalexopoulos
Chief Executive Officer

Enhance Sustainable Growth

Accident prevention
Improvement of environmental footprint
Curbing of carbon emissions
Energy efficiency
Water management

Advanced health and safety conditions
Corporate volunteering
Active citizenship
Added value multiplied

Expand and embed health and wellness practices
Maintain responsible and sustainable practices in value chain
Increase value created and share with stakeholders

Participation in U.N. Global Compact WBCSD/CSI

Stakeholder forum
Local advisory panels
Networking and partnership building

Develop new methods and products
3R (Reduce - Reuse - Recycle)
Utilize and promote alternative energy sources

International standards and best practices applied

Learning from experience and sharing of best practice
Collaborations and joint action

Raise awareness and educate
Invest in R&D
Innovate

Compliance with legal requirements

Branching-out and adding value

Be part of the solution

Do less harm

Do more good

Win-win

CSR Vision

"To pursue at all times our business and create value, in an ethical and socially responsible manner, doing less harm and endeavoring to do more good"

Integrity, know-how, commitment to delivering results, respect for customer needs, continuous improvement, corporate social responsibility

Accountability to our People and to Society



The effectiveness of collective action


"In the ten years since its launch, the United Nations Global Compact has been at the forefront of the U.N.'s effort to make the private sector a critical actor in advancing sustainability."

Change takes place essentially at the local level. Empowering local networks to support companies to meet their social and environmental commitments is therefore a vital condition for the future of the U.N. Global Compact Initiative. This statement was clearly underlined by key stakeholders in the consultations following the tenth anniversary of the launching of the initiative.

TITAN's engagement with the Global Compact Initiative  started in 2002 when less than 500 companies world-wide had signed the pledge. To meet its voluntary commitments, TITAN fully incorporated Global Compact principles into its policies and practices, while reporting social and environmental challenges and performance according to international standards and best practices since 2003.

Moreover, in 2007 the procedure for on-going evaluation adopted by TITAN resulted in the development of a more robust and integrated process of both internal self-assessment, and independent, third-party assessment and verification. Receiving feedback from stakeholders and fostering continuous improvement on all fronts is part of the whole process.


TITAN responded positively to the U.N. Global Compact appeal for self-assessment, and following the relevant criteria the Group 2010 CSR and Sustainability Report was compiled and classified accordingly, and ranked at the "advanced" level in the relevant ratings.

During these last ten years special emphasis has been laid on making not only TITAN Group companies but also their associates more aware of the need for collective action in the spirit of the Global Compact Initiative. 

In 2007 TITAN conceived the idea of helping to set up national Global Compact networks. At that point in time TITAN had already founded with twelve other companies and three business associations the Hellenic Network for CSR.

In 2008, the Global Compact Network was also established in Greece and in the following year TITAN also joined the Global Compact Network in F.Y.R.O.M. In 2011 another step towards strengthening collective action at local level was

the foundation of the Corporate Social Responsibility Network in Kosovo. At the same time, preparatory contacts were made for the establishment of a similar network in Albania.



In addition TITAN also engaged its own resources in all southeast European countries to support and facilitate cooperation among the networks and their members in the region. Intended to develop a common agenda for action on areas of common interest – such as the protection of human rights and combating corruption - the first regional network meeting and conference  was scheduled for the beginning of 2012.



CSR Europe is the leading European business network for corporate social responsibility with around 71 multinational corporations and 33 national partner organizations as members.  The organization was founded in 1995 by senior European business leaders in response to an appeal by the European Commission President Jacques Delors. It has since grown to become an inspiring network of business people working at the very forefront of CSR across Europe and globally.



In October 2010, CSR Europe launched a joint ENTERPRISE 2020 initiative  to address societal challenges through collaborative action and shape the business contribution to the European Union's Europe 2020 strategy for smart, sustainable and inclusive growth.


TITAN Group has joined CSR Europe as a core member since 2004.  In 2006, TITAN took the opportunity to join forces with other European and international enterprises in a CSR Europe collaborative venture on responsible supply chain management. Last year it agreed to expand the scope of this endeavour to take in human rights.   To support the implementation of ENTERPRISE 2020, TITAN Group has committed to share know-how, experience and practices for the following collaborative ventures:

- > Supply chain and Human Rights 
- > ESG Disclosure and Reporting 

TITAN Group pledges

TITAN Group values express its engagement to apply the following international standards:

- U.N. Global Compact
- AA1000 Accountability Principles Standard 
- ISO 14001: 2004 Environmental Management System Certification
- OHSAS 18001
- SA 8000 Social Accountability
- GRI (reporting guidelines)
- WBCSD/CSI (sectoral initiative)
- European Business Alliance for CSR (European initiative)
- E.U. Policy on CSR (Announcement, October 2011) 

Also related to ISO 26000 CSR  principles and particularly the following:

- Accountability
- Transparency
- Ethical behavior
- Respect for stakeholder interests
- Respect for the rule of law
- Respect for international norms and behavior
- Respect for human rights



World Business Council for Sustainable Development

As a core member of the Cement Sustainability Initiative, launched by the World Business Council for Sustainable Development (WBCSD), TITAN has focused since 2003 on the implementation of the commonly agreed "Agenda for Action".

Since 2006, environmental and safety targets at both Group and local level have been set for all TITAN cement activities, with external verification of performance starting in 2007. By 2010 all wholly owned TITAN operations were included in the scope of this assessment, performed annually. In 2012 TITAN has taken over the co-chairing of the CSI, along with two other core members, paving the way for strategic initiatives. TITAN joins forces with other cement producers in most of the CSI working groups established for each key challenge, by involving specialist resources on the corporate level. The focus is on the full incorporation of CSI tools and guidelines in the agenda for operations on Group level, systematic work towards adopting and disseminating best practices within the company, and aiming at continuous improvement and the management of change.

In this direction, TITAN also co-chairs with another core member the "Biodiversity and Land Stewardship" Taskforce of the CSI.

In 2011, new Guidelines on Quarry Rehabilitation were published. In order to deliver a well-balanced document and promote transparency, the CSI solicited input from a wide range of external reviewers (including IUCN, WWF, GIZ, IFC, EBRD) throughout the drafting process. The views of external stakeholders were discussed openly and extensively, in order to adopt and incorporate as many relevant views as possible. To quote the CSI Director: "We firmly believe that the benefits to the natural environment and local communities of progressive and pragmatic quarry rehabilitation outweigh the long-term rehabilitation costs to the cement companies".

Helping business lead by example

"UNEP is expected to play a most significant role in advancing sustainability in the next five years, followed by WBCSD and WWF", The Sustainability Survey, 2011.

As commitment to sustainability values is becoming more and more widespread, and confidence between society and governments continues to erode, corporate and institutional, as well as academic, experts have expressed optimism about the WBCSD's role in advancing sustainability. This was underlined by a relevant survey conducted by SustainAbility in the U.K., based on the feedback from qualified sustainability experts worldwide.

The WBCSD, a CEO-led, global coalition of some 200 forward-thinking companies, advocates progress on sustainable development and seeks to be a catalyst for innovation and sustainable growth in a world where resources are increasingly limited. In this context, the WBCSD Cement Sustainability Initiative (CSI) is a unique, global effort by 23 leading cement producers, with operations in more than 100 countries, ranging in size from very large multinationals to smaller local producers.

After ten years of collective action the CSI is now focusing on understanding, managing and minimizing the impacts of cement production and use by addressing a range of prevailing issues, including:

- > protecting employee health and safety,
- > addressing climate change and mitigating global warming,
- > using raw materials and fuels efficiently,
- > reducing air emissions,
- > managing biodiversity and quarry rehabilitation,
- > managing water consumption and use,
- > further improving concrete sustainability.

The effectiveness of collaborative action becomes more visible as the membership expands. New CSI-led taskforces are operating in China, with a view to inculcating and institutionalizing principles and good practices in CSI member companies in this rapidly developing market.

U.N. Conference on Environment and Development "Rio+20"

Twenty years after the first Rio summit, world leaders will meet again to renew their commitment to sustainable development and effective engagement of the private sector. Rio+20 will be critical for climate change and the challenges related to environmental protection.

The United Nations Conference on Environment and Development (Rio+20), to be held in Rio on June 20-22 2012, promises to be a unique opportunity to strengthen public-private collaboration needed to advance sustainability on a massive scale.

The Business Action for Sustainable Development 2012 (BASD), is a joined effort of the UNGC, ICC and WBCSD aiming at coordinating the participation of the private sector at Rio+20.

BASD submitted specific recommendations with the "Zero Draft" document, forming the basis for the current negotiations between the member countries.

The TITAN Group has been engaged in this process both as a co-leader of the CSI, which is also member of the BASD, and as a UNGC member company. Moreover, TITAN has appointed the TITAN America CEO, to represent the Group in Rio and take part in the discussions related to the industry's position on climate change.

2011 Group performance against existing targets

Measuring performance against set goals and objectives is part of continuous self improvement. The Group engages with experts and stakeholders, seeking meaningful ways to understand and record the "added" and shared value created by its operations and CSR endeavors. This is a long-term, on-going and challenging process which has initiated changes at all levels.

In 2009 the Group CSR Committee revised its specific targets related to environmental and safety performance, while adopting new targets related to the alternative fuel substitution rate and water consumption. The new targets were calculated taking into account new acquisitions, equity changes and new kiln lines that had become operational in the meantime. The TITAN Group is committed to achieving these by the year 2015, with the exception of the alternative fuels substitution rate-targeted for 2017. Accordingly, all data referring to Group performance against targets are based on the 2009 equity base.

In addition, having performed environmental audits to each one of the Group cement plants by the end of 2011, it was decided to revise the frequency from two to three years.

In 2011 TITAN decided to adopt the definitions and KPIs proposed by the WBCSD/CSI Water Management Task Force. Thus, starting with this year's report, information regarding water withdrawal, consumption and discharge will be included.

Likewise, in its reporting of local impact indicators (specifically for Biodiversity), TITAN has extended the coverage of quarries, in order to include all types of raw materials extraction and use (cement and aggregates).

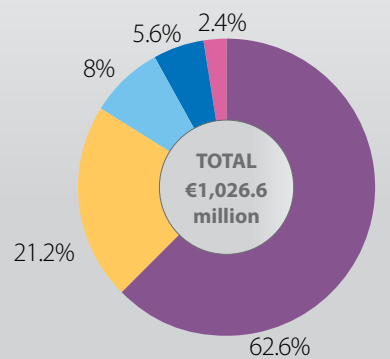
Environmental expenditures

In 2011 total expenditures relating to the implementation of the Group's environmental policy came to €36.6 million. This amount includes investments of €16.4 million, representing about 45% of total costs, in environmentally friendly technologies. Another €15.9 million or 43.6% of the total costs was used on environmental management, while €4.2 million was directed to other environmentally related expenses, including €1.7 million (about 4.5%) on waste management, €1.8 million (about 5%) on rehabilitation, €0.6 million (about 1.6%) on reforestation and €0.1 million (about 0.3%) on training and awareness building.

Distribution of value created by TITAN Group in 2011

Total value created in 2011 was €1026.6 million and distributed to key stakeholders as follows:

- > To employees for salaries, pensions and social benefits, including additional benefits beyond those provided by law: **€218.1 million**
- > To local and international suppliers: **€642.9 million**
- > For new investments in fixed assets: **€58.1 million**
- > To state and local authorities through taxation: **€82.6 million**
- > Return to shareholders and minorities: **€24.9 million**

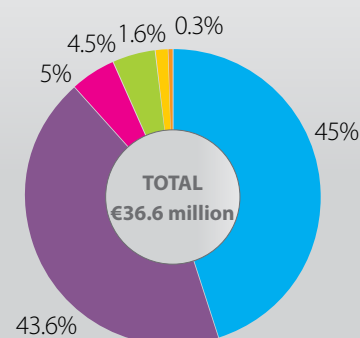


- To local and international suppliers 62.6%
- To employees for salaries, pensions and social benefits, including additional benefits beyond those provided by law 21.2%
- To state and local authorities through taxation 8%
- For new investments in fixed assets 5.6%
- Return to shareholders and minorities 2.4%

TITAN Group Equity

	Plant	2009	2011
GR	Kamari	100%	100%
	Patras	100%	100%
	Thessaloniki	100%	100%
	Elefsina	100%	100%
SR	Kosjeric	100%	100%
	Usje	100%	100%
	Zlatna Panega	100%	100%
U.S.A.	Pennsuco	100%	100%
	Roanoke	100%	100%
	Alexandria	100%	100%
EG	Beni Suef	100%	100%
TR	Tokat	50%	50%
AL	Antea	100%	100%
KO	SharCem	-	100%

Environmental expenditures



- Application of environmentally friendly technologies 45%
- Environmental management 43.6%
- Rehabilitation 5%
- Waste management 4.5%
- Reforestation 1.6%
- Environmental training and awareness 0.3%

2011 TITAN Group Performance vs Targets

Environmental Performance	Group Target ¹				
	2010	2011	Progress	2015	2017
Gross direct specific CO ₂ emissions ^{2,3,4} (kg/ton product)	697.7	680.5	▶	628	
Including ST ProAsh® production (kg/ton product)	655.3	626.8	▶	628	
Specific dust emissions (g/ton clinker)	153.6	159.2	✗	95	
Specific NO _x emissions (g/ton clinker)	1,857.2	1,705.9	▶	1,670	
Specific SO _x emissions (g/ton clinker)	211.3	241.9	✗	240	
Specific water consumption (lt/ton cement)	362.3	347.7	▶	350	
Use of alternative fuels (% thermal basis)	1.43	1.56	▶		10
ISO 14001 certified or equivalent of all wholly owned (in 2009) cement plants (%)	83.3	91.7	▶	100	
ISO 14001 certified or equivalent of all wholly-owned (in 2009) active quarries for cement plants and aggregates (%)	88	98	▶	100	
ISO 14001 certified or equivalent of all wholly-owned (in 2009) dry mortar production facilities (%)	100	100	▶	100	
Develop an Environmental Impact Assessment Study (EIAS) and implement a Rehabilitation Plan (RP) for all wholly-owned (in 2009) active quarries for cement plants and aggregates (%)	60	60	▶	100	
Develop and apply integrated water management system to all cement and ready-mix plants by 2012	50	80	▶	100	
Carry out environmental performance audits for each one of the cement plants and related quarries every three years			!		
Safety Performance					
Fatalities (directly employed)	0	0	▶	0	
Fatalities (indirectly employed)	0	1	✗	0	
Fatalities (third parties)	0	0	▶	0	
Serious accidents	0	2	✗	0	
Aim to be consistently among the top quartile best performers of WBCSD/CSI members in terms of Lost Time Injury Frequency Rate (LTIFR) ⁵	2.33	1.49	!	0.9	

▶ Actions underway ▶ Target achieved ✗ Target not yet achieved ! Moving target⁵

¹ All targets have been recalculated based on the equity the Group held in 2009.

² Target set for CO₂ emissions referred to 1990 performance according to the Kyoto Protocol.

³ Total CO₂ emissions do not include emissions related to vehicles (used for material or personnel transportation outside the site).

⁴ Product equals cementitious production as defined by WBCSD/CSI.

⁵ This target is reviewed every year according to top quartile performance of WBCSD/CSI members.

Understanding the Industry and our Footprint

The TITAN Group is an independent cement and building materials producer with 109 years of industry experience. Based in Greece, the Group owns 14 cement plants in nine countries, with half of these plants in emerging markets. TITAN has been listed on the Athens Stock Exchange since 1912 and is a core member of the World Business Council for Sustainable Development (WBCSD) and the U.N. Global Compact Initiative. Cement, concrete,

aggregates, a variety of other building materials and ProAsh™, a fly ash produced from by-products of coal, are the products made and marketed by the TITAN Group, whose vertical integration development strategy is designed to serve fundamental needs of people and societies.

Improving infrastructure development and strengthening the capacity of the construction sector and related activities is

a key growth and local sustainability priority for all regions in the long-term. Value created by TITAN operations is distributed to key stakeholders directly, while added value is also shared through continuous efforts to improve social and environmental footprints.

In 2011, from **52 active quarries** were extracted **24.3 million tons of raw materials** (wet basis) of which 16 million tons or more than 65% were used for cement production while 8.3 million tons for aggregates. **€36.6 million** were invested **to reduce environmental impact**.

Main impacts of operations include:

- > Dust and noise
- > Safety risks
- > Alteration of the landscape
- > CO₂ emissions related to energy consumption by equipment and transportation
- > Raw materials energy and water consumption



91.7 million m² is the total area of active quarries:

- > 17.3 million m² are affected by operations
- > 14.7 million m² have been rehabilitated.

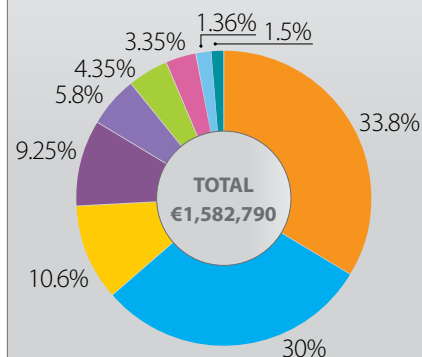
More than **1.9 million plants and trees** have been planted for **quarry rehabilitation and reforestation** of other areas, or donated to third parties.

Education, community development and infrastructure, **environment** and safety, culture and **social solidarity** were the focus areas of Group financial and in-kind donations expenditure for 2011.

Total thermal energy consumption for all Group activities was **36,828 TJ** while **total electrical energy consumption** was **5,511 TJ** or 1,531 GWh. 1.5% of the energy consumed for clinker production came from alternative fuels.

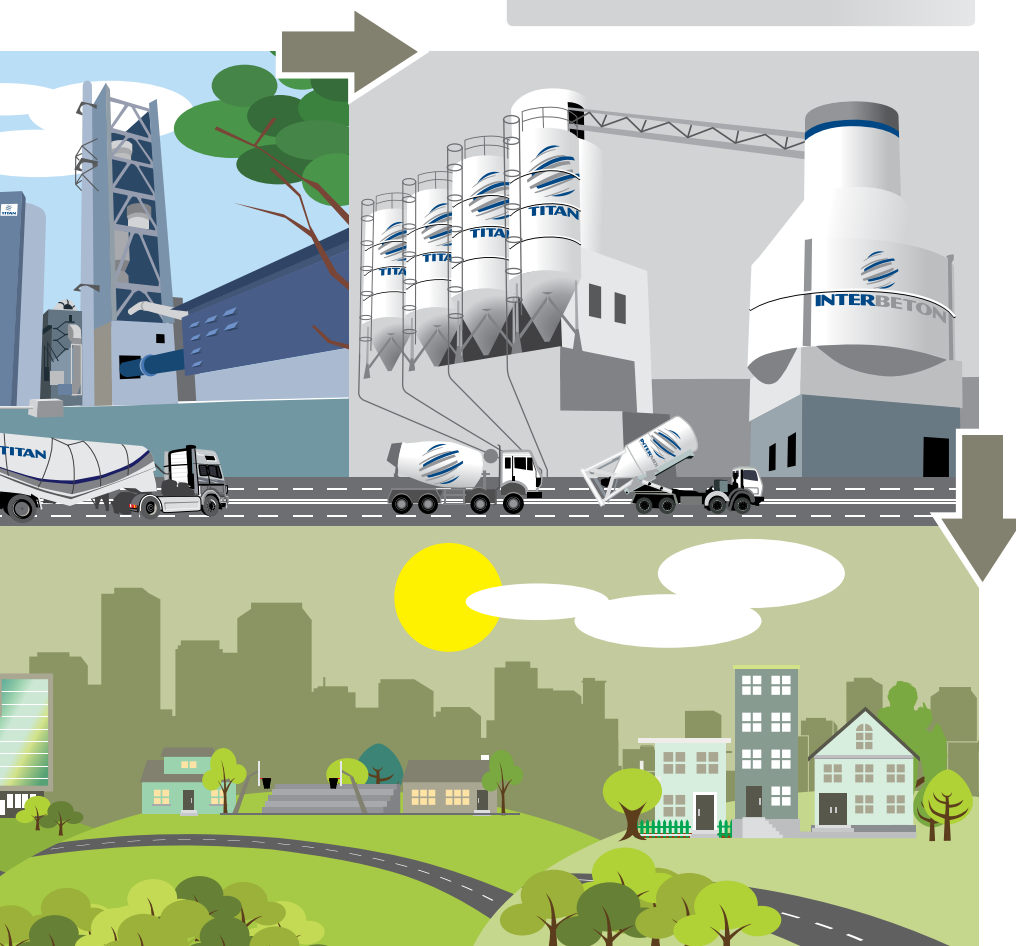
Total water consumption was **9.9 million m³**.

Contribution to communities per country



To community development and social solidarity programs: **€1.58 million**

Egypt 33.8%	Bulgaria 4.35%
Greece 30%	Kosovo 3.35%
Serbia 10.6%	Albania 1.5%
U.S.A. 9.25%	Turkey 1.36%
F.Y.R.O.M. 5.8%	




- > **8.6 million metric tons** = total direct **CO₂ emissions** from cement plants.
- > 625.1 kg CO₂/ton product = TITAN specific CO₂ emissions including Separation Technologies' production.
- > 0.8 million metric tons = the total indirect CO₂ emissions related to electrical energy consumption by cement plants.
- > 1.2 million tons (dry basis) of alternative raw materials used for cement production.
- > 30,630 metric tons was the total alternative fuel consumption.


TITAN products contribute to the multiple social values provided by concrete structures such as:

- > **Safety**
- > **Durability**
- > **Economy**
- > **Resource Efficiency**
- > **Communication and Connectivity**
- > **Aesthetics**

Governance for Sustainability

Throughout its history, TITAN has been guided by certain values. Putting these corporate values into practice is a task in which all TITAN employees can make a difference. Commitment to applying the highest standards of corporate governance has been underlined by the decision of the TITAN Board of Directors to comply – over and above the provisions of Greek Law - with the U.K. Code on Corporate Governance, as revised by the U.K. Financial Council (June, 2010). 

Since 2000, corporate social responsibility and sustainable development have been embedded step-by-step in the governance and management of TITAN operations. Meeting business objectives, both in the short and long-term, is regarded as a shared responsibility among all TITAN Directors and managers.

First adopted in 2004, the TITAN Group Code of Conduct (like the Code for Procurement of 2008)  sets out the principles of conduct that each individual is expected to follow. The Group Internal Auditing Department reports annually to the Board of Directors the outcomes of internal audits including incidents of non-compliance with Group standards and principles.

In 2011, a revised draft of the Group Code of Conduct was presented to the management team and selected external stakeholders. Feedback received was incorporated to the final draft. The new Code of Conduct is expected to be fully launched in 2012 with a new communication and training plan.

TITAN Group CSR Committee  is the Board Committee appointed to shape and guide TITAN's CSR strategy and sustainability agenda. The Committee is chaired by the CEO and includes two other Board Members and three Members of the Executive Committee. It meets three to four times each year to review all aspects of TITAN's CSR policy  and agenda for action. CSR is a shared responsibility for the TITAN Group, both top-down and bottom-up.

CSR as a Shared Responsibility

CSR Committees are established and operate at national level being responsible for integrating and implementing TITAN Group strategy at local level. Consisting of senior management and experts in safety, the environment and human resources management, CSR Committees also meet

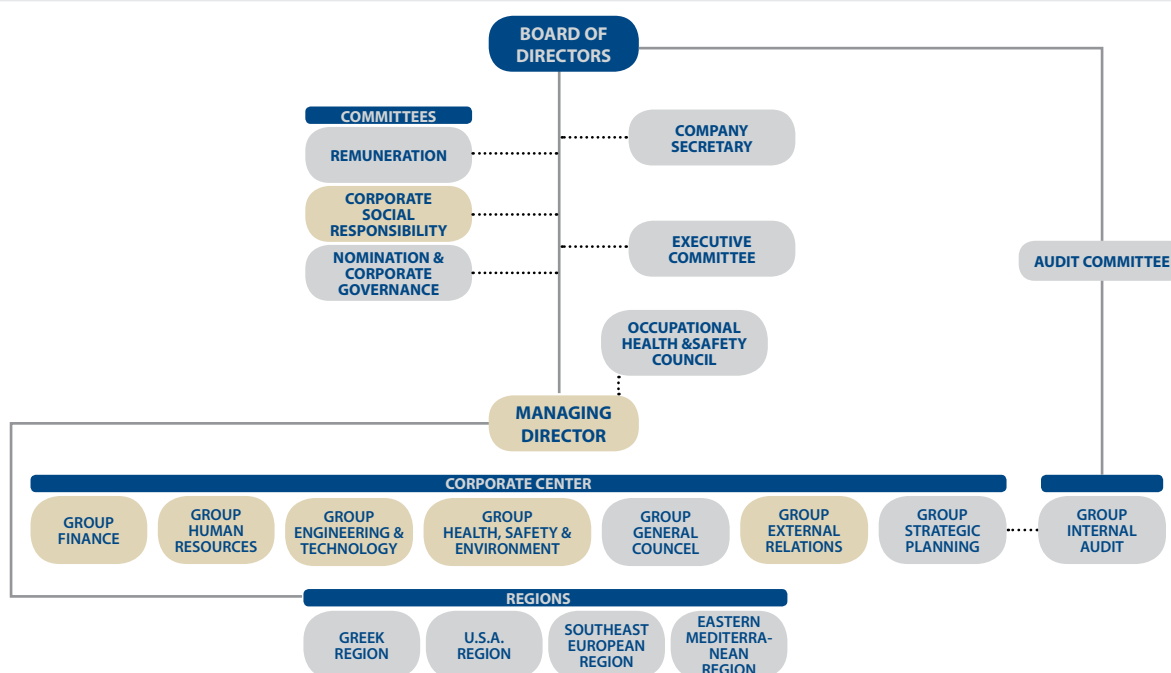
three to four times each year, and in some cases every month, to review and assess action plans and performance achieved, as well as to facilitate and initiate further improvements at both local and regional levels.

Building capacity and new skills for further improving engagement with key stakeholders was a key priority addressed in 2010. Accordingly, more than 150 managers from the SEE Region, Greece and Egypt were invited to participate in relevant workshops in 2011.

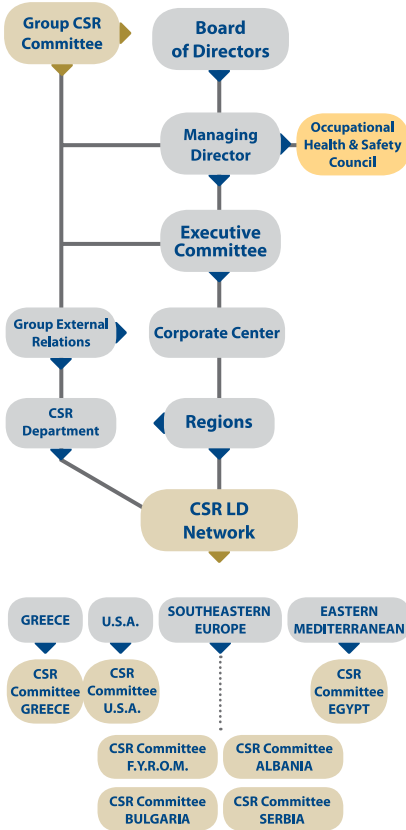
All CSR Committees have appointed one of their members as a representative to the Group CSR Liaison Delegates Network (LDN) aiming at improving internal communication, sharing and learning from best practice.

Three LDN web-seminars and one meeting were organized in 2011, focusing on better measuring of the social footprint, reporting and verification according to international standards and the new E.U. CSR Announcement, corporate voluntarism, social solidarity and employees' engagement.

CSR: a shared responsibility



Group CSR management structure



Managing Risks and Opportunities

Social and political unrest has increased potential risks that may affect TITAN operations either directly or indirectly. Particularly in Greece and Egypt, but also in other countries where risks like bribery and corruption are considered extremely high, continuous monitoring and risk assessment of potential impacts on TITAN is an integrated process related both to financial risk assessment and compliance with TITAN values and its Code of Conduct.

In addition, a Direct Employee Communication Line operates for all employees in Greece and a similar system titled "Ethic Point" is available for employees in the U.S.A., so as to facilitate direct communication of incidents – anonymously if necessary – to senior management. Other mechanisms for reporting grievances are available in all countries, either in the form of a yellow safety box for employee communication with management or in the form of written procedures.

In 2011, a total of 11 cases were reported through this process as non-compliance with the TITAN Group CoC. Five of these cases were reported in the U.S.A., four in Greece and two in Egypt. All cases were fully investigated by independent committees and handled accordingly.

In all relevant communication with employees, contractors and key business associates it is clearly stated that non-compliance with specific standards and principles may cause specific impacts – even a suspension of co-operation.

The risk of corruption is considered in all business units and is one of the topics examined during annual corporate social responsibility assessment at both local and Group levels. In 2011, relevant risks have increased in countries with increased social and political instability, like Egypt. The Transparency International Index shows only minor improvements in other countries where TITAN operates, like F.Y.R.O.M. and Serbia. For many years TITAN follows, as a standard practice, a policy aiming at balancing private with public customers, so that the majority of sales in each country are to private customers. Moreover, it continuously examines risk assessments from independent authorities and implements relevant training programs for all managers and employees – particularly in functions that are more exposed to such potential risks – so as to ensure that TITAN standards are fully met.

Social and Environmental Risk Assessment

TITAN Group has early recognized that integrating social and environmental risk assessment in management of operations and decision making is an important factor for meeting its social and environmental endeavors. As reported in 2010, a project was commenced and executed in 2011 targeted to the overall improvement of health, safety and environmental risk mapping and assessment.

The project was assigned to one of the world's leading consultancy companies and was built on an existing tool used internally for auditing the environmental performance of cement plants.

The tool has been customized so as to serve the following objectives:

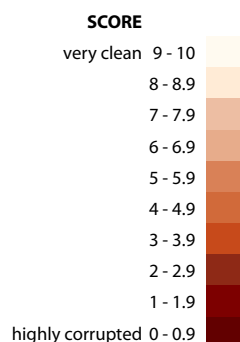
- > identify risks for each activity and operation,
- > benchmark performance of each activity against specific indicators,
- > support effective action planning from site level up to company and Group level.

Throughout the year, pilot testing of the new tool has taken place in Thessaloniki (Greece), Antea (Albania) and Usje (F.Y.R.O.M.).

Monitoring corruption risks

TITAN operations exposure per country according to 2011 Transparency International Index

Country	Corruption Perception Index Score	TITAN Group Employees %
U.S.A.	7.1	30.8
Turkey	4.2	4.4
F.Y.R.O.M.	3.9	5.9
Greece	3.4	21.5
Bulgaria	3.3	5.7
Serbia	3.3	5.8
Albania	3.1	3.8
Egypt	2.9	13.5
Kosovo	2.9	8.6

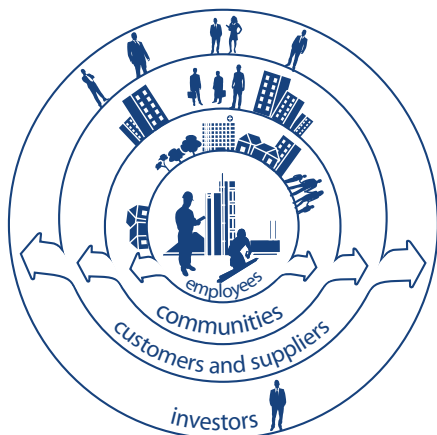


Stakeholder Engagement

Since 2007, TITAN is developing gradually an integrated process for Stakeholder Engagement. Following international standards and best practice, this is a two-way process, aiming at both internal and external stakeholders.

The main principles directing identification of key stakeholders are: inclusivity, relevance to TITAN business and significance. The definition given by U.N. Global Compact regarding the "sphere of influence" guides the identification of all relevant groups at local, national and global levels.

From extending analysis of the outcomes of this process the last few years, it has become apparent that key stakeholder groups at local level might be different for TITAN operations, depending on the particular conditions, social and political from place to place.



Stakeholder engagement being a key element for continuous improvement, workshops and internal assessment audits are conducted every year in co-operation with local CSR Committees.

Feedback from stakeholders is requested in all communication events organized by TITAN through focused questionnaires, interviews, feedback cards. TITAN has also adopted stakeholder fora and panels to inspire a more systematic and open dialogue on specific topics, like community development priorities in Kosovo and use of alternative fuels in Serbia.

In 2011, TITAN launched an extensive training program for all managers and supervisors from SEE&EM operations and Greece, while it seeks to expand this further so as to cover more employees at local and regional levels.

This program initiated the launching of local engagement plans aligned with key priorities for TITAN business and different

stakeholder groups, particularly employees, contractors and suppliers, communities and local authorities, governmental and non-governmental organizations.

Utilizing feedback from stakeholders

TITAN CSR Committees operating in all countries are responsible for assessing and monitoring at least once each year the outcomes of CSR performance at country level, as well as the feedback received from stakeholder dialogue. Furthermore, in each case CSR Committees direct the development and implementation of stakeholder engagement action plans which meet particular local priorities.

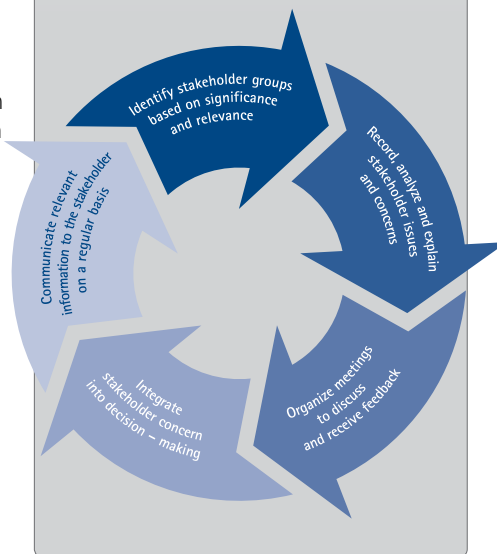
Group and national CSR Committees re-examine priorities of relevant action plans every year to enable more focus on those issues which are the most material to TITAN's business and where action is needed. Health and safety at work, as well as employment and human rights, were acknowledged as top priorities for all those engaged in countries like Greece and Egypt that have suffered most from the financial crisis and political uncertainty.

To meet this aim in 2011:

- > The 2nd CSR Report was published by TITAN Cement in F.Y.R.O.M. and presented to all stakeholders at special events.
- > An open plant day was organized for more than 900 people from neighboring communities, local authorities, media and other key stakeholders.
- > Local Stakeholder Advisory Panels were set up in Serbia and Kosovo. The company issued its first annual CSR Report for 2010 and a web-based reporting process for environmental performance in Serbia.
- > TITAN Cement in Bulgaria completed its first Stakeholder Mapping and Profiling Survey in line with AA1000 SES standards and launched a relevant action.
- > TITAN Cement in Serbia organized two stakeholder meetings seeking feedback regarding its CSR strategy, priorities and performance at national level.
- > TITAN in Kosovo took the lead in co-operating with other local enterprises and the American Chamber of Commerce to found local/national CSR networks.

TITAN Group CSR policy

- > We aim to build trust with all our stakeholders by communicating openly and transparently, and seeking engagement to understand the impact of our operations and their concerns.














TITAN Priorities

Following the annual assessment for 2011, current Group focus is on countries at risk, particularly Greece and Egypt, while priorities are defined as:

- > Care for employees and development of a "social safety net" for people in need within the sphere of TITAN's influence.
- > Fully integrate recently acquired operations in Kosovo and joint venture in Turkey in social performance assessment and reporting process.
- > Improve "Social footprint" by engaging with stakeholders and developing relevant systems to measure performance.
- > Continue to invest and expand efforts related to energy and water consumption, climate change and biodiversity.
- > Further develop and promote win-win solutions like in the area of 3R (Reduce-Reuse-Recycle) through stakeholder engagement and collective action.

Stakeholder Dialogue Outcomes and TITAN Group Priorities

Stakeholder groups	Key issues - priorities	2011 TITAN activities
Employees and their representatives	Health and safety, working conditions, stability and continuity	<ul style="list-style-type: none"> > Employee wellness programs > Capacity building training for stakeholder engagement, corporate voluntarism and social solidarity initiatives > Living TITAN values, leadership and safety programs
Investors	CSR awareness building for investors. Leadership role in local markets. More aggressive climate change targets. Good combination of social and environmental focus	<ul style="list-style-type: none"> > "Advanced" performance in communicating progress to stakeholders according to U.N. Global Compact > Participation in meetings with Social Responsible Investors, response to feedback received regarding non-financial performance review and communication of environmental and social targets and outcomes
Contractors and Suppliers	Safety, working conditions, moving beyond compliance, market conditions	<ul style="list-style-type: none"> > Contractors crew management guidelines and driving safety procedures applied in all operations  > Commitment to participate in collaborative venture for responsible supply chain management and human rights 
Customers	Quality, market conditions, product sustainability	<ul style="list-style-type: none"> > New Separation Technologies unit operating in E.U.  > Pervious concrete launched in U.S.A. and efforts to utilize blended cements in all markets continued 
Communities	Environmental and social footprints Community development and support	<ul style="list-style-type: none"> > Local advisory stakeholder panels operating in Serbia and Kosovo > Stakeholder profiling survey in Bulgaria > Open plant day for local communities in F.Y.R.O.M. > Web based emissions report in F.Y.R.O.M. and Serbia  > Stakeholder consultation meetings held in all countries
Governments	Focus on national priorities	<ul style="list-style-type: none"> > Provide solutions for reduction, re-use and recycling of wastes  > Participate in joint efforts for tree planting and rehabilitation of natural environment  > Join collaborative efforts for CSR and sustainable development 
International Organizations and NGOs	<ul style="list-style-type: none"> > Engagement in Sustainability and Corporate Social Responsibility initiatives > Transparency and accountability > Create and share value 	<ul style="list-style-type: none"> > Support the establishment and the activities of local Global Compact and CSR networks  > Co-chair WBCSD/CSI  > Participation in CSR Europe's collaborative ventures for ENTERPRISE 2020 

Communication with employees and key stakeholders

Title	Type	Country	Target Group
Annual CSR and Sustainability Report	Printed Report	All	All stakeholders Total: 1,000
Annual CSR and Sustainability Report	Web Report	All	All stakeholders
Annual CSR Report	Printed Report	F.Y.R.O.M.	All stakeholders Total: 2,000
Annual CSR Report	Printed Report	Serbia	All stakeholders Total: 2,000
TITANS	Printed magazine	Greece	Employees and stakeholders Total: 3,675
AKHBARNA	Printed magazine	Egypt	Employees Total: 800
TCK Novosti	Printed newsletter	Serbia	Employees and stakeholders Total: 900
ST issue	Web based newsletter	U.S.A. (GR)	Stakeholders Total: 600
TITANET	Web based newsletter	Group	Technical staff and managers Total: 650
HR Review	Web based newsletter	Group	HR staff – Group wide Total: 100

Engaging with our people

Health and Safety at Work

In the TITAN Group, safety at work has always been a top business priority. The Group's zero-injury objective, and its ambition to lead the top performers in the building materials industry, have both led TITAN's continuous pursuit of safety excellence.

There are significant challenges in embedding a culture of safety, not only within the TITAN workforce, but also among third-party contractors and drivers transporting raw materials and products.

Apart from traffic accidents and accidents involving heavy vehicles used in construction, other high-risk activities may be identified within the sphere of TITAN operations: solitary working in quarries, use of explosives and excavation works, high temperatures in production of clinker and chemical processes are all potential safety risks that may lead to an incident during operations, maintenance or other types of activity.

Although the LTI Severity Rate has improved by 6% compared to 2010, after two years free of fatalities, an unfortunate accident resulting in the death of a contractor's employee occurred at the plant in Kosovo. This fatality, and a serious accident with three LTIs which happened in TITAN's plant in Albania, have made the whole organization more vigilant. Efforts towards improving the Group's safety culture in new acquisitions have been intensified, and a road map is already in place to improve their safety performance and increase awareness on accident prevention.

Building a Health and Safety Culture

A systematic approach is followed by TITAN at Group level, guided by the Group Health and Safety Council, which is chaired by the CEO and attended by the Chair of TITAN's Board of Directors. The Council meets three to four times each year and is constantly reviewing safety performance against set targets and seeking further advancement of best practices in all TITAN operations.

Clear organizational and personal accountabilities are supported by a robust program of training, communication, strict procedural discipline and locally developed policies and action plans.

TITAN is focused on continuously impro-

ving the leading rather than the lagging Key Health and Safety Performance Indicators. Reporting and thoroughly investigating all accidents and near misses, training the Group's as well as its contractors' employees, encouraging everyone's participation in assessing the risk of the jobs he/she is involved in and active participation of line people in site safety committees: these are some of the preventive measures TITAN is taking in its daily business life.

In 2011, 1,888 near misses were reported by TITAN's own and contractor employees, compared to 1,475 in 2010, with 96% of them being fully investigated. The lessons learned were disseminated to the whole group and more than 2,200 corrective actions were taken as a result of the near misses investigation.

Safety training for both direct and indirect employees after reaching a peak of 106,794 hours in 2010, was reduced to 61,918 man-hours mainly owing to the rightsizing of the workforce in most of the Group sites and the completion of the big projects.

Regarding driving and contractor management, TITAN is on the right track regarding its compliance with the relevant CSI guidelines, having already completed more than 70% of the procedures. Complying with the CSI guidelines is not enough for TITAN, since these two factors are among the greatest hazards encountered in its operations. The TITAN Group has set the bar very high and is consciously pursuing excellence in this field.

For a third consecutive year, two of TITAN's cement plants have received awards for their excellent safety performance. The plant in Thessaloniki, Greece, has been recognized for its safety performance and the plant in Zlatna Panega, Bulgaria, for its safety initiatives and continuous improvement. The plants in Beni Suef and Alexandria in Egypt have been recognized for their pursuit of safety excellence, despite working at full capacity under adverse social and political conditions.

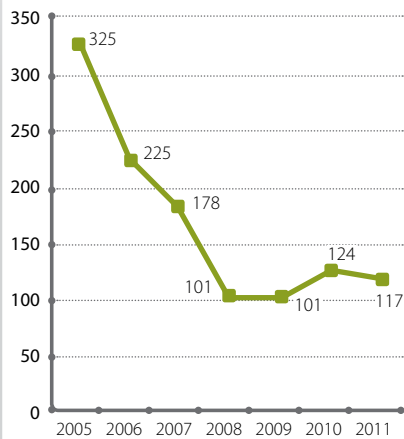
The endeavor to continuously improve the Group's performance has involved the "360° safety reviews" which have already been completed once for all cement plants. From now on, a new tool has been developed and its implementation started, so that in addition to identifying risks, a step further is taken towards managing them.

As far as the lagging indicators are concerned, both the number of Lost Time Injury (LTI) and the Lost Time Injury Frequency Rate (LTIFR) of the Group's employees have been improved, compared to last year, by 38% and 36% respectively. Compared to 2005 the improvement is 78% for the number of LTIs and 75% for the LTIFR rate. Both the LTIs and the LTIFR for 2011 are the best ever achieved in the company.

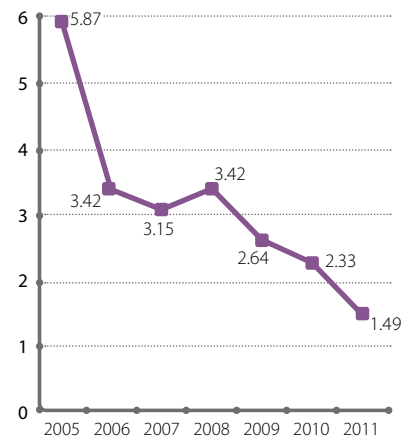


TITAN cement plant, Thessaloniki, Greece

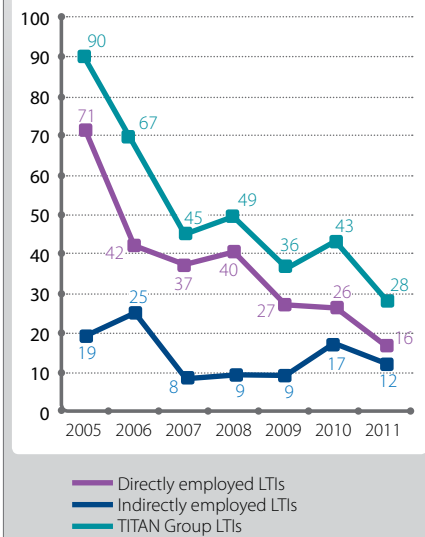
Lost-Time Injury Severity Rate.
Directly employed -
(All activities)



TITAN Group LTI's Frequency
Rate. Directly employed -
(All activities)



Number of LTIs -
Directly and Indirectly
Employed (All activities)



Employment

The TITAN Group has striven to safeguard sustainability of employment since the beginning of the financial crisis in 2008. Resizing of operations in all regions has been reflected in the employee turnover, which continues to decline, although a new "greenfield" plant started operations in Albania early in 2010 and a new plant was acquired in Kosovo at the end of 2010. Accordingly, employee turnover ratio at Group level reached 12.9%.

Following a policy aiming at balancing current market constraints with long-term perspectives and business strategy, TITAN continued to implement a restructuring and resizing plan with transparency and full respect for the affected colleagues. Taking under consideration social criteria, such as age, family conditions and maturity, voluntary early leave plans were implemented along with other supportive measures. 🌐

Employment at TITAN is characterized by long-term relations with employees. As in previous years, in 2011, temporary and part-time contracts for employment were limited to 58 and 12 contracts respectively in all Group activities. All employees with part-time and temporary contracts are provided with additional benefits, like catering, transportation and medical care by TITAN.

Employment and procurement policies followed by the TITAN Group in all countries focus primarily on people from local and surrounding communities. The number of indirect employees has also declined further in 2011. Approximately 1,300 indirect employees have served in operations like quarrying, transportation of goods, cleaning and catering, while another 1,000 indirect employees have been hired for more short-term operations, like maintenance and technical support. The majority of contractors and suppliers are also local in a percentage that varies from minimum 80% to 90%, depending on the country. 🌐

Establishing a culture and workplace where employees take pride in their success is critical in meeting the Group's goals and aspirations.

Engaging with employees starts with a communication policy based on "open doors", encouraging all to seek information or report problems, of all degrees of seriousness. Formal communication channels are available at Group, country or local levels, reflecting the wealth of local cultures and diversity of needs and expectations. In all countries different types of written communication, web-based or other have developed. In all cases the key areas of TITAN focus remain health and safety, care for people and communities, respect for customer needs and stakeholders' expectations. Safety performance, and transferring corporate values into practice, are regarded as one key criteria for managers' annual performance appraisals.

Communication days for employees are organized in most countries, enabling direct communication with management as well as timely information-sharing on all issues related to employment conditions and future perspectives. Freedom of association is respected for all employees and collective bargaining agreements cover all employees in countries where such practices are applicable. In all countries, health and safety committees operate with employee representatives to support management in the on-going improvement of health and safety conditions at work.

Direct Employment*

Country	2009	2010	2011
Greece**	1,677	1,527	1,216
U.S.A.	1,942	1,834	1,733
Bulgaria	365	342	324
Serbia	372	340	327
F.Y.R.O.M.	356	358	331
Egypt	819	766	759
Albania	119	208	214
Turkey	253	255	246
Kosovo	-	531	490
Total	5,903	6,161	5,640

* End year

** By "Greece" is identified the regional operations as well as the Group corporate center.

Percentage of women in employment

Country	2009	2010	2011
Bulgaria	28.7	28.2	23
Serbia	16.9	16.3	15.4
F.Y.R.O.M.	16.3	16.3	16
U.S.A.	13.7	13	12
Greece	12.9	12.9	13.6
Albania	9.9	12	10
Egypt	2.9	3	2.8
Turkey	-	-	5.4
Kosovo	-	-	3.6

Percentage of women in management

Country	2009	2010	2011
Serbia	25	30	23
F.Y.R.O.M.	28.5	28.5	26
Bulgaria	16.6	22	18
U.S.A.	17.5	15	13.5
Albania	7.6	8	7
Greece	7.4	8	6.25
Egypt	3.2	3.6	3.4
Turkey	-	-	-
Kosovo	n/a	-	-

Total number of new employee hires (by age group and by gender)

	18 - 30	31 - 40	41 - 50	50+
M	37%	22%	28.5%	13%
	18 - 30	31 - 40	41 - 50	50+
F	65%	17.6%	11.7%	5.8%
	18 - 30	31 - 40	41 - 50	50+
ALL	40%	21.3%	27%	12%

Human Rights and Equal Opportunities

TITAN supports the Universal Declaration of Human Rights and is committed to the protection of fundamental human rights within its sphere of influence as proclaimed by the U.N. Global Compact. Taking the view that such issues may be of importance in different areas, TITAN has fully incorporated, since 2007, human rights issues in materiality workshops organized every year 🇹🇷. Today, all TITAN operations have participated in this process, apart from activities in Turkey, where it is scheduled for 2013.

The Group CSR Committee examines the outcomes of this systematic effort each year and underlines areas for further action and improvement. Feedback is provided to CSR Committees for review and relevant decisions. The likelihood of human rights abuses in the sphere of TITAN's influence has been ranked moderate as the risk represented for TITAN is low to medium level depending on the country 🇲🇪. However, additional efforts are made to assess such risks by asking feedback directly from stakeholders and particularly employees, contractors' employees and local communities, as well as by reviewing country risk assessment reports provided by well respected institutions.

Health, safety and risks related to working conditions have been identified as the most relevant risks for the Group's indirect employees. Security, health and safety are major risks identified in Egypt for both direct and indirect employees, given the remaining political uncertainty extending into a second consecutive year. Respect for human rights is reflected and incorporated in Group Health and Safety Policy, applying equally to direct and indirect employees. Moreover, respect for human rights is expressed through practices that facilitate employee representation, communication and active involvement in TITAN endeavors and achievements.

To facilitate understanding of TITAN standards and principles, human rights, as defined by the Universal Declaration of Human Rights, are included in the CSR training agenda for managers and all new recruits. Moreover, Values and Code of Conduct seminars are regularly run for all employees and encourage employee engagement in an effort to achieve ongoing improvement.

Gender Equality

Gender equality is considered a challenge for heavy industries, as well as for most of the countries where TITAN currently operates. The European Commission is considering the application of quotas for the promotion of women to executive positions and/or Boards of Directors.

Acknowledging the necessity for broader diversity at all levels of the organization, TITAN has joined forces with 31 other companies in an ERT working team 🇪🇺 to create a European cross-industry database of female candidates for non-executive and supervisory board positions, in order to stimulate increased participation of women on company boards. The team is committed to publicizing their targets for the career advancement of women.

TITAN has one female member out of 14 persons in the Board of Directors. The principle of equal opportunities for all and no distinction between male and female is fully applied in wages and benefits. Accordingly, wages are determined in line with market practices, aiming at equal pay for equal work and differentiated only according to individual performance and potential. To ensure a better balance of working and living conditions, TITAN has always offered additional benefits to support parenthood. All employees retain their jobs after parental leave and may extend this leave when there are serious reasons for such an extension. Equal opportunities are also safeguarded by human resources development policies which support life-long learning and continuous improvement through annual performance appraisals for all managers and employees while vocational training programs are focused on continuous development of professional skills and competencies. All age groups and female employees have participated in training programs implemented by TITAN Group in 2011. Moreover, the majority of managers are local and only a few expatriates are currently employed mainly in recently acquired operations such as in the case of Kosovo.

The determination to keep decisions balanced with equal responsibility for all is reflected in the fact that there have been only minor changes in women's representation in employment and management positions, in countries where extensive restructuring programs have taken place. Seeking to retain highly qualified employees, TITAN is investing in ongoing employee development and provides both financial and non-financial benefits to reward individual and collective efforts.

TITAN Group standards

Non-discrimination

Prohibit discrimination in all employment-related practices.

Working hours

Respect the right to leisure and avoid excessive overtime.

Wages and benefits

Guarantee a wage that – at a minimum – meets national legal standards and additional benefits responding to the needs of the majority and local priorities.

Apply appropriate disciplinary measures.

Prohibit harassment.

Child labor

Prohibit employment of under 18-year olds.

Forced labor

Prohibit any type of forced or bonded labor.

Freedom of association

Respect the right of people to form and join associations and to bargain collectively.



TITAN cement plant, Zlatna Panega, Bulgaria

Training and Human Resources Development

The continuous development of human resources is a priority for the TITAN Group aiming at life-long learning and enhancement of professional skills and competencies that are necessary to anticipate present and future challenges. In 2011, further emphasis was placed by TITAN on training and development programs, expanding the scope and the participation of employees from different hierarchical levels.

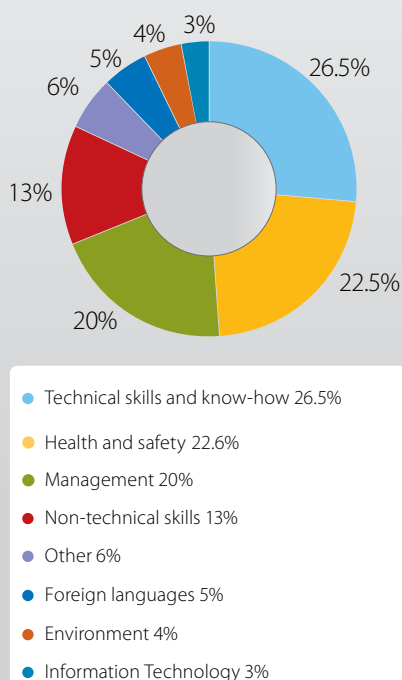
Although compared to 2010 the total number of training man-hours declined, approximately 43% of all TITAN long-term training initiatives directed to both direct and indirect employees continued. Moreover, new programs like the "C-Mentors", the "STEP Change" and the "Stakeholder Engagement Development and Training Program" have been launched in different regions with positive outcomes.

More than 3,000 training man-hours were also dedicated to corporate social responsibility and sustainability issues, like human rights and diversity, working conditions and responsible supply chain management. Acknowledging the diverse conditions, culture and experiences in every country, a new training guide and glossary of business terminology, for managers and employees incorporating TITAN's experience, is currently under development.

2011 Training man-hours per employee

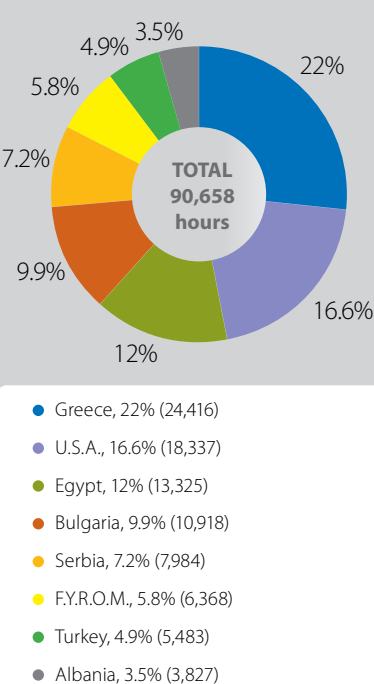
Country	man-hours per employee
Bulgaria	30.7
Serbia	25.7
Turkey	23
F.Y.R.O.M.	19
Albania	19
Egypt	17.5
Greece	17
U.S.A.	12.5
Kosovo	-

Distribution of training man-hours per subject (%*)



*In total training man-hours

Distribution of training man-hours per country (%)



STEP Program

In pursuit of the corporate value of continuous improvement, the "STEP - Self Training E-learning Program" has been implemented:

This is a flexible and up-to-date one year program adjusted to the fast-moving and technologically advanced contemporary working environment. The e-learning content has been developed by Harvard Business Publishing, a non-profit organization that is fully owned by Harvard Business School, one of the most prestigious educational institutions in the world.

The program's purpose is to enhance leadership and management skills across all Business Units. Following a mixed approach, and adopting various learning methods such as case studies, assessment tests and workshops as well as e-learning modules, it allows the development of a learning culture, transferring know-how and fostering the TITAN corporate culture.

STEP Program address the areas of coaching, leadership and emotional intelligence. It provides immediate and constant access to the learning content, through an e-learning platform that is interactive and easy to navigate. It is a flexible developmental program, since participants may study at their own pace, taking personal responsibility for its completion.

Although this program contributes to reducing training costs, since it does not require participants' physical presence and thus eliminates traveling costs, no sacrifice is made in the program's content and effectiveness.

Local communities and other stakeholders

Communities

TITAN has a long history of engaging with local communities in a spirit of honesty, mutual trust and shared values - based on the concept of branching out and adding value. In 2011, TITAN continued its long-term community development initiatives, promoting the establishment of a new local advisory panel in Kosovo to support a more inclusive and responsive approach to funding local development projects. Community engagement that results in mutual trust and social acceptance has been the focus of stakeholder engagement workshops for local management teams. In many cases successful outcomes, like those in Serbia and Bulgaria, have proved that this is the right way to attain TITAN objectives. 🇷🇸

Expansion of the alternative fuels program in Bulgaria was considered after consultation with local stakeholders, who look forward to broader participation and further co-operation in this program.

In the U.S.A. volunteering and social solidarity is a long tradition and has provided valuable lessons for the whole TITAN Group. In 2011 these efforts continued, while new initiatives were launched by employees.

To adopt an even more strategic approach to engagement with stakeholders, and to sharing value created by TITAN, a new program will focus on measuring and communicating TITAN's social footprint in a more comprehensive and meaningful way. To meet this aim, local reports on social and environmental performance have been produced already in F.Y.R.O.M and Serbia, while in Bulgaria a stakeholder profiling survey has recorded the areas of interest and priorities of all relevant parties.

The new tool created by TITAN for measuring the social footprint will follow international standards but it will be tested and integrated at local level so as to be useful at both corporate and Group level.

Local stakeholder fora 🇷🇸 and other community engagement activities have proven that TITAN has adopted a business strategy that is incorporating stakeholder concerns. TITAN's commitment to joint action and participation in local business networks and corporate social responsibility initiatives is welcome and expected to continue and strengthen.

Suppliers

Supplies of raw materials, energy, goods and services are important for TITAN operations and business continuity. The majority of suppliers, including contractors and sub-contractors is local. Accordingly, almost 60% of total annual expenditures for supplies is directed to local suppliers. The Group procurement policy aims at ensuring a sustainable supply chain and thus assumes that key suppliers, and particularly those closer to TITAN's sphere of influence, like contractors, acknowledge and respect TITAN's social and environmental standards. To this end, the Group Code for Procurement is communicated to all potential suppliers and specific criteria like safety performance are used for evaluation of suppliers' performance. TITAN suppliers are invited to participate in multi-stakeholder fora and annual independent and third-party assessments of TITAN's overall performance 🇷🇸.

Moreover, internal assessments for health, safety and environmental risks carried out at all TITAN operations include contractors working for TITAN. In 2011, about 30% of the total number of main contractors for cement plant quarries was included in the scope of health, safety and environmental audits. TITAN invests systematically in raising awareness and supports suppliers to continuously adapt to higher standards. This long-term endeavor is leading the integration of new management systems according to SA8000 🇷🇸 in Albania, the inclusion of suppliers in internal and external assessment and auditing procedures, as well as in health, safety and environmental risk assessment programs.

Furthermore, TITAN participates actively in the implementation of CSR Europe's collaborative venture on responsible supply chain and human rights, launched in 2011 in the framework of the ENTERPRISE 2020 initiative.

Customers

Population growth increases the demand for building materials. Concrete remains the most widely used product after water. Human development is directly linked to the capacity for construction of new houses, buildings, hospitals, schools, highways, and infrastructure in general. The economic crisis has adversely influenced customers of cement and concrete industries and the impacts are visible throughout the

value chain in most of the countries where TITAN operates.

TITAN is always focused on meeting customers' needs and this includes awareness of the growing difficulties and risks in different markets. Customer days and satisfaction surveys are carried out on a regular basis, with the aim of measuring performance and identifying areas for improvement.

Information about product safety and qualitative information is provided to all customers of TITAN products upon delivery, as well as relevant training if necessary. In Research and Development, TITAN continues efforts to develop more environmentally friendly cement materials for specific applications, like the pervious concrete marketed officially in the U.S.A.

🇷🇸 Raising awareness of such new products among customers and their clients, as well as training and educating customers, policy makers and opinion leaders, are priorities for our sales and marketing teams.

Investors

TITAN keeps its investors systematically updated on its economic, environmental and social performance. Specifically, TITAN responds to all socially responsible investors' queries regarding special criteria applied in decision making. In this context, TITAN, with other companies in the cement industry, was assessed by Triodos Bank 🇷🇸, using Triodos' specific ESG criteria, and ranked first out of 14 companies in the analysis, according to which:

- > TITAN's reporting on ESG issues is comprehensive and relatively transparent.
- > On governance, the company is a member of WBCSD/CSI, a U.N. Global Compact signatory and has a CSR committee responsible for ESG issues.
- > On social issues, TITAN was found to have strong programs for Health and Safety in the workplace. Its Code for Procurement includes social and labor standards within the supply chain. Its labor policies are based on the ILO core principles.
- > On the environment, TITAN has an extensive policy and management system, disclosing detailed data on its dust, No_x, So_x and GHG emissions and implementing programs to reduce them. TITAN also developed a more environmental friendly cement for the construction of a major dam in F.Y.R.O.M.

Focus by Region

Greece and Western Europe



Facing the crisis

For Greece, 2011 might be remembered as the worst year since the Second World War. Negative development prospects, continuously increasing unemployment rates, political and social unrest were the main challenges of the previous year.

In such an unfavorable environment, employment stability and job security have been identified as major concerns, by businesses and key stakeholders, including employees and their representatives, communities and authorities.


In TITAN, the decisions made regarding CSR agenda were guided by the vulnerable individuals and groups influenced by the above condition. This has been reflected in decisions made for restructuring and in programs implemented for communities and other stakeholders.

The restructuring program in Greece has resulted in an overall reduction of direct employment by 8.4% compared to 2010 levels. The restructuring process involved:

- > No planned overtime work.
- > No new hiring and no replacements.
- > Voluntary early-departure plans for those close to retirement.
- > Support for self-employment and cooperation as an external contractor, in cases where this is feasible.
- > Additional social support, training and compensation schemes, beyond legal obligations for those who left the company.

In line with its corporate social responsibility commitments, TITAN has continued to implement a number of long-term programs aimed at either improving its human resources, or providing opportunities for employees to further develop skills and competencies that will improve their professional prospects.

Managing in the Global Macroeconomic Environment

Within the dynamic and continuously evolving global macroeconomic environment, managers need to find ways to lead their companies by successfully utilizing resources in order to take advantage of opportunities and deal effectively with potential threats. Within this context, a four-day training program titled "Managing in the Global Macroeconomic Environment" was implemented in Greece, in cooperation with the Athens Laboratory of Business Administration (ALBA ) with the participation of 30 employees from across the Group's operations. This developmental program consisted of two parts: the first part studied, among other topics, the operation of the aggregate economy and the determination of GDP, unemployment, inflation, interest rates, economic policy, budget deficit and public debt. The second part focused on the challenges that the dynamically evolving global macroeconomic environment poses to executives of multinational corporations. This training program also included a team project involving the expansion of TITAN into new markets and a macroeconomic analysis of this market.

Career Preheater

The need to transmit valuable technical knowledge and experience to technical professionals and newly-hired employees, as well as the need to familiarize them with the Group's corporate culture, has led TITAN to design an integrated training system called "Career Pre-heater". It is an intensive in-house classroom-based learning program, running in the Group's Greek cement operations over the last seven years.

The main benefits of this program are to ensure the transfer of technical knowledge within the Group, accelerating employees' induction into the company, acquainting them with the company's operations and helping them build strong relationships with colleagues from other functions, thereby further enhancing communication among the Group's plants.

Employee turnover ratio by age and by gender (Greece)

	>35	>45	>55	50+
M	5.3%	11.6%	36.4%	46.7%
	>35	>45	>55	50+
F	8.1%	8.1%	70.3%	13.5%

The program's purpose is to develop effectively the technological skills, leadership competencies and behaviors of professionals - with the support of TITAN Group experts and external trainers.

The program consists of 26 training modules, covering all technical topics related to the company's industry. In light of the company's needs and the encouraging results of the program, its implementation was extended to include other Business Units (Albania and Bulgaria, F.Y.R.O.M. and Serbia).

This year the focus was on inter-departmental participation of engineers, exchanging knowledge and know-how and thus simultaneously creating an additional communication bridge between departments for further enhancement of plant efficiency. 🇬🇷

Focus on unemployment

With a view to share know-how, experience and human resources, for the benefit of young people who face long-term unemployment, the TITAN Group has focused on maintaining on-going interaction with the academic community, which, in turn, ensures that the Group is in constant contact with potential recruits. This also facilitates the Group in its attempt to assist students in making a smooth transition into the labor market. To this end, activities that have been proved a successful practice the last few years have continued and expanded.

Summer internships and on the job training

More than 1,000 students have obtained work experience and tested their professional skills in summer internship programs offered by TITAN in Greece. Since 2000, TITAN has launched this program offering young students opportunities for on-the-job training over the summer months, lasting one or two months. The programs run at TITAN production plants and headquarters in cooperation with universities and technical schools, and with guidance offered by TITAN experts and Human Resources department.

In addition to summer employment, over the past level years approximately 20 students a year from technical institutes have worked with the Group for six months in order to attain adequate work experience. It is worth noting that some of these students, after their six-month training period, were actually hired by the TITAN Group.

The Post-Graduate Students' Forum

The Post-Graduate Students' Forum is a collaborative initiative designed to connect business with the academic community and future leaders. Fostering direct communication and the exchange of views between post-graduate students and representatives of the academic and business community, the Forum is also a unique opportunity for students to visit a heavy-duty production plant, as the Forum is hosted at one of TITAN's cement production facilities.

The event is an expression of the Group's corporate social responsibility policy and was first launched in 2002, to mark the Company's centenary. It has been hosted at the Company's plants in Kamari, Biotia, and Efkarpia, Thessaloniki, twice a year.

The program has been running successfully over the past nine years and a total of 2,400 students from 20 different post-graduate programs in universities in Athens and Thessaloniki have participated.

More than 300 students took an active part in the two last events, which were held in Athens and Thessaloniki. This year, for the first time, the students were given the opportunity to take part in a two-hour vocational orientation program. The program demonstrated a technique which could be used as a tool for personal empowerment, assisting students to fully attain their individual and professional goals. 🇬🇷

Social Solidarity and Volunteering

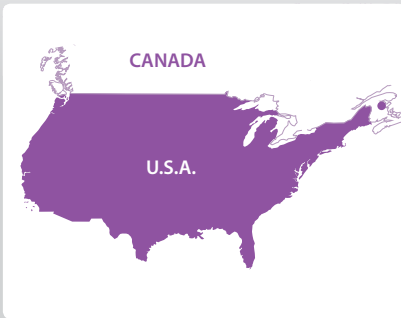
Donating blood in a country that demand exceeds existing supplies is always a priority. For TITAN, the annual blood donation program runs from the 1960's and remains a significant event for the company and its employees who have taken action to expand this initiative among their family members, friends and neighbors from local communities. The collective effort of the last two decades has resulted in a total of 5,239 units of blood, which equals approximately 300 units annually. This is a remarkable effort, considering that the number remains steady over the years, although many of the older blood donors have retired and the total number of employees has reduced. New employees have replaced their colleagues with enthusiasm keeping the level of 300 units of blood per year. 🇬🇷



Post-Graduate Students' Forum, 2011, Athens, Greece

Focus by Region

U.S.A.



Safety Evaluation

In the effort for continuously improving their performance in Safety, the TITAN America corporate safety team has developed a safety evaluation tool in order to internally benchmark the performance of the more than 130 operating sites in the country in the following two key areas:

- > The safety culture development.
- > The safety programs development and implementation.

The reviewing process is done in each site at least once per year, by the safety experts in cooperation with the operations people. For each site the good practices and deficiencies are identified and eventually an overall evaluation score is assigned.

The results of the reviews are conglomerated and a Pareto chart is developed for each key area for the whole business.

The good practices are shared among the sites in the business while the deficiencies are used to develop the action plan for safety performance improvement of the next year.

For the year 2011 the process revealed that the operation of the safety committees in the Business Unit is the major weakness towards improving the safety culture and awareness of risks related to electricity is the major weakness in the area of safety programs development and implementation.

These two areas are among the top priorities of TITAN America for safety performance improvement in 2012.


Engaging with our employees

Aligning corporate values with personal values is recognized by TITAN America as a top priority. Accordingly, the TITAN America Leadership program (TAL), a values-centered leadership development program, is implemented systematically over the last six years. Cultural Assimilation, Business Ethics, Self Awareness/Self Development and Team Initiation and Building are the main topics of this program. The most important aspect of this program, though, is that it is delivered by senior company executives and it is led by TITAN America CEO.

TAL is highly interactive among participants, with the objective of provoking thought, emotion and learning from each other. Each employee brings his/her own personal experiences and touch into the program, while helping individuals to open leads to a two-way learning and development. Moreover, the program is holistic, going beyond the work boundary into personal, family and social issues. It aims to connect beyond the physical and mental level to the emotional and subconscious level, since many of its topics are important areas that are rarely discussed under the pressure of every day work.

Another objective of this program is to underline that work is not just a way for earning a living, but the path towards a more purposeful life, so as to increase employee satisfaction and engagement.

Values seminar programs are also held for labor workers in TITAN America Mid-Atlantic region operations as well as several locations at Florida Business Units. For the realization of the program top management from each unit are serving as facilitators of the program.

TITAN America was awarded for this program with the Champions of Learning Awards in South Florida during the 7th Annual American Society for Training and Development (ASTD) Best Practices. 

Problem Solving Training

Aiming at implementing a systematic Problem Solving process so that common pitfalls of ineffective problem solving are avoided, a Problem Solving training took place for the Florida Business Unit management members, in which more than 150 employees were trained.

Training was offered on how to avoid common pitfalls of ineffective problem solving such as: quick conclusions when no adequate analysis has taken place, failure to gather critical data, working on not well defined problems, not involving

critical people and plan failure to implement the recommended solution. The six steps process of Problem Solving was presented, serving as a comprehensive approach in answering all questions related to each problem solving phase, producing outcomes that lead to a well defined and planned solution.

At the same time, this developmental program goes beyond problem solving since it can be further employed to identify changes that need to be made on a system, work, process, specific products or services. It fosters root cause analysis that enables an organization to meet and exceed customer requirements and improve quality, resulting in improved business performance.

Volunteering and wellness

Highlighting the importance of volunteering and wellness, TITAN America developed the TITAN Team Challenge program, which is an opportunity for TITAN America employees to help others in need, while at the same time exercising. This program is a voluntary walking program intended to support good health habits, while raising money for employees' favorite charity.

Following the formation of small walking teams (consisting of six team members) from different locations across the Florida Business Unit, each team reported its weekly total steps, over the course of twelve weeks. In total, 269 employees took part in this competition, making in total 172,566,713 steps. The 44 teams that participated in this voluntary program is about 1/3 of Florida Business Unit's employees.

At the end of these twelve weeks, the winning team was announced, receiving a pay check in order to offer it to a selected charity. This program has created a high degree of excitement and has driven awareness related to wellness and individual health being.

TITAN America employees have a long and fruitful experience in volunteering. In 2011, employees have volunteered to cook meals at the Ronald McDonald House. The mission of Ronald McDonald House Charities (RMHC) is to create, find and support programs that directly improve the health and well being of children for the last 36 years. The Ronald McDonald House program provides a "home-away-from-home" for families in order to stay close by their hospitalized child at little or no cost. These houses are built on the simple idea that nothing else should matter when a family is focused on healing their child – not where they can afford to stay, where

they will get their next meal or where they will lay their head at night to rest. TITAN America employees from the Corporate Center raised \$2,223 for Jeans Day, in support of the Ronald McDonald House.

TITAN America's Corporate Center hosted the 2nd Annual American Red Cross Blood Drive. During this initiative, 13,800 units of blood were collected from TITAN America's Corporate Center employees and other community members, which is estimated that it could potentially save 4,600 lives.

In addition, the 1st Annual Lemon-Aid stand was also hosted in TITAN America, raising over \$500 to donate to Children's Hospital of the Kings Daughter in support of finding the cure for cancer.

Raise awareness through employee engagement

Cement and building materials industry plays an important role in a nation's economic prosperity and security. TITAN America continues to make strides in sustainable development, balancing economics with environment and people. In line with this aim, TITAN focuses on compliance with all laws and regulations. However, TITAN America feels obliged to share know-how and expertise with both employees and key stakeholders so as to enhance better understanding of the interconnection between business and society.


To this end, TITAN is developing a strategy to raise awareness and become more involved at all levels of the political spectrum from local communities to the national front. TITAN hopes to engage all employees at every level of each business unit and corporate function.

In 2011, a new web-based communication line was launched titled "Voice of TITAN America" (<http://www.voiceofTITANamerica.com/>) as a tool for communicating regulatory and legislative actions of importance to building materials industry.

Concrete Joint Sustainability Initiative - U.S.A.

Formed in the spring of 2009, the Concrete Joint Sustainability Initiative (CJSI) represents over 20 associations that, as a group, will concentrate on the sustainable development applications of all concrete structures. Among leading organizations in this initiative is the Portland Cement Association that is chaired by a TITAN representative.

Aiming at projecting a unified industry front, member task groups were created to develop and implement current program objectives. A Joint Declaration contains nine principles which are related to the social values of concrete structures. The Joint Declaration is summarized as follows:

- Concrete structures are the core of our industry identity that include all vertical and horizontal applications and concrete products.
- Concrete structures are at the center of an integrated approach to addressing industry challenges.
- Proactively communicate and continuously enhance the social value of concrete structures.
- Our integrated thinking will focus on the social values provided by concrete structures.
- Review priorities and activities, coordinate to align respective programs and projects, and leverage on the particular strengths and expertise of each organization to pursue an integrated focus on concrete structures.
- Persistently drive continuous improvement at component and integrated levels to enhance the social value of concrete structures.
- Provide advocacy, technical and educational resources to enhance the use and convey the benefits of concrete structures to others.
- Time is of the essence; we must pursue mechanisms and approaches that may diverge from business-as-usual for expedited results.
- Maintain open channels to welcome, involve and engage all industry segments in becoming part of this direction. 

Focus by Region

Southeastern Europe



SEE Region

2011 was a mixed year with regard to health and safety results: TITAN's SEE plants performed very well, as a result of the extensive training and focus of recent years; almost all statistics improved and most plants had an LTI free period. Some plants, like Zlatna Panega in Bulgaria, achieved impressive results (more than two years without LTIs) while all others performed competitively. The effort to increase the number of reported and investigated near misses continued, as it is considered the best way to reduce unsafe activities and conditions.

Among other achievements, TITAN's Zlatna Panega plant in Bulgaria received two awards from the local government authority for its performance on health and safety; the Antea plant in Albania developed a new integrated system for health and safety which was OHSAS 18001 certified, and the Usje plant in FYR.O.M. received a state license to perform risk assessment.

On the improvement front, the "Safety Pillars" project was initiated in mid-2011: Each BU received an assignment to develop new rules - or review existing rules - on safety issues and eventually produce guidelines that will be shared within the region. All items were completed and are now under final review. The intention is that they be distributed for application in the third quarter of the year. The subjects were Risk Assessment, Permit to Work, Driving and Contractor Safety.

At the same time, the newly acquired Sharcem plant in Kosovo was incorporated into the Southeastern Europe region; it is located in a new country, recovering from long years of war and instability, where people's priorities have not been focused on health and safety. Upon incorporation, an audit was performed and together with improvements in the equipment and processes, the health and safety system was evaluated and a program for improvement will be developed and implemented in 2012.

It is unfortunate that during demolition works carried out by a specialized contractor, a trespasser in the restricted area entered a building that was in the process of being demolished and was killed when the structure collapsed on him.

Albania/Antea

Implementing a CSR strategy in Albania

Aligned with TITAN Group standards and principles, Antea Cement, the Group subsidiary in Albania, has been engaged in a long-term action plan to meet high level environmental and social standards. In 2011, the company efforts were focused on the following:

- > Integration of Health, Safety, Environmental, Quality and Social Accountability Management systems and preparation for their certification according to ISO 14000, SA 8000 and OHSAS 18001.
- > Launching and implementation of Personnel Improvement Process and execution of collective contract between company and Employees Trade Union as agreed in 2010.
- > Rehabilitation of 1.8 ha of the limestone quarries with seedlings of endemic species.
- > Improvement of skills and competencies of both directly and indirectly employed personnel with emphasis given on Health and Safety, Contractors' Crew management and Safe Driving.
- > Engaging with employees to improve health and wellness including noise monitoring, medical tests and additional services to support overall improvement of physical condition and wellness.

Throughout the year, Antea, being the most technologically advanced plant in the country, has kept its doors open for study visits and training requested by a number of stakeholders, including academic community, NGOs and public schools. Antea has also launched an internship program for students from the Polytechnic University of Tirana. Moreover, Antea was acknowledged by local authorities for its support in establishing and organizing the second in the country Technical Vocational School which is operating in the region and provides young people with technical skills that are necessary for professional orientation and future employment. From September 2010 to June 2011, the Technical Vocational School of Thumana provided specialized training courses to more than 80 students reaching a total of 1,050 training hours.

Bulgaria/Zlatna Panega

Stakeholder Engagement

Continuous improvement of corporate social responsibility and sustainability performance depends on comprehensive and systematic stakeholder dialogue and effective engagement. In December 2010, a Stakeholder Engagement plan was launched in Bulgaria, focused on assessing of stakeholders needs and expectations. In this respect, all key stakeholders for TITAN operations in the country were invited to discuss company social and environmental strategy and priorities. The process, which included stakeholder mapping and profiling, interviews and survey through questionnaires, resulted in the following main outcomes:

For employees the most important issues are the following:

- > Health and safety at work.
- > Job security and compensation.
- > Environmental protection and transparency.

For communities the most important issues indicated are the following:

- > Water resources and management.
- > Health and safety.
- > Community support.


For suppliers the most important issues identified are the following:

- > On-time payment.
- > Hiring subcontractors and suppliers from local market.
- > Preservation of market of domestically produced cement (with respect to cement sold at lower prices and which may not be compliant with E.U. regulations).

Authorities representing local municipalities, including the municipality of Zlatna Panega, have raised during this process the following issues:

- > Increase the use of alternative fuels as part of waste management strategy (tires, plastics, waste paper, animal wastes, etc) with appropriate, transparent, publicly-available information on environmental impacts.
- > Secure and enhance local employment.
- > Expand social dialogue and joint European projects as well as assistance to community development programs (renovation of local school, as well as in respect municipal water supply pipes, smaller road repair projects in local municipalities, etc.).

Environmental educational program

In 2011, TITAN Zlatna Panega Cement launched a joint project with the Regional Environmental Center for Central and Eastern Europe (REC ) aimed at developing and promoting environmental educational toolkits in public schools.

The partnership between REC and TITAN was focused on the Lovech region, where the company operates in Bulgaria. The project included publishing of material and implementation of an educational program based on the relevant material.

The toolkits developed in this framework cover 22 topics related to environmental protection, climate change and biodiversity, and are designed for pupils in grades 5 to 12. The Lovech region has a total of 30 schools and the target groups for the training include not only pupils of average age 7-18 but also teachers and trainers.

Implementation of the environmental educational program, developed by REC and supported by Zlatna Panega Cement, will give new opportunities for the teachers and students to study topics related to climate change and biodiversity conservation and will provide demonstration, training modules and practical methods for energy efficiency and conservation of significant biodiversity at the local level. The program promotes practical approaches related to education for sustainable development in schools.

Kosovo/Sharrcem

CSR Network

In April 2011, the American Chamber of Commerce in Kosovo with the support of Sharrcem, organized the Kosovo Corporate Social Responsibility Day where representatives of the business community, government and NGOs were invited to attend. The aim of the conference was the exchange of experiences in CSR and the creation of a National Advisory Board for CSR.

During the Conference, companies were invited to share experiences and know-how in respect to corporate social responsibility and after the conference, a working group was created, comprised of the following: American University in Kosovo, Sharrcem, Coca-Cola Hellenic, ProCredit Bank, Raiffeisen Bank, Meridian Corporation, Marigona Residence, AVC, KAEF and CEED Kosovo, with the purpose of creating an Advisory Board for CSR. It was decided that this group will be called the Initiating Group for CSR in Kosovo, and that companies that are part of it will jointly work in raising the awareness of businesses about the importance of CSR  and in creating a coordinated platform for CSR activities in Kosovo. In its relevant Declaration it is stated:

"We – as members of the Kosovo CSR Network – accept our responsibility to operate our enterprise legally, ethically and with social responsibility. In fulfilling this duty, we intend to lead by example and demonstrate Good Corporate Citizenship through concrete actions and words. Our first responsibility is to our shareholders. We also recognize that our enterprise has continued success depends on its conduct toward its employees, other stakeholders, partners and communities".



TITAN quarry, Zlatna Panega, Bulgaria

Focus by Region

Southeastern Europe




F.Y.R.O.M./Usje

Continuous improvement

The goals set by the "STEP Change" safety program, completed in 2010, paved the way for TITAN Usje's excellent performance in health and safety in 2011. Until August 6, 2011, there were no injuries for a period of 556 consecutive days. The LTI dropped from two in 2010 to one, while the LTIFR (LTI Frequency Rate) fell from 3.1 to 1.6. In January 2011 the plant's Health and Safety Management System received OHSAS 18001:207 certification from ELOT. This is the third management system implemented in Usje, complementing the Quality System ISO 9001:2000 and the Environmental Management System ISO 14001:2004. It confirms the plant's commitment to health and safety and will further improve the systematic approach already undertaken by the TITAN Group.

In addition to this, during 2011 the local Red Cross delivered first aid training to the first aid teams of the plant, while engineers, managers and supervisors received internal training in fire precautions.


First Company Open Day

Responding to stakeholders' expectations as expressed in the occasion of first Stakeholders' Communication Day  organized in 2010, TITAN took the initiative to invite all stakeholders in a company Open Day in September 2011. More than 900 people, employees and their families, citizens from neighboring communities, suppliers and customers, as well as representatives of organizations and authorities visited the cement plant and had the opportunity to take a guided tour around the different production departments, so as to understand the processes and methods used for production, health and safety, environmental protection and all other issues related to TITAN commitments, standards and performance at local level.

Governmental authorities like the Minister of the Environment and Physical Planning, the General Secretary of the same Ministry, as well as the Mayor of Kisela Voda, have also joined this event, together with 25 media representatives.

The Open Day was considered by all as an excellent opportunity to strengthen links and communication between the employees and their families on one side and the community and other key stakeholders on the other.

Feedback was requested by all and more than 50% responded with completing relevant questionnaires. The outcomes of this evaluation underlined the success of the

event as 95% of the visitors were fully satisfied with the event, 87% believed they had significantly increased their knowledge of TITAN operations and performance and 93% expressed the need to make such efforts more regular. 

Partnering with schools project

TITAN Usje continued in 2011 its "Partnering with Schools" project, which was launched in 2010 and covers nine primary schools and one kindergarten in the area.

The project aims at improving the health and safety and environmental conditions in the schools, as part of TITAN's voluntary commitment to supporting education in the country, as well as the Group's health and safety and environmental commitment and know-how.

Each school was asked to identify its own priorities and needs to be accommodated by TITAN within the project areas, namely safety and the environment. Having received priority lists from all the schools, the "Partnering with Schools" project team grouped the needs and priorities under a common Action Plan. Almost all schools needed new fences or some repairs to the existing ones. Others needed new playgrounds, new washrooms and toilets or repairs and replacements in their electric or hydraulic infrastructure. The work in all schools was completed within 2011.



Open plant day, Usje, F.Y.R.O.M.

Reviving the Global Compact Network

TITAN Usje has committed to support the revival of the Global Compact Network in F.Y.R.O.M. by joining efforts with the Network's Secretariat and establish an Initiative Board. Aiming at working collectively and proactively to help local companies, organizations and stakeholders to understand and adopt the ten principles in their strategy and practices, the Initiative Board has held three meetings which resulted in the Annual Conference of the Global Compact Network, held on October 5, 2011.

The conference was focused on the members of the local UNGC Network and other companies interested in joining. Representatives from the UNDP, the Ministry of the Economy and the national CSR Coordinating Body were invited to the conference. The attending companies emphasized the importance of the network and the need for stronger engagement of all its members. 🌱

Recognition for continuous efforts

TITAN Usje was the recipient of most awards at the National Awards for Best Socially Responsible Practices in 2010, organized on October 26, 2011 by F.Y.R.O.M.'s National CSR Coordinating Body. TITAN Usje won the National Award for the Best Socially Responsible Practices for 2010 in the category of Environmental Protection for large companies, for the project "Biodiversity of artificial lakes in Cementarnica Usje".

In addition, TITAN Usje also received three accolades for the following projects: "Partnership with Schools" in the category of Investing in the Community, "Occupational Safety and Health of our Employees" in the category of Employee Relations, and "Corporate Governance" in the category of Ethical Management.

In total, 38 companies applied with 63 projects in the five main categories.

These awards are a verification of Usje's efforts and commitment to being a responsible corporate citizen and to contributing for the growth and the well being of all stakeholders, the environment and the society as a whole.

Serbia/Kosjeric

Engaging with our people

TITAN Kosjeric continued and strengthened its efforts to improve the professional and personal skills and competencies of both direct and indirect employees with a variety of vocational training programs implemented throughout 2011. OHSAS 18001 Safety Instructions training was completed for all employees, as well as training for internal auditing according to ISO 9001, 14001, OHSAS 18001, while other workshops covered topics such as "Developing Personal Influence and Impact" and "Train-the-Trainer", "Building skills and competencies for Stakeholder Engagement", "Interpersonal Relations" and "Coaching conversations".

Commitment to share value

TITAN's long-term commitment to create value which is shared with key stakeholders was the main focus of dialogue developed in a more systematic way in 2011.

Evaluating the last decade that TITAN has acquired the local cement plant in the area of Kosjeric, a number of activities were initiated, highlighting that approximately €50 million were invested in production modernization throughout this past decade, €15 million or else 30% of the total expenditure was related to environmental protection, while another €11 million or else 22% of total expenditure was financial support to local community development projects.

Starting in February 2011, the management invited local stakeholders in an open forum to discuss what has been achieved so far and what the key challenges are for the future.

Apart from a stable uphold to the local community of Kosjeric, TCK is recognized as a reliable partner by the society institutions, corporate affiliates, cement industry members, authorities, ministry departments as well as educational and cultural institutions.

Inviting key stakeholders to an on-going constructive dialogue and further co-operation on projects, that can create added value for all, were the key objectives of many activities organized throughout the year. The highlights of these activities can be summarized to the following:

1. Communicating 2010 CSR performance review in local stakeholders meeting organized in February 2011.
2. Implementing Stakeholder Engagement Workshop for managers and supervisors.
3. Defining key stakeholder groups according to international standards and the principles of inclusivity, relativity and dependence. Identifying and ranking stakeholders' issues based on the principle of materiality.
4. Opening company web side and providing information related to its social and environmental performance.
5. Developing and communicating its 1st Corporate Social Responsibility Report covering 2010.
6. Inviting stakeholders to participate in a local stakeholder advisory panel to promote dialogue and collaboration on certain issues like the use of alternative fuels and the more efficient utilization of urban waste for energy recovery.



Children from local school in a study visit at TITAN cement plant in Serbia

Focus by Region

Eastern Mediterranean



Eastern Mediterranean Region

Following the political unrest of the Arab spring, in 2011, new issues have arisen relating to the privatization of the formerly state-owned heavy industries like cement production, which took place more than ten years ago. People from the broader area of Alexandria who worked there in the past, before TITAN acquired full control of the plant, have demanded to be employed again. However, throughout the difficult times experienced in Egypt over the last two years, TITAN has continued to care for all employees and communities around the plants, providing both financial and non-financial support to people and seeking specialized expertise and advocacy with national institutions and organizations when needed.

2011 was a very successful year with regard to health and safety results: the three plants in the Eastern Mediterranean achieved a very good record, as a result of the extensive training and focus of the last few years; all statistics improved and two of the plants had an LTI free period, Beni Suef for the second successive year, while Tokat saw its LTIs reduced by an impressive 80%. The effort to increase the number of reported and investigated near misses continued, as this is considered the best way to reduce unsafe activities and conditions.

Among other achievements, the Alexandria plant received an award from the local government authority for its performance on health and safety. Beni Suef implemented original programs for the inspection of all belt conveyors, while extensive training programs for the professional drivers were organized in both Egyptian plants, which also managed successfully the challenges from the political crisis that developed in 2011. Tokat, in Turkey, had its Health and Safety System OHSAS 18001 certified and initiated actions reaching all employees to improve their awareness on Health and Safety issues.

On the improvement front, the "Safety Pillars" project was initiated in mid-2011: Each BU received an assignment to develop new rules, or review existing rules, on safety issues and eventually produce guidelines that will be shared within the region. All items were completed and are now under final review. The intention is that they be distributed for application in the third quarter of the year. The subjects for the Eastern Mediterranean region were Training and Competencies and Management of Change.

Egypt

Priority on Safety

The top priority for TITAN Egypt remains the safety of its employees and the continuous improvement of health and safety performance in the two plants that the Group operates in Egypt. In 2011 the Beni Suef plant reached 748 days, and the Alexandria plant 384 days, without any lost time injuries. The commitment of TITAN Egypt to OHS is confirmed by the certifications obtained in 2011. In December 2011 the Beni Suef plant received certification to the following standards: Quality Management System ISO 9001, Environmental Management System ISO 14001 and Health and Safety Management System OHSAS 18001.

In July 2011 the Alexandria plant received the following certifications: Health and Safety Management System OHSAS 1800:2007, Quality System ISO 9001:2008 and Environmental Management System ISO 14001:2004 - which represent the three Management Systems implemented there.

In addition, safety tours were organized of both plants by Management Committee members and a procedure to inspect and audit TITAN's sites by the management teams was established. Moreover, an emergency and evacuation plan was developed for the Head Office and fire alarm systems were upgraded in both plants. Last, but not least, training sessions for emergencies were organized in the Head Office and in both plants.

In May 2011, TITAN's Alexandria plant was awarded the shield of Occupational Health and Safety from Egypt's Ministry of Manpower and Immigration, in recognition of the advanced level achieved by the plant in this field and also as an acknowledgment of the efforts made by the Company to ensure a secure working environment for its employees.

Engaging with employees

With the aim of promoting good health and a healthy lifestyle among its employees, TITAN Egypt launched in 2011 a campaign against smoking, followed by medical examinations and a blood tests campaign. It is a proof of the company's concern for its most important asset - its employees - at a time when social conditions and a busy lifestyle make it hard to have regular health check-ups.

Blood pressure measurements and blood tests for major organ functions were available to all employees and the participation level (84%) confirmed the need for the campaign. The campaign is also addressed to indirect employees and in the Beni Suef plant more than 10% of them participated, making the continuation of the campaign in 2012 a top priority.

Global Management Challenge

Originally developed by a group of management researchers from the University of Strathclyde, in Scotland, the Global Management Challenge is currently one of the most popular management simulators in the whole world.

TITAN Cement Egypt participated in a global business championship with the participation of well known companies.

The first round started in February and finished in March, during which the TITAN Cement Egypt team won and came top in its group. The team took part in the next Semi-Final round.

C-Mentors Program

A new program C-Mentors was launched in 2011 first in Egypt, then in Albania, Bulgaria and Turkey. Focused primarily on developing young engineers on a fast-track pace to be world-class cement professionals, C-Mentors program provides condensed industrial knowledge and deep experience cascaded, shared and transferred from internal trainers to trainees.

Workshops run over two days, introducing first of all the main Industrial Competencies for cement professionals, related to the required competencies for every role in the plant and methodological tools that can help in identifying and filling individual development gaps, such as the Industrial Competencies Matrix, Job Profiling and Individual Development Priorities (IDPs).

C-Mentors is a training program based on an Industrial Competency Framework and it has been long awaited by the group as a systematic approach to train and to develop our people based on actual needs.

Engaging with local community

The Alexandria plant contributed to the well being of the Wadi El-Kamar area with a series of actions at local level that included:



Donating medicines to the local Medical Centre, improving the conditions and the facilities of the local school, improving health, safety and environmental conditions of the local area, planting trees, organizing a football tournament with the participation of local citizens, celebrating Egyptian National Orphans' Day on the plant's premises, donating daily evening meals to poor families during Ramadan. The Beni Suef plant organized together with the Directorate of Youth and Sports a major competition on the Holy Quran throughout the month of Ramadan, awarding prizes to the top five winners.

The plant donated cement and cash to support and enhance the local community. It also donated dry food (Ramadan bags) to the population in the vicinity of the plant.



Safety training program, TITAN Egypt

Addressing the challenges of climate change

Climate change has been the most significant challenge for the human race over the last two decades. Population growth increases the need for construction materials, as well as for energy. The need to balance this against the impact of the carbon footprint on society and the environment is evident and the TITAN Group has focused its climate mitigation strategy   on this area since it was first adopted in 2008.

The requirement to do less harm during production, but also do more good when developing and applying new products with a smaller carbon footprint and a longer and more eco-friendly lifecycle, are two sides of the same coin.

Despite the financial downturn, the TITAN Group has not relaxed its efforts to reduce its carbon footprint and improve its overall environmental performance. Although in 2011 specific targets have been met such as water consumption management and expanding the scope of performance measurement at Group level (see p. 11), in certain areas like the replacement of carbon intensive fuels with alternative ones, further work is needed.

Reducing TITAN's environmental footprint is considered both an opportunity and a challenge. All revised Group environmental targets agreed in 2009 have been broken down into local action plans that are coordinated, monitored and evaluated by local Committees with the support of the Group's Engineering and Technology Department.

In 2011, internal and external independent assessments covered the following operations:

- > ISO 14001 systems of the Greek Division Cement plants.
- > CO₂ emissions management systems in F.Y.R.O.M. and Albania.
- > Environmental performance of cement plants in Thessaloniki, Greece, F.Y.R.O.M. and Albania.

Moreover, the reported CO₂ emissions were verified at eight of TITAN's cement plants.

Managing the Impact on the Environment

As part of the constant endeavor to improve monitoring and reporting of environmental impact, full Environmental Management Systems (EMS) were developed and implemented at installations that were lacking such systems. The purpose of these systems is to organize more effectively all actions that are related to the protection of the environment.

The existence of an EMS allows for:

- > Detecting, at frequent intervals, environmental issues related to the operation of TITAN's facilities, and planning the necessary actions to deal with them; observing requirements derived from environmental legislation and ensuring that they are fully applied.
- > Training of directly and indirectly employed personnel in environmental issues.
- > Implementing appropriate emergency plans to deal effectively with the consequences of emergency events and minimize their environmental impact.
- > Managing the wastes produced by the facility, efficiently and in accordance with local legislation.
- > Recording and dealing with complaints related to the environmental performance of the facility.
- > Developing and implementing rehabilitation plans.

During 2011 the following facilities had their EMS certified according to international standard ISO 14001:

- > BSF cement plant and attached quarries, Beni Suef, Egypt
- > TKT cement plant and attached quarries, Artova, Tokat, Turkey
- > TKT ready-mix unit, Artova, Tokat, Turkey
- > Three ready-mix units, Rhodes, Greece.

Special Management Systems


Special standalone environmental management systems were developed to fulfill specific needs.

Monitoring and reporting air emissions is part of the Group's effort to tackle its impact on the environment. Currently, 85% of TITAN's cement plants have an environmental management system, ISO 14001 or equivalent. The Group is actively working on implementing such a system to the remaining facilities. Aligning with CSI recommendations, investment plans are in place to install continuous monitoring devices to cover main pollutants like dust, NO_x and SO_x at all cements plants by the next few years. In addition, an air emissions management system at Group level is currently under development with a target to have it in place by the end of 2012. This will make the monitoring and reporting scheme more robust.

CO₂ emissions

In compliance with TITAN's decision to comply to WBCSD/CSI principles on CO₂ emissions, a management system was developed and implemented at the SharrCem cement plant, Kosovo. SharrCem is TITAN's latest acquisition, that has become part of the Group in December, 2010.

Water

Water management systems were developed for all cement plants, in agreement with the Group Target. The implementation is under way and the systems should be fully adopted into the current EMS of each plant before the end of 2012. For more details you can refer to p.37 of this report. 

Reducing CO₂ footprint

The majority of TITAN Group CO₂ emissions come from cement production 🏭. Cement plants generate carbon dioxide emissions, thus contributing to the greenhouse effect and climate change. There are both direct and indirect emissions of carbon dioxide (CO₂).

Direct CO₂ emissions, from the production of cement itself, are attributed to:

- > “Decarbonization”, which is the process of transforming raw materials (mainly limestone) into clinker, the main component of cement.
- > Fuel consumption, since most fuels burned in the kilns (coal, oil and pet-coke) create CO₂ as a product of the chemical reaction between carbon (C) and oxygen (O₂).
- > Indirect emissions of carbon dioxide are released during the production of the electricity required for the production of clinker and cement.

The Group’s main objective is to reduce its carbon footprint from the level of 1990 emissions. Serving this objective, an initial Group target of 15% reduction compared to the 1990 emissions level was set back in 2006, to be achieved by the end of 2010. The target was revisited in 2010 and a more aggressive one was set for the period 2010-2015. The current goal is to achieve an overall reduction of 22% from 1990 levels.

In line with Group CSR and Sustainability policy, in 2010 TITAN expanded the scope of key performance indicators measuring its carbon footprint, so as to include ST production in Group performance.

During 2011, total direct CO₂ emissions from cement and grinding plants were 8.6 million tons. In 2011, CO₂ specific emissions, including ST production, were further reduced by 4.4%, achieving the target set with an overall reduction of 22.1% since 1990. Even if ST production is not taken into account, the Group’s carbon footprint was reduced by 2.5% to that of 2010 or 15.5% compared to the base year.

It should be noted that in 2011 specific CO₂ emissions that include ST production were recalculated to account for the amount of ProAsh™ produced, not the amount sold.

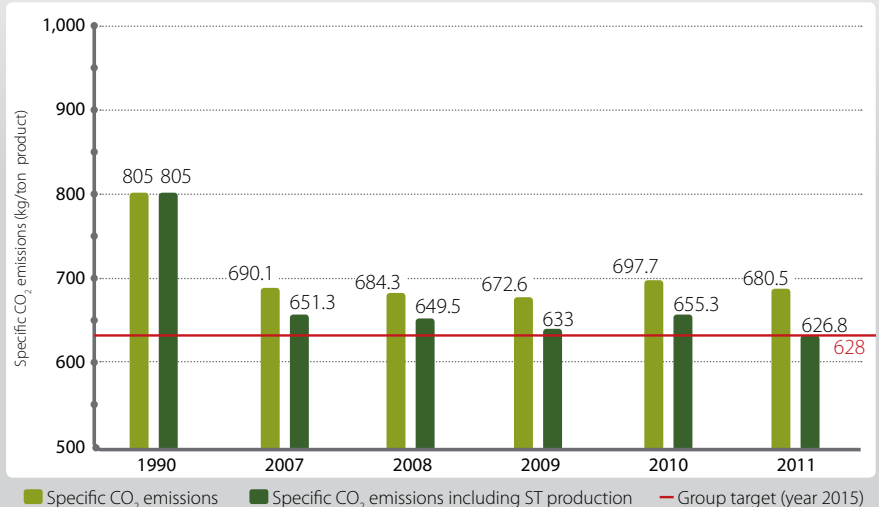
R&D for Sustainability

The Group Research, Development and Quality Department has a variety of tasks accomplished during its 20-year long history 🧪. Aiming at creating economically viable products and processes on behalf of TITAN Group, R&D is particularly focused on reducing carbon footprint and to meet

this aim both collaborative and corporate efforts have been undertaken so far.

Among the most recent efforts related to initiatives aiming at greener products with less carbon is the “TEFRODOS” Project, in co-operation with four universities, aiming at delivering a road of normal traffic constructed with the least CO₂. 🚗

Specific gross direct CO₂ emissions^(1,2,3,4)



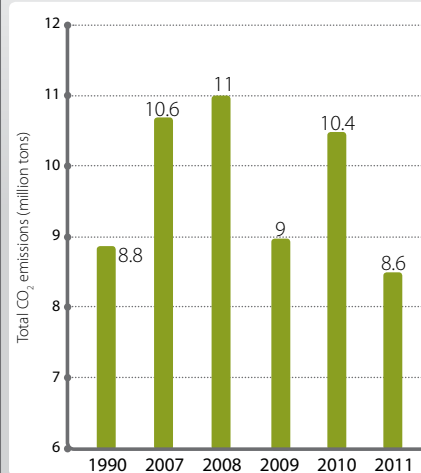
⁽¹⁾ Specific emissions in each year are calculated based on the equity held by TITAN Group in 2009.

⁽²⁾ CO₂ emissions before 2008 do not include emissions related to vehicle and mobile equipment.

⁽³⁾ Net emissions are equal to gross emissions minus acquired emissions rights due to offsets related to the use of alternative fuels.

⁽⁴⁾ Product equals cementitious products as defined by WBCSD/CSI.

Total gross direct CO₂ emissions^(1,2,3)

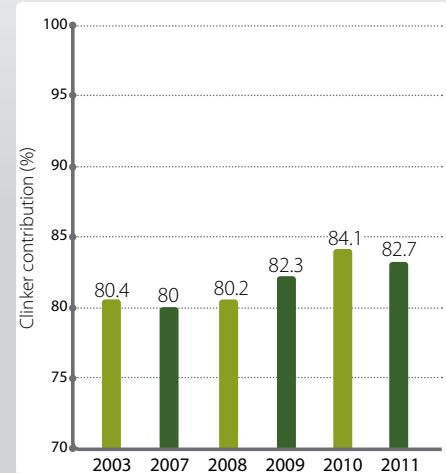


⁽¹⁾ Total emissions for years 1990-2010 were recalculated in year 2011, according to WBCSD/CSI, to reflect changes in equity held by TITAN Group (Kosovo).

⁽²⁾ CO₂ emissions after 2008 include emissions related to on-site vehicle and mobile equipment.

⁽³⁾ Net emissions are equal to gross emissions minus acquired emissions rights due to offsets related to the use of alternative fuels.

Clinker-cement-ratio⁽¹⁾



⁽¹⁾ Clinker contribution is calculated based on the equity held by TITAN Group in each specific year.

Other Air Emissions

Dust

In 2011, total emitted dust was 1,601 tons while specific emissions were 159.2 g/ton clinker, based on 2009 equity held. At all facilities continuous efforts are made to ensure that dust emissions respect the limits set by the environmental terms of their operating permits as well as specific conditions set by the local authorities.

Specific dust emissions were increased compared to 2010. This was a result of the decrease in production in all countries, apart from the few where local plants still operate with electrostatic filters that are less effective than bag or hybrid filters. Despite specific dust emissions being increased by 3.7% compared to 2010, in relation to 2003 a 57% reduction has been achieved at Group level.

The main sources of dust are smokestacks, where emissions can be controlled with filters. Fugitive dust, which is also generated by materials transportation, is measured regularly and controlled using specific measures such as paving and spraying, covering vehicles, etc.

NO_x

Group performance in 2011 was improved compared to last year as a result of further improvements achieved at plant level. Specific NO_x emissions recorded further improvement during 2011, close to the Group target. Year-to-year reduction was about 8%, while cumulative reduction in respect to 2003 came to a significant 44%.

In the last few years, TITAN has invested heavily in technologies that can reduce NO_x emissions, like SNCR systems and low NO_x burners, and will continue to follow this path in the future. In 2011, NO_x emissions were 17,152 tons while specific emissions were 1,706 g/ton clinker, based on 2009 equity held. As with dust, we are working tirelessly so as emissions are within the limits stipulated in the environmental terms of the operating permits.

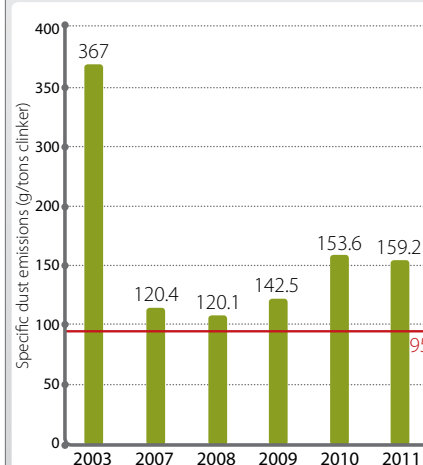
Combustion at high temperatures leads to the creation and emission of NO_x. Scientific studies have indicated that emitted NO_x leads to the creation of acid rain and smog.

SO_x

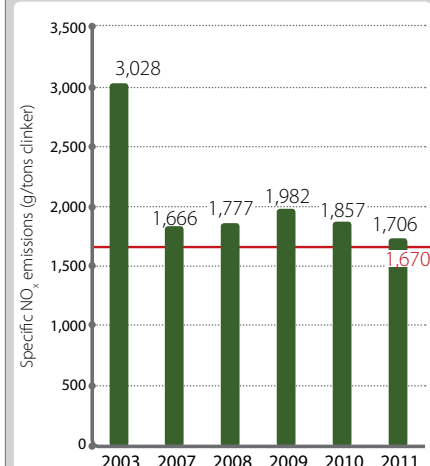
The presence of sulphur (S) in raw materials is the primary cause of SO_x emissions which are directly linked with the appearance of acid rain. It is therefore vital to keep these emissions as low as possible.

For yet another year, at many Group plants, SO_x emissions were negligible while in all cases they are far lower than those allowed in the environmental terms of the operating permits. In 2011, SO_x emissions were 2,433 tons while specific emissions were 241.9 g/ton clinker, based on 2009 equity held. Compared to 2010, specific SO_x emissions increased by 14.5%, ending above - yet close to - the Group target. Overall performance since 2003 was improved by a staggering 51%. It should be noted that total emitted quantity was reduced.

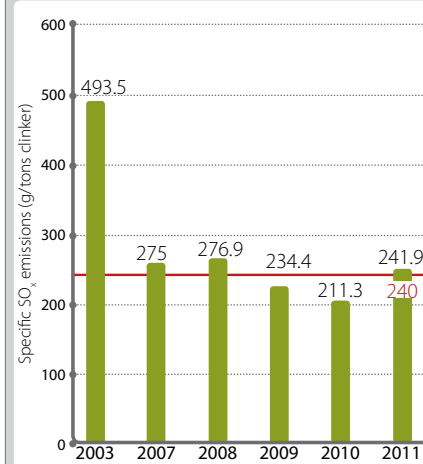
Dust emissions^(1,2)



NO_x emissions^(1,2)



SO_x emissions^(1,2)



— Group target (year 2015)

(1) Specific emissions of each year are calculated based on the equity held by TITAN Group in 2009.

(2) Group target was calculated based on the equity held by TITAN Group in 2009.

Water Management

In 2011, specific water consumption was decreased by 4% compared to the previous year, slightly below the Group target of 350 lt/ton of cement. On Group level, 30.5 million m³ of water was withdrawn in total, out of which 9.9 million m³ were consumed, whereas for cement plants water withdrawal and consumption was 8.1 million m³ and 4.4 million m³, respectively. Detailed information on the quantity of water withdrawn by source as well as water discharge by destination are given in the relevant tables.

In addition, 18.9 million m³ of water or about 62% of the total withdrawn volume were recycled to cover total water needs. It is worth mentioning that cement plants operations made use of 15.5 million m³ of recycled water, which corresponds to about 190% of, or twice the water withdrawn volume.

An Integrated Group Water Management System has been developed on the corporate level and already established for use in all cement plants. Components of the system include "mapping" of the water flows, databases for water balance calculations and water quality analyses. Work is proceeding on, actively implementing an equivalent set of practices for ready-mix plants in 2012 (also a Group target). In 2011, Group-level guidance was introduced into all cement plants, leading to the development of guidelines to be incorporated in the respective environmental management systems. Continuous improvement


was reflected in the reduction of all specific water consumption in 2011, compared to past performance.

TITAN is also a core member of the newly formed WBCSD/CSI Water Management Task Force. This enables the Group to follow all the latest trends in the industry, learn from other cement producers in the CSI, and lead by example through the establishment of good practices, raising the level of awareness and transparency in reporting. New KPIs were proposed by the Task Force, with priorities recognized as follows: withdrawal, consumption, discharge and recycling of water. TITAN is adopting the WBCSD/CSI definitions and KPIs, under a preparation period towards implementation of the new KPIs for water reporting, expected in the next one - two years. The Task Force Team ^{WBCSD} is currently working on developing high-level guidance on good practices for water measurement, based on the experience and practices followed within the member companies of the team.

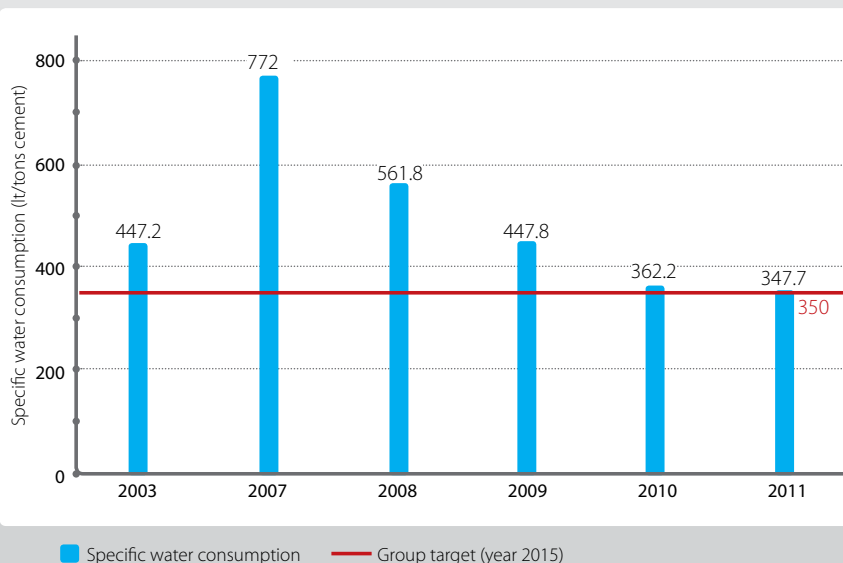
The establishment of guidance for water risk assessment is also a target in CSI, currently focusing on commercially available and established "tool kits" like the Global Water Tool. TITAN plans to run a test year in 2012, applying the "mapping" capabilities of this Tool, by utilizing all existing data from the Group system, and with a preliminary assessment for the possible sources of water risk. On the local level, other similar tools (i.e. the Local Water Tool

developed by GEMI) are available and will also be used.

As part of water risk assessment and sustainable water management at specific sites, focus hydro-geological studies have been conducted in the Antea, Pennsuco and Usje plants and are under development at Zlatna Panega (Bulgaria) and SharCem (Kosovo).

All these ongoing efforts for water risk assessment are targeting at identifying potential significant impact of water withdrawal for TITAN's operations to water sources and finally delineating actions for an efficient water management. 

Water consumption^(1,2)



(1) Specific consumption of each year is calculated based on the equity held by TITAN Group in 2009.

(2) Group target was calculated based on the equity held by TITAN Group in 2009.

Water withdrawn (in million m³)

Ground water	24.2
Municipal water	1.1
Rain water	0.2
Surface water	2.6
Waste water	2.4
Total	30.5

Water discharge (in million m³)

Surface water (river, lake)	19.4
Ocean or sea water	1.2
Total	20.6

Reduce - Reuse - Recycle

Cement production consumes substantial amounts of both raw materials and energy, in the form of thermal and electric energy. Systematic monitoring and recording of consumed quantities is required to ensure that environmental impact, if any, is adequately appraised. The TITAN Group attaches a high priority to applying and improving its monitoring mechanisms. Additionally, TITAN is working on increasing the efficiency of its plants, optimizing the operation of the existing equipment as well as taking advantage of new, state-of-the-art equipment. The aim of these efforts is an overall reduction in consumption.

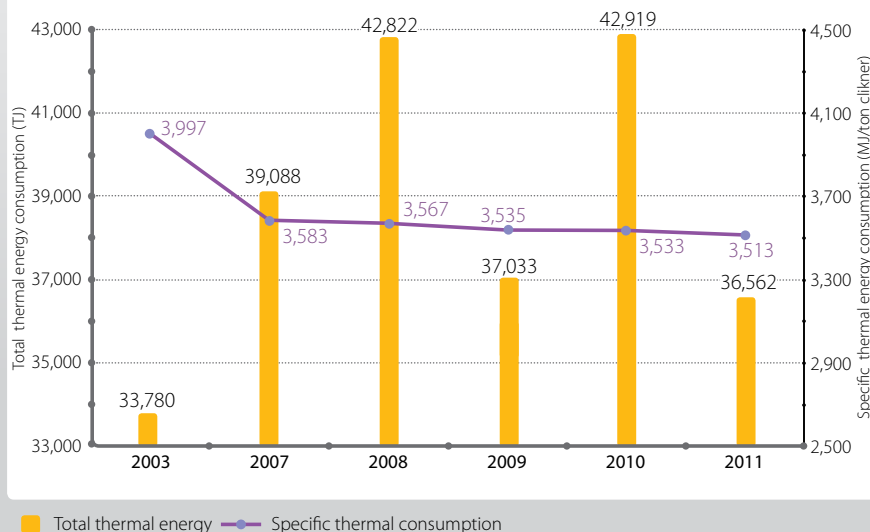
In 2011, additional efforts to reduce indirect energy consumption were launched by TITAN regarding business related traveling and initiatives motivating employees to commute with public transportation instead of private cars. Measurable outcomes of these efforts will be available in 2012. 🚗

Thermal energy

In 2011 the TITAN Group consumed 36,562 TJ (36,559 TJ by the cement plants and their attached quarries and 3 TJ by four related quarries), in the form of thermal energy, in its clinker and cement production process. The observed decrease in total thermal energy consumption, almost 14.8% compared to last year, is a result of a similar decrease in the volume of production as a result of the specific conditions in the markets. The corresponding specific consumption remained at the same level as in 2010, coming to 3,513 MJ/ton clinker.

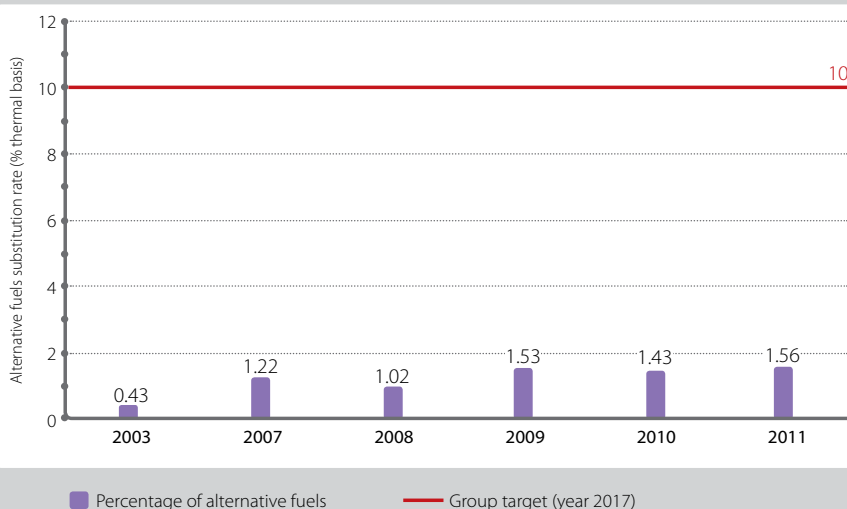
Compared to 2003, however, specific consumption showed a significant reduction of 12.1%. This reduction, which at 2011 production level is equivalent to about 5,000 TJ, is a result of substantial investments in state-of-the-art efficient equipment not only during the design of new cement plants but also during the retrofit of existing plants. In addition, improvements in the day-to-day operations through the implementation of best practices and experiences further provide for efficiency improvement. The largest source of thermal energy (98.5% calorific basis) came from conventional energy sources, such as coal, pet-coke, fuel oil and natural gas. Alternative fuels make up the remainder.

Thermal energy consumption for clinker and cement production⁽¹⁾



(1) Calculation based on the equity held by TITAN Group in each specific year.

Substitution rate of alternative fuels used in clinker and cement production (thermal basis)^(1,2)



(1) Substitution rate of each year is calculated on the equity held by TITAN Group in 2009

(2) Group target for year 2017 is calculated based on the equity held by TITAN Group in 2009

Electrical energy

In 2011, the electrical energy consumption by the Group cement production plants, attached and related quarries was 1,437 GWh or 5,174 TJ (5,173 TJ by the cement plants and their attached quarries and 1 TJ by four related quarries). As in the case of thermal energy consumption, the observed decrease of almost 12% - compared to last year - is a result of the decrease of the volume of production. Moreover, improvements in the operating efficiency of the Group's facilities were also a contributing factor. The average specific consumption being decreased by almost

2% compared to the previous year, to 111.1 kWh/ton cement. Compared to 2003 level, the decrease is equal to 6%, which corresponds to an equivalent of 3,45 TJ based on the 2011 cement production.


The installation of advanced equipment, like low energy vertical roller mills or motors with inverters, made possible the reduction of the electrical consumption. As in the case of thermal energy, frequent inspections of the equipment by the plant engineers as well as performance audits by the corporate group engineers sustain TITAN's focus on operational advance.

Renewable energy sources

Cement production is energy demanding. To conserve limited natural resources, the use of alternative fuels, especially those of high biomass content, became a major part of the Group's sustainability strategy.

In 2011, total renewable energy came to around 550 TJ compared to almost 36,000 TJ of non-renewable energy. As percentage of the overall thermal energy consumption, alternative fuels consumption was increased from 1.43% in 2010 to 1.5%. This is a result of a further increase of alternative fuels use in plants that are already using such fuels. Although efforts to develop appropriate infrastructure and acquire permits according to national and international standards have been met

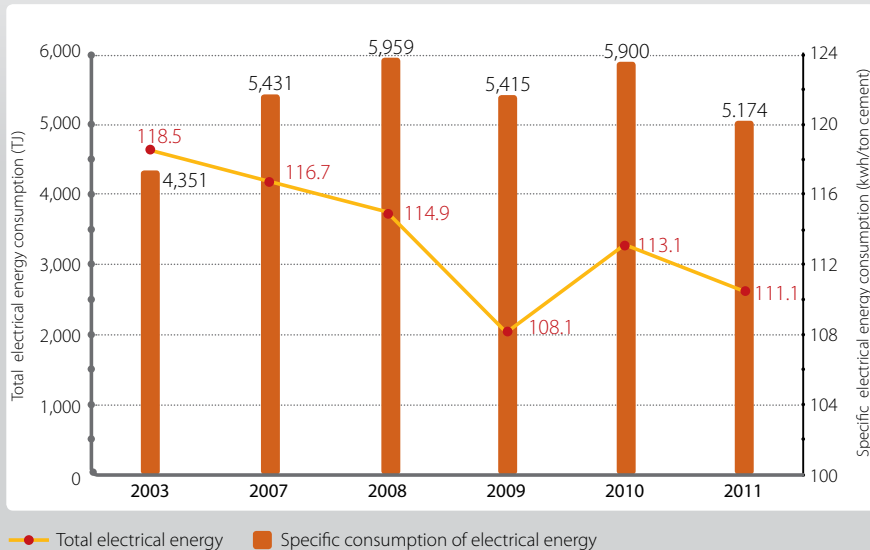
successfully, TITAN's performance is lagging, not only to that of its peers, but also to the Group target set for 2017.

It is worth mentioning that almost 75% of the alternative fuels used in cement (or in TITAN) is biomass, while overall the use of alternative fuels since 2003 has more than tripled. 

In the last two years, cautious but ambitious plans were prepared and put into action. They covered all aspects of alternative fuel usage, including engagement of stakeholders, obtaining the necessary licenses, market studies to source suitable fuel streams, as well as acquiring state-of-the-art equipment that will increase alternative fuels use substantially.

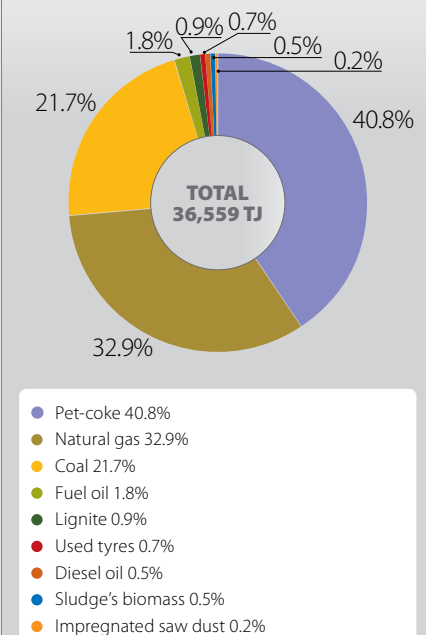
Investments on new/upgraded facilities for handling, storing and feeding alternative fuels were made at Kamari and Thessaloniki cement plants in Greece as well as at Zlatna Panega cement plant in Bulgaria (for more details please see p.48). At Thessaloniki plant this effort has been paused for the moment to avail further dialogue, consultation and engagement with key stakeholders.

Electrical energy consumption for clinker and cement production⁽¹⁾




⁽¹⁾ Calculation based on the equity held by TITAN Group in each specific year.

Fuel types



Extracted and alternative raw materials

Cement production consumes significant amount of raw materials, like limestone, clay, marl, sand, iron oxide, bauxite. Raw material conservation is part of TITAN's determination to work towards sustainability. Investing in the use of alternative raw materials can serve this need in two ways, firstly, by reducing the consumption of extracted raw materials and secondly, by reducing the amounts of by-products that had to be landfilled, giving the society win-win solutions.

In 2011, the Group used 18.6 million tons (dry basis) of raw materials for cement production. Approximately 6.6% of all raw materials (about 1.2 million tons - dry basis) were alternative raw materials, namely by-products and waste disposals from other industries such as fly ash, pyrite ash, blast furnace slag and industrial gypsum. The remaining 17.4 million tons (dry basis) were natural materials from mining and quarrying activities. 


Compared to 2010, the consumption of alternative raw materials, as quantity as well as percentage of the total raw material consumed, has been improved due to the effort made to increase such use by most of the Group's facilities. More specific, last year the quantity of alternative raw materials used was increased by almost 8%, while in respect to 2003 the relevant increase was almost 34%.

Managing Waste

In today's environmentally conscious global community, the reduction, reuse and recycling of raw materials, energy and waste are the cornerstone of any industrial activity. The requirements of sustainable development in a world with constantly growing demand have led all sectors of industry, and the cement industry in particular, to act immediately and intelligently.

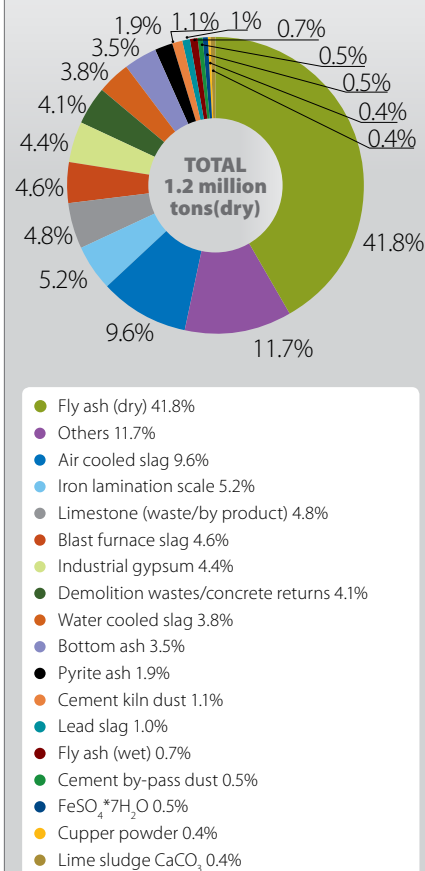
The reduction, reuse and recycling of raw materials, energy and waste constitute a primary element in the implementation of the Group's environmental policy both at the tactical and the strategic levels. In order to achieve these targets, all of the TITAN Group facilities have developed and implemented or plan to implement, in the near term, 3R practices.

Raw materials and intermediary products which leak out of the production process are recovered with specialized equipment and, after being appropriately processed to remove foreign particles, are reintroduced into the production line and subsequently reused. As part of TITAN's policy for sustainable development, waste produced as part of everyday activities is collected, stored and disposed of through authorized contractors.

TITAN is, furthermore, a founding member of the Hellenic Recovery and Recycling Corporation (EEAA). Most sites have a management system for waste that is part of the ISO 14001  or an equivalent system, wherever such a system exists.

Among the materials thus collected are iron and aluminum scrap metals, vehicle batteries, used lubricants, used tires, electrical, electronic and electric equipment, paper, cardboard, household batteries, and toner used in printers and photocopiers. Recycling of waste is a win-win practice that serves the goal of reducing the Group's impact on land by minimizing the need for land filling as well as the use of extracted raw materials. Compared to 2010, the recycled quantities of waste have increased by almost 16%. Concrete recycled accounts for about 86% of the total amount, having almost tripled since 2008, the first year that this practice was reported. In 2011, at the Elefsina cement plant in Greece, a pilot project on utilizing demolition waste was implemented (for more details please see p.45) assessing the advantages of such a solution not only for in-house use but also for the communities in the areas of the Group's activities.

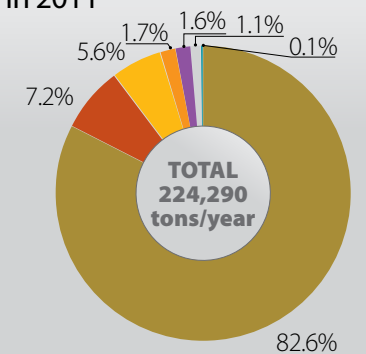
Materials consumed - Industrial Waste⁽¹⁾ [% dry]



(1) Calculation based on the equity held by TITAN Group in each specific year.

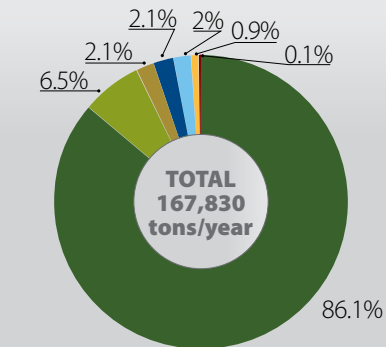
As part of TITAN's policy for sustainable development, waste produced as part of everyday activities is collected, stored and disposed of through authorized contractors.

Waste produced by type in 2011



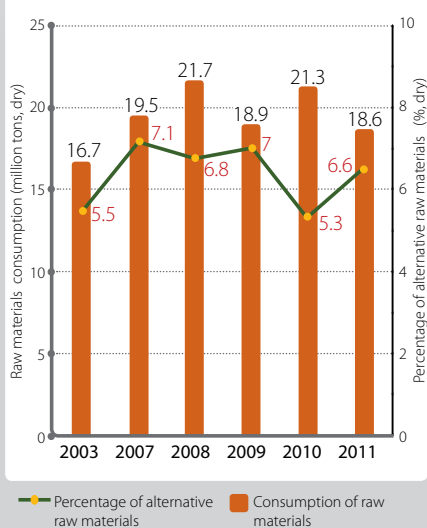
- Concrete returns (ready-mix units) 185,315 (82.6%)
- Others 16,210 (7.2%)
- Construction and demolition waste 12,500 (5.6%)
- Iron and steel 3,920 (1.7%)
- Other scrap (excluding iron, steel, aluminum, some cables) 3,490 (1.6%)
- Waste refractories 2,385 (1.1%)
- Used oils (engine, gear and lubricants) 250 (0.1%)

Recycled waste in 2011



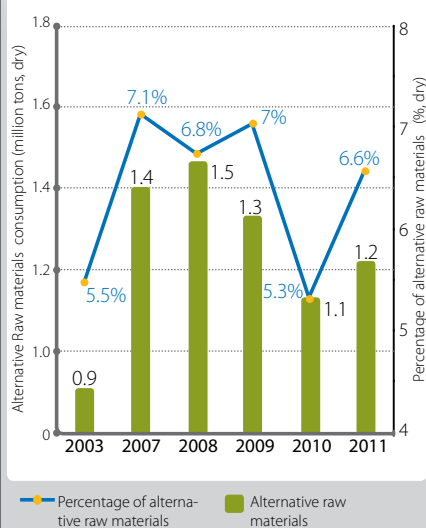
- Concrete returns 144,450 (86.1%)
- Others 10,97 (6.5%)
- Construction and demolition waste 3,480 (2.1%)
- Iron and steel 3,53 (2.1%)
- Other scrap (excluding iron, steel, aluminum, some cables) 3,420 (2.0%)
- Waste refractories 1,525 (0.9%)
- Used oils (engine, gear and lubricants) 250 (0.1%)

Consumption of raw materials and percentage of alternative raw materials used in clinker and cement production⁽¹⁾



(1) Calculation based on the equity held by TITAN Group in each specific year.

Consumption of alternative raw materials and percentage of alternative raw materials used in clinker and cement produc- tion⁽¹⁾



(1) Calculation based on the equity held by TITAN Group in each specific year.

Quarry Rehabilitation and Biodiversity

Biodiversity management and quarry rehabilitation continue to be high on the list of TITAN's CSR priorities 🌱. TITAN co-chairs and actively participates in the WBCSD/CSI Biodiversity and Land Stewardship Task Force. Activities of the task force include the development of Guidelines on Quarry Rehabilitation that were released in January 2012, the adoption of a Screening Tool for Quarries to identify high biodiversity value areas, as well as a Guidance document for Biodiversity Management Plans.

The Guidelines besides setting the principles for quarry rehabilitation, also focus on the vital role of external stakeholder engagement, through continuous communication and open dialogue, in the successful development and execution of a rehabilitation plan and a mutually beneficial outcome for both stakeholders and operators. TITAN has launched a systematic program to communicate the new WBCSD/CSI Guidelines to its business units, aiming to use them as a tool for supporting new rehabilitation plans or improving existing plans at its quarry operations.

In addition, TITAN leads the core team within the CSI for adopting a specific screening tool in identifying high biodiversity value areas, and supporting alignment of reporting for CSI Biodiversity KPIs. TITAN already uses the Integrated Biodiversity Assessment Tool (IBAT 🌿) for screening its quarry sites, and other tools of similar capacity will be evaluated as part of the on-going work within the CSI.

All areas are screened and biodiversity value is identified, based on national or international designations (e.g. international treaties, Natura etc.). The baseline biodiversity assessment on a case-by-case basis helps to identify the specific species under protection and the importance of their preservation, as included in national or international conservation or protection species lists (like IUCN Red List of Threatened Species), and that are usually related with the designation of protected areas/habitats. Work will continue in 2012 for identifying the number of protected species in all the Group's quarries under KPI 1.

TITAN has fully integrated the recently adopted by CSI biodiversity key performance indicators for all Group activities, including quarries that are not directly linked to cement production (e.g. aggregate quarries). Accordingly, the number of Group quarries that are regarded as of high biodiversity value according to KPI 1 have increased from five to nine quarries. Out of the total nine quarries, three quarries (or 33%) actively implement biodiversity management plans (KPI 2). More specifically, aggregate quarries in Greece were incorporated under KPI 1, as they are located within areas that were recently characterized as "wildlife refuges" under new national legislation enforced in 2011.

Moreover, TITAN has already started to formulate a more systematic Biodiversity Management Plan (BMP), to record

methodology, objectives and actions, and to monitor progress, for the Zlatna Panega quarry (Bulgaria) 🇵🇵 and will continue in two more cases (Pennsco and Center Sand quarries in the U.S.A.) 🇺🇸 in 2012. The Management Plans will form the basis for the eventual rehabilitation plans.

In 2012 the Cement Division Greece is planning to conduct Biodiversity Studies for a "baseline" assessment at the poz-zolana quarry on Milos island 🇬🇷 (inside a Natura area) and in other aggregate quarries within "wildlife refuge" areas.

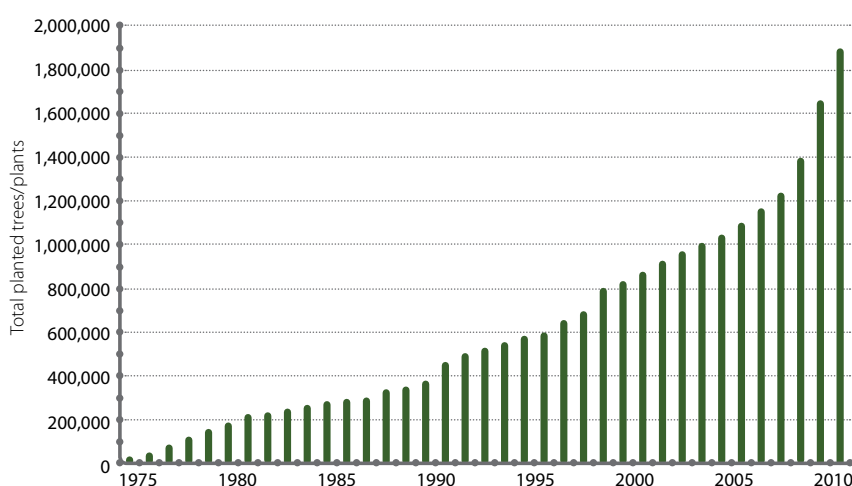
As it regards the Group's quarries environmental performance targets, almost 100% of our wholly owned active quarries (as in 2009) have been certified with ISO 14001 or equivalent system. For most of them an EIAS has been developed and a Rehabilitation Plan is in place and implemented, and actions are on-going to develop such studies and plans for the remaining ones. This procedure might in some cases be time consuming due to each country's legislative and licensing provisions or due to other external factors and hard conditions faced in specific countries (e.g. Egypt).

In 2011 the total area of "active quarries" was 91.7 million m², of which 17.3 million m² are "affected", 14.7 million m² have been rehabilitated or restored to date (cumulative) and 59.7 million m² are still "green" (untouched).

The total number of trees planted to date, mainly for reforesting/rehabilitating depleted quarries in Greece, amounts to 1.9 million. In 2011 there was no rehabilitation of surface areas using the "hydro-seeding" method, but based on the accumulated experience over recent years and the positive results of this method, it will continue to be used in the future. 🇬🇷

Under CSI TF5, TITAN will be building on the work of the WBCSD Ecosystems Focus Area, to explore strategic partnerships with scientific organizations, well-recognized international organizations or NGOs.

**Total number of trees/plants planted
or given to third parties by TITAN (cumulative)**



Application of specific methods to reduce the visual impact of quarry operations (Altsi gypsum quarry, Greece)

In line with its environmental awareness and activities towards enhancement of biodiversity, TITAN applies usual traditional, but also modern methods for quarries rehabilitation, such as reforestation of depleted benches, hydroseeding or creation of water reservoirs with respect to local community needs.

At Altsi gypsum quarry in Crete island (Greece), the visual impact of the operations has always been the most challenging issue, due to the white color of gypsum and the location of the quarry, which is visible from a long distance, in an area where tourism is the main employment of the local society. Following long-time concerns and efforts, TITAN nowadays applies specific methods for smoothing the contrast of the open quarry that together with systematic reforestation are expected to succeed in mitigation of the overall visual impact of the quarry exploitation activities.

The method followed is based on the spraying and covering of the depleted slopes/benches with an environmental friendly aqueous solution with iron oxides that provides an ochre color to the slopes. This process has a satisfying result, since it reduces the color contrast in the natural landscape and has an overall positive aesthetic effect. Efforts towards visual impact mitigation continue, by trying new practices for optimizing the end result.

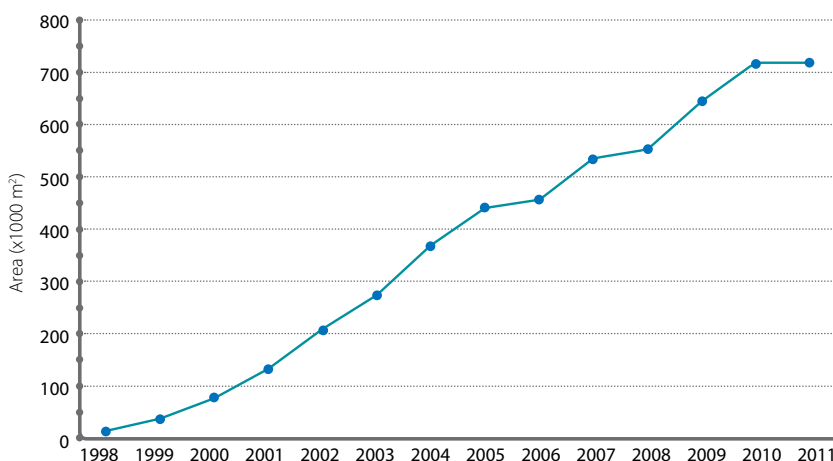


Catawba creek (Roanoke cement plant, Virginia, U.S.A.)

In line with its long-standing water and land management program, Roanoke Cement has established over the last six years the annual event of "Catawba Creek Cleanup", a spring Saturday morning gathering of employees and local residents who walk the banks of surrounding Catawba Creek polishing the stream. Roanoke Cement Company employees and volunteers have picked up more than ten tons of trash since the start of the program in 2006.



Hydro-seeding (cumulative)




Focus by Region

Greece and Western Europe



New generation kiln burners (Kamari cement plant, Greece)


As part of the Group's collective efforts to maximize the use of alternative fuels, along with reducing the NO_x emissions, a project for replacing the old burners of both rotary kilns was carried out. The total investment cost was about €0.4 million. The new burner systems designed by Unitherm Cemcon are tailor-made to meet the specific requirements of TITAN's kilns. Each one of them can feed simultaneously four different fuel types, one conventional fossil type fuel and three alternative fossil/biomass type fuels. In addition, NO_x emissions can be reduced using the inherent ability for easy and effective shaping of the flame. The two most important factors for adjusting the flame shape are the deflection angle of the air nozzles as well as the quantity of the air. The design of the injection system allows for rapid and uniform mixing of fuel and air, creating excellent conditions for the combustion of even the hardest burnable fuel. As a consequence, NO_x emissions are lower, owing to the reduced quantity of air needed for combustion. This has the additional advantage of reducing the consumption of the abatement agent (urea) used by the existing SNCR system. 



Alternative fuels installation (Kamari cement plant, Greece)

During 2011, an existing installation for handling, storing and feeding alternative fuels at the Kamari cement plant was upgraded. The installation, the first of its kind for the plant, had been in operation since 2001. The improved installation is designed according to the ATEX European Directive, allowing for operation in a potentially explosive atmosphere. It is equipped with a separate anti-explosive protection system, as well as a fire-protection system that assures the safety of the employees and the environment. The system is suitable for many different types of alternative fuels like dried sewage sludge, RDF/SRF and any other alternative/biomass type solid fuel. It can feed both kilns with a maximum feeding rate of 10tons/h. The total cost of the investment was €2.5 million.

Utilizing concrete returns (Ready-mix plants, Greece)

Continuing the practice - started in the last several years - of utilizing concrete returns as an alternative raw material in the production of clinker and cement/concrete, a further 144,000 tons of concrete (39,000 tons in Greece and 105,000 tons in the U.S.A.) were recycled, saving valuable, non-renewable resources of raw material, reducing direct and indirect CO₂ emissions and minimizing the need for landfilling. 

Alternative fuels installation (Thessaloniki cement plant, Greece)

At a time when recycling is not just a trend, but a necessity and a solution to one of the major problems facing our planet, the cement industry has a positive contribution to make towards the protection of the environment through the utilization of alternative fuels in the production of cement.

The use of alternative fuels to replace conventional non-renewable fossil fuels, like coal, pet-coke or lignite, is an essential requirement for sustainable development.

Alternative fuels, especially those with high biomass content, can help reduce CO₂ emissions footprint.

One of the newest plants in the TITAN Group, the Thessaloniki cement plant has a rotary kiln designed to use alternative fuels at a high substitution rate. In 2011, the installation of a unit that can receive, store and feed alternative fuels was completed. The installation has a silo with a capacity of 340 m³ and can achieve a maximum kiln feeding rate of 10 tons/h.

The installation is designed according to the ATEX European Directive, allowing for operation in a potentially explosive atmosphere. In addition, the unit is equipped with a closed-loop system that guides all exhaust gases coming out from the de-dusting bag filters to the kiln burner, thus avoiding any odor leakage to the environment. The system is suitable for many different types of alternative fuels like rice husk, RDF/ SRF and any other alternative/biomass type solid fuel. The new installation can serve as a solution to the issue of waste management faced by the local municipalities especially that of dried sewage sludge. Such material can be handled safely and in an environmentally friendly way, with multiple benefits for the local community, the plant and the environment.

The total cost of the investment was €2.8 million. ©



Recycling demolition waste (Elefsina cement plant, Greece)

During 2011 a number of old buildings at the Elefsina cement plant were demolished. As part of the project, TITAN planned and implemented a total management scheme for all waste generated. Demolition waste was crushed and materials other than concrete, like metals, wood, etc. were removed using a special mobile unit that was installed in the grounds of the plant. Concrete waste was transported to the Kamari cement plant to be used as an alternative raw material in clinker production, thereby minimizing the need for landfilling, while metals were sent to specialized companies for recycling. The demolition work lasted for about three months and during that period 6,000 tons of waste were produced.

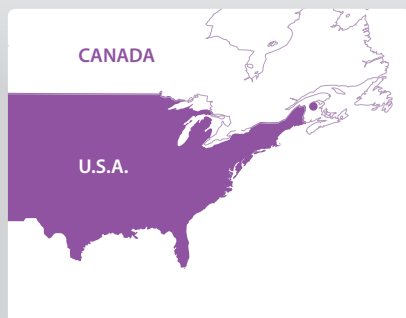
The scheme was the first of its kind for the Group and served as a pilot project to assess the advantages of such a solution. TITAN intends to investigate the possibility of recycling concrete waste produced during the demolition of public or private buildings and other structures.

This was a fitting end for the buildings, built about 100 years ago. At the end of their life cycle they provided the raw materials to produce the cement that will be used in building new constructions, an example of applying TITAN's principles on sustainable development. ©



Focus by Region


U.S.A.



Energy Star Award® (Roanoke cement plant, Virginia, U.S.A.)

Energy Star® is a U.S.A. Environmental Protection Agency (EPA) program that identifies and establishes the benchmarks for superior energy performance. TITAN America has been an Energy Star® Partner since 2008. As such, it has made a commitment to protect the environment through the continuous improvement of its energy performance. TITAN believes that an organization-wide energy management approach will help enhance its financial health, increase its value, and aid in preserving the environment for future generations.

In 2011, the Roanoke Cement Company, a subsidiary of TITAN America LLC, was awarded the Energy Star® Award for a fifth consecutive year by EPA. The Troutville plant, the only cement plant in Virginia, was the first cement plant to be certified with an Energy Star® in 2011. A cement plant is eligible for the Energy Star® if the plant achieves energy performance within the top 25 percent nationally using the Energy Star® performance scale.

Furthermore, Roanoke Cement actualized the “Plant A Star™” program , encouraged by EPA. The program is intended to provide customers with technical assistance and energy management training. The Plant Energy Team conducts presentations and energy audits, demonstrating the benefits of energy management, tracking and benchmarking, while showcasing the available resources provided by the Energy Star® Program to its customers. Roanoke Cement saw the benefits of a systems assessment, and reassessment of its energy use with proactive maintenance, repair and replacement has produced demonstrable efficiencies.

To date, TITAN America/Roanoke Cement has invested approximately 3,000 hours in helping 15 business partners fast-track their energy savings initiatives in 2010. Conservative estimates indicate that these businesses could see a 15% reduction in electrical energy consumption in their first year, applying the skills developed through this program. Based on these estimates, the Plant A Star™ Program helped save enough electrical energy to power 150 households last year.

Long-term goals have been established, calling for a 90,000 MWh (33%) reduction in energy utilization – the equivalent of the production of 700,000 tons of cement (or enough energy saved to power 8,000 homes for one year) across the TITAN America organization by 2015.

“TITAN America continues to lead by example,” says Elizabeth Dutrow, Director of Industrial Sector Partnerships with Energy Star®. “Achieving a national level energy certification for its Virginia cement plant demonstrates leadership. But Roanoke Cement hasn’t stopped there. The company is reaching beyond what is expected to help others to achieve similar heights. Roanoke Cement’s outreach program for customers, “Plant A Star™”, is a gold standard for cement manufacturers to emulate in helping their customers, the ready-mix producers, to improve energy performance.” “TITAN is committed to using energy in the most efficient and cost-effective manner,” says Aris Papadopoulos, Chief Executive Officer of TITAN America. “We strive to improve environmental performance to lead energy management within the cement industry.”

“Our Plant Energy Team recognized that businesses are struggling with increased burdens and need to address their energy consumption to remain competitive,” says Kevin Baird, Roanoke Cement, Plant Manager.

Trout pond in an old limestone pit (Roanoke cement plant, Virginia, U.S.A.)

TITAN America's Roanoke Cement is continuing work on the Trout Pond Restoration Project, initiated in 2008 and designed to create a sustainable ecosystem rich in biodiversity.

The site was previously a working limestone quarry, but has long been abandoned. Filled by groundwater inflows and rainfall, a 24,000 m² (six acre) portion of the pit has been developed into a lake. In 2009 a partnership was forged with Trout Unlimited, a national organization dedicated to conserving, protecting and restoring North America's trout and salmon fisheries and their watersheds. In 2009, 350 rainbow trout were released into the quarry pond, and the site is now considered ideal for hosting this environmentally sensitive species. To take full advantage of the shoreline, a 3x6 meter (10'x20') fishing pier with floating dock was constructed out of pine, allowing visitors to fish or view wildlife; annual "fishing days" at the pond are organized for Roanoke Cement employees and their families. The quality of water inside the pond is monitored annually through measurements of water temperature, in order to assess conditions for trout survival.

Adjacent to the pond, the site also offered 780 m² (8,400 square feet) of land for restoration.

The restoration project began by leveling out the rock and placing on-site clay soil - taken from overburden in the operating quarry site - for planting over the area. On the far left of the pond, a shallow area was created to grow wetland vegetation.

Plantings included eight Tuscarora Cape Myrtles, two Weeping Willows, four Spiraling Willows and Cattails. Kentucky 31 Tall Fescue grass seed was sown - perfect for the clay soil conditions surrounding the trout pond. The fescue has a widespread root system allowing the grass to be highly drought resistant. Plant species found in the region or native to the state were favored as sustainable choices, based on the results of a biodiversity study, conducted in collaboration with Roanoke College. To bring in more native wildflowers, two clay beds were laid out along the bank of the pond.

Native habitats were created adjacent to the trout pond using premixed seed including Indiangrass, Canada Wild Rye, Big Bluestem, Partridge Pea, Ox Eye Sunflower, Black Eyed Susan and Switchgrass.

Bird feeders and birdhouses were installed to lure native species back to the area. The various birdhouses included eco-friendly structures hung near the trout pond as well as globe cage feeders that resist squirrels and species of birds that intimidate smaller birds.

A variety of species now reside at the trout pond in multiple habitats. Restored fauna include several different species of dragonflies that require water for breeding. These species are especially important indicators for gauging the health of a trout pond.

The restored trout pond is a sanctuary for dragonflies, and other species like butterflies and grasshoppers. The trout pond is an oasis for native birds providing them with fresh water, food and nesting materials.

In July 2011, the Roanoke Cement Company was recognized by Virginia DMME (Division of Mining Mineral and Energy) and VTCA (Virginia Transportation Construction Alliance) with the "Best Quarry" Reclamation Award.




Focus by Region

Southeastern Europe



New Processed Engineered Fuel installation (Zlatna Panega cement plant, Bulgaria)

In mid-2011, the Zlatna Panega cement plant commissioned its new installation for alternative fuels. In July, testing of the shredding equipment was performed and in August the first energy recovery from the new alternative fuels was successfully accomplished. The total investment cost for the entire installation has been €5.7 million. This new alternative fuel installation, the first of its kind within the TITAN Group, is designed for the production of PEF (Processed Engineered Fuel). PEF is a fuel of uniform, constant quality made from various non-recyclable waste materials with variable quality. Its main raw waste material comes from the Municipal Solid Waste (MSW) deposited in the Sofia landfill, while the PEF is enhanced by the use of other carefully selected high heat value (HHV) industrial, commercial or biomass waste.

It should be noted that the Zlatna Panega plant has an Integrated Pollution Prevention Control (IPPC) permit for the energy recovery of hazardous and non-hazardous wastes. The project was carried out in partnership with the Evolution Environmental Group LLC ("E2"), a Company with 35 years of experience in the utilization of alternative fuels in the U.S.A. and Europe. 

PEF Production Line

The delivered waste materials are deposited inside the building and fed into the primary shredder. The shredded materials are then transported by belt conveyor to the second stage for further treatment. Separation of the useful light fraction from inert materials (small rocks, glass, metals, dirt, and sand) is achieved through the vibrating screen. After the vibrating screen a wind sifter is used to further separate the light fraction (drier and two dimensional particles) from the heavy fraction (wet, heavier and three dimensional particles). The light fraction is then transported into the secondary shredder. The shredded materials are either stored in piles on the storage floor or sent to the storage silo for feeding to the kiln.

The Waste Materials used for PEF production

In general, many and varied waste materials can be used for the production of PEF. The main waste stream is RDF (Refused Derived Fuel) delivered from three waste separation installations sourcing their original waste from the MSW of the Suhodol Sofia landfill. RDF contains mainly non-recyclable plastics, paper, textile, foils and other burnable materials. The quality of RDF usually varies from day to day and delivery to delivery, so it needs to be standardized to satisfy the energy needs of the clinker production process.

For the improvement of the NCV quality of RDF, high heat value industrial and commercial streams are used, like textiles, plastics, plastic bumpers, plastics from appliances, shredded rubber and other forms of waste. In addition, biomass waste materials such as rice husk, sunflower husk, saw dust, etc. are also used to improve the moisture quality of the RDF.

In all cases, every waste material that is used in the PEF production process undergoes vigorous quality control through initial and process tests, in line with the high standards set by the Zlatna Panega plant's qualified experts.

Future Steps

Zlatna Panega has just embarked on this new and challenging activity and a lot still has to be learned. The main challenge is to gain further experience in the production of a uniform fuel by using many different materials of inconsistent quality. In the future, the Zlatna Panega plant intends to gradually increase the feeding of PEF by making it more stable and convenient for use.

In the near future, the plant intends to test other high calorific value materials and to include them in PEF production, while at the same time, it intends to start another environmentally friendly project for using animal meal as alternative fuel, as well as locally produced biomass from energy crops.



RDF unloading



Feeding the primary shredder



Vibrating screen and wind sifter



End part of the production line



PEF piled in storage area



Miscanthus crop – Planting phase



Miscanthus crop – Harvesting phase

Biomass project (Zlatna Panega cement plant, Bulgaria)

In the spring of 2010, the Zlatna Panega cement plant, in collaboration with the Bulgarian Science Academy, selected and planted experimentally five types of fast-growing species (two grass species and three tree species) or "Energy Crops". These crops are planted on land located around the plant, owned by the company.

The aim of the experiment is to determine, which of the species are most suitable for growth in the region of Zlatna Panega. This experiment will determine which of them are most environmentally, socially and economically suitable to be grown by local farmers and then sold to the plant for heat recovery.

The selected energy crops are chosen according to the following criteria:

- > The species are perennial, they are planted once and only harvesting and bailing is needed for period of 15-20 years.
- > The species should grow well on poor lands and require minimal maintenance, keeping expenses as low as possible.

The grass dries itself on the field, reaching moisture levels lower than 20%, depending on the season. Because of the perennial type and qualities of the grass, the soil is preserved, because fewer pesticides and fertilizers are required and the roots enrich and improve the soil.

The chosen species must have high annual productivity. Data indicate that the yield varies between 0.8 and 2 tons per 1000 m², sometimes even 3-4 tons, depending on the climate and the quality of the soil.

The experiment started in the beginning of 2010 and will continue for three years, given that the energy crops need three years to reach their maximum growth. The final results must be evaluated in the beginning of 2013 after the second harvest is complete.

In the winter of 2012 the first harvest will be completed for the (50% of maximum growth) grasses. Trees should be harvested over a five year period.



ESIA and quarry rehabilitation in Antea (Antea cement plant, Albania)

To be fully effective, rehabilitation planning should begin as early as possible in the quarry life cycle and be reviewed and updated on an ongoing basis. A successful rehabilitation plan should ideally commence prior to operation, as part of the Environmental and Social Impact Assessment (ESIA).

For the Antea “greenfield” project of the TITAN Group in Albania, an ESIA was conducted in 2008 to cover the entire project, while focused Environmental Impact Assessment Studies and Quarry Management Plans were developed for the two associated quarries, in line with the Environmental and Social Action Plan. The Quarry Management Plans (QMPs) for both quarries were completed in 2010 and comprised a structured and practical desk study, providing planning outlines, aligned with national legislation and also conforming to TITAN Group best practices for quarry development and rehabilitation. The QMPs included the overall (long-term) mine plans, the detailed five year plans and the first year of quarry operations (focus annual plan), and aimed at ensuring and presenting a rational plan for quarry depletion, mine scheduling and rehabilitation-reforestation of benches.

According to the field investigation results and the ESIA, the specific sites proposed for the project development (cement plant and quarries) were not designated as conservation areas and were not considered to be “Critical Habitat” as defined by IFC’s Performance Standard 6 “Biodiversity Conservation and Sustainable Natural Resources Management”. Two flora species that are included in the Red List of Albania, namely *Quercus ilex* (holly or holm oak) and *Salvia officinalis* (sage) have been recorded on project-affected sites. These species were recommended for use during rehabilitation practices and planning, for planting along with other species.

Although the quarries are still at the very early stage of development, rehabilitation practices are already being applied in the upper (depleted) benches of the Antea quarries, with the aforementioned species being planted. Planting will proceed in line with the quarry development.

Quarry rehabilitation is today an integral part of the Antea Plant Environmental Management System (EMS) incorporating all relevant procedures, working instructions and monitoring practices for the quarries’ rehabilitation, ensuring implementation of plans, progressive landscaping and reclamation for mined-out areas. 🇷🇺 🇧🇪



Hydrogeological Study of Burizane Aquifer – Sustainable Groundwater Management for Antea plant

The Antea “hydro-drilling” project was initiated in 2007, with the target to develop water wells for supplying water to cover the needs of the new Antea cement Plant in Albania. Sustainable groundwater management in Antea plant includes measures related to the operation of the pumping wells in such way to achieve optimum groundwater withdrawal and also to the implementation of a monitoring plan, already incorporated in the plant’s ISO 14001 EMS, consisting of regular monitoring of the level and quality of water in the wells.

Moreover, a Hydrogeological Study was initiated and completed in the period 2010-2011, with main objectives to:

- > evaluate the hydraulic characteristics of the Antea cement plant water wells and the possible impact of pumping to the surrounding overall Burizane aquifer and springs, and
- > propose best practices and measures for the sustainable groundwater management.


The Study was based on continuous pumping and systematic water-level measurements in all water wells, covering two “water-seasonal” periods (autumn and spring).

Based on the results of tests and processing of data, it was possible to draw important conclusions with regards to the characteristics of the aquifer. Among else, it was evaluated that the aquifer –formed inside massif, karstic or fractured limestone- is characterized by anisotropy in horizontal dimension and according to a conceptual groundwater flow model. It was also evaluated that the wells may not affect the springs of Burizane, appearing in a cluster to the SW of the plant area. Finally, it was assessed that the annual rate of pumping and water consumption from the Burizane aquifer for the cement plant needs hardly reaches 3% of the total annual potential of the aquifer replenishment. Accordingly, there is no risk of causing any negative effect to groundwater level or the quantity/sufficiency of aquifer.

Biodiversity Study in Usje Marl lakes – Award (Usje cement plant, F.Y.R.O.M.)

In October 2011, Cementarnica Usje was awarded the first prize in the National Competition for Corporate Social Responsibility in the category “Environment”. The award was conferred for the project “Biodiversity of the Artificial Lakes in the Usje Cement Plant”, following the outcome of the Investigation Study on Hydrology, Hydro-geology and Biodiversity, conducted in 2010-11 at the initiative of the Usje plant, and in line with TITAN's Corporate Social Responsibility Policy. The Usje plant is continuing to implement all measures, as recommended in the study, for the maintenance and enhancement of water quality and the ecological status of the lakes ecosystem.

Granting Integrated Pollution Prevention Control (IPPC) permits (Kosjeric cement plant, Serbia and Usje cement plant, F.Y.R.O.M.)

Integrated Pollution Prevention Control (IPPC)  is a licensing regime for certain types of industrial activities, including cement production. The purpose of the process is, through an integrated approach (one permit), to:

- > regulate impacts on the environment caused by industrial activity as a whole, preventing transfer of pollution from one environmental medium to another,
- > implement the best available techniques,
- > set conditions for each individual case, taking into consideration the local conditions and
- > allow/encourage public participation and public involvement in the decision making process.

In compliance with its high standards and vision of doing less harm and endeavoring to do more good, TITAN makes every effort to comply with the most stringent regulations, like that of IPPC, even in areas where the local legislation is lacking such provisions. In many cases, TITAN provided the local authorities with its knowledge and helped them build up their law in accordance with European standards. This was the case at the Usje cement plant, F.Y.R.O.M. and the Kosjeric cement plant in Serbia.

In 2011, both plants were issued their IPPC permits. It was a long process, starting back in 2007 for the Usje plant and 2009 for the Kosjeric plant. At the Usje plant a total of over €2.5 million was invested in implementing measures and specific solutions mandated by the adjustment plan, with about 80% of the activities foreseen being completed in the period 2007-2011, while the Kosjeric plant invested over €15 million in the field of environmental protection, in line with the best available techniques and Group best practices.

It is worth mentioning that both the IPPC were among the first to be issued in each country. In fact, the Kosjeric plant was the first and, so far, only company to obtain a permit of this kind – among the 177 companies in the industrial sector in Serbia looking to obtain an IPPC permit by 2015.



Focus by Region

Eastern Mediterranean



Certifying EMS according to ISO 14001 (Beni Suef cement plant, Egypt and Tokat cement plant and ready-mix unit, Turkey)

During 2011 the following facilities:

- > BSF cement plant and attached quarries, Beni Suef, Egypt
- > TKT cement plant and attached quarries, Artova, Tokat, Turkey
- > TKT ready-mix unit, Artova, Tokat, Turkey

had their EMS certified according to international standard ISO 14001. This was the successful conclusion of an endeavor started months before and must be ascribed to the inspiration and leadership of the local management as well as the tireless efforts and dedication of the personnel involved.



Environmental activities at APCC (Alexandria cement plant, Egypt)

An ambitious environmental initiative for the residential area close to the Alexandria plant was launched in June 2011, on the occasion of World Environment Day. In partnership with the District Office, the plant set about improving the appearance of the main street in Wadi El-Kamar area. This involved painting the houses in the main street facing the plant the same colour, paving the main street to control the fugitive dust from the unpaved road, and planting trees in the surrounding area. At the end of the project, the plant received an appreciation certificate from the Administrator of Agamy district, acknowledging its valuable efforts. The Alexandria plant secured environmental approval for the renewal of the plant license after merge of line 5 with APCC in permanent license. The plant underwent an Environment Impact Assessment review by the Ministry of the Environment. Based on the environmental approval, the plant permit was issued by the Administrative Authority on 26.11.2011.



TITAN Group cement plants WBCSD/CSI Progress Review

WBCSD/CSI	Description	2009	2010	2011
Climate Change	Total direct CO ₂ emissions ^(1,2) (gross/net), metric tons			
	<i>based on specific year equity</i>	8.7 million	10.1 million	8.6 million
	<i>based on 2009 equity</i>	8.7 million	10.1 million	8.2 million
	Direct CO ₂ emissions ^(1,2) (gross/net), kg per metric ton of product			
	<i>based on specific year equity</i>	672.6	697.7	676.4
	<i>including ST ProAsh™ production</i>	633.0	655.3	625.1
	<i>based on 2009 equity</i>	672.6	697.7	680.5
	<i>including ST ProAsh™ production</i>	633	655.3	626.8
Alternative fuel and material	Energy efficiency, kcal per kg of clinker	844.4	843.9	839
	Alternative fuel substitution for conventional fuels, %			
	<i>based on specific year equity</i>	1.53	1.43	1.50
	<i>based on 2009 equity</i>	1.53	1.43	1.56
	Biomass in kiln fuel, %			
	<i>based on specific year equity</i>	0.90	0.91	1.13
	<i>based on 2009 equity</i>	0.90	0.91	1.17
	Alternative raw materials (clinker and cement), %	7.0	5.3	6.6
Emissions	Clinker to cement ratio	0.82	0.84	0.83
	Total dust particulates, metric tons			
	<i>based on specific year equity</i>	1,493	1,866	1,693
	<i>based on 2009 equity</i>	1,493	1,866	1,601
	Dust particulates, g per ton of clinker			
	<i>based on specific year equity</i>	142.5	153.6	162.6
	<i>based on 2009 equity</i>	142.5	153.6	159.2
	Total NO _x , metric tons			
	<i>based on specific year equity</i>	20,767	22,561	17,523
	<i>based on 2009 equity</i>	20,767	22,561	17,152
	NO _x , g per ton of clinker			
	<i>based on specific year equity</i>	1,982	1,857	1,683
	<i>based on 2009 equity</i>	1,982	1,857	1,706
	Total SO _x , metric tons			
	<i>based on specific year equity</i>	2,456	2,567	2,468
	<i>based on 2009 equity</i>	2,456	2,567	2,433
	SO _x , g per ton of clinker			
	<i>based on specific year equity</i>	234.4	211.3	237.1
	<i>based on 2009 equity</i>	234.4	211.3	241.9
Local impacts	Clinker produced with monitoring of major and minor emissions, %	100	100	100
	Active quarries with high biodiversity value ^(3,5)	3	5	9
	Active quarries with biodiversity management plans ^(4,5)	1	2	3
	Active quarries with biodiversity management plans ^(4,5) , %	33	40	33
	Sites with community engagement plans, %	100	100	100
	Sites with quarry rehabilitation plans ⁽⁵⁾ , %	48	48	63

TITAN Group cement plants WBCSD/CSI Progress Review

WBCSD/CSI	Description	2009	2010	2011
Health and Safety	Employee fatalities	0	0	0
	Employee fatality rate	0	0	0
	Contractor fatalities	0	0	1
	Third-party fatalities	0	0	0
	Employee Lost Time Injury	18	18	11
	Employee Lost Time Injury Frequency Rate	2.81	2.49	1.54
	Employee lost working days	714	1,234	850
	Employee Lost Time Injury Severity Rate	111	171	119
	Contractor Lost Time Injury	4	11	8

(1) CO₂ emissions after 2008 include emissions related to on-site vehicle and mobile equipment.

(2) Net emissions are equal to gross emissions minus acquired emissions rights due to offsets related to the use of alternative fuels.

(3) Active quarries within, containing or adjacent to areas designated for their high biodiversity value.

(4) Active sites with high biodiversity value where biodiversity management plans are actively implemented.

(5) Since 2011, coverage of wholly owned active quarries has expanded, to include both quarries attached to our cement plants and quarries for aggregates production in alignment with WBCSD/CSI definitions.

TITAN Group all activities - additional indicators

Description	2009	2010	2011
Total heat consumption, TJ	37,026	42,912	36,559
Total alternative fuels, metric tons	30,570	32,290	30,630
Total electrical energy consumption, GWh	1,504	1,639	1,437
Total water consumption ⁽¹⁾ , m ³	6.3 million	5.3 million	4.4 million
Specific water consumption, lt/ton cement			
based on specific year equity	447.8	362.3	340.1
based on 2009 equity	447.8	362.3	347.7
Total alternative raw materials consumption, metric tons	1.3 million	1.1 million	1.2 million
Total indirect ⁽²⁾ CO ₂ emissions, metric tons	1.1 million	0.9 million	0.8 million

(1) Decrease of total water consumption in 2011 is related to improved water management performance, reduced production and alignment with the WBCSD/CSI definitions about water withdrawal, consumption, and discharge.

(2) Indirect CO₂ emissions are related to emissions released during the production of the electrical energy consumed by TITAN facilities. To calculate such emissions, factors provided by the supplier of the electrical energy or other public available data are used. When such data are not available, the most recent relevant data provided by WBCSD/CSI are used.

Report Structure, Scope and Methodology

Background

TITAN Cement S.A. produced its first Social Report in 1983 and continued in the same reporting format till 2002. In 2003 TITAN Group adopted the Global Reporting Guidelines and proceeded to produce of its first Group-wide Corporate Social Responsibility and Sustainability Report aligned with international standards and best practices. Since 2005, TITAN has followed the Communication on Progress guidelines issued by U.N. Global Compact Initiative and its Report is registered accordingly to the U.N. Global Compact electronic platform. In 2010 TITAN received an invitation to register the annual report as an "Advanced level" Report and thus, it will follow the relevant procedure.

Defining Report content

Report content and material issues are examined in respect to relevant feedback received from stakeholders as well as developments within TITAN and the countries where it operates. CSR Committees work cross-functionally within TITAN to define reporting priorities at Group and local levels. To meet this aim GRI's Technical Protocol "Guidance on Defining Report Content" is consistently followed.

Independent Assessment and Verification

TITAN is committed to raising its level of transparency and improving reporting to stakeholders. Since 2007 independent assessment and report verification have been a core part of TITAN's procedure for continuous improvement. This process has covered all TITAN operations apart from the joint ventures in Turkey and the recently acquired plant in Kosovo, which is currently in the process of integrating TITAN standards and procedures. The 2011 Report has been independently verified by Det Norske Veritas Business Assurance (DNV) and the detailed verification statement is included in this section of the Report.

Scope of the 2011 Report

Data from all TITAN Group subsidiaries form the basis of this Report. The Report covers the full range of economic, social and environmental impacts of TITAN operations. More details on economic,

governance as well as principal subsidiaries are included in the 2011 Annual Report and Financial Bulletin. Thus, in the contents of this Report direct references to relevant sections are cited. The TITAN Group operates as a joint venture in Turkey and acquired a new cement plant in Kosovo at the end of December 2010. In this Report, data from Turkey have been incorporated in the Group Report, as well as data from Kosovo. Social performance indicators, particularly related to employment profile analysis by gender and age as requested by the most recent update of GRI G3.1, are partially disclosed as relevant recorded data are not fully verified, yet.

Specific information regarding gender representation in employment and management are also not reported as not still included in local reporting systems. TITAN has undertaken the commitment to further improve reporting structure and methodologies in both Turkey and Kosovo, starting from environmental and safety systems. This process continues for update and integration of social management systems that it is expected to be completed in 2012.

The Report covers key indicators of Group environmental performance, consolidated data from cement production and cement grinding plants and their attached quarries - as well as four quarries that, although not attached to a specific cement plant, provide raw material only to cement plants. The plant in Kosovo and its attached quarries, acquired in December 2010, are included in this year report, apart from the data relating to training, which have not been recorded according to TITAN standards, and for this reason were excluded from relevant tables and consolidated figures.

The reader should also bear in mind that: Performance related indices that are connected to a Group target, like specific air emissions for CO₂, dust, NO_x and SO_x, specific water consumption, as well as alternative fuel substitution, are calculated based on the equity held by the TITAN Group in 2009.

All other reported data are calculated based on the equity held by the TITAN Group in each specific year. These include data related to raw materials, energy and water consumption, as well as waste production.

In 2011, the TITAN Group produced 12.9 million tons of cement at its 14 operating

cement production facilities and two cement grinding plants. In addition, the eight Separation Technology production units produced 1 million tons of cement-like material.

Changes in the Report structure

The structure of this Report is similar to that followed in previous years, in order to achieve more consistency with long-term commitments and easier performance review. With feedback received from stakeholders changes have been made in certain sections as well as in the Table on page 11 titled "2011 TITAN Group Performance vs Targets 2015 and 2017", as well as on page 4 in the Table titled "Non-financial performance".

A more detailed presentation of TITAN's social and environmental efforts at local level focuses mainly on areas that have been identified as priorities in each case. This has been underlined as an expectation of the stakeholders and in this Report an effort has been made to improve further the presentation of TITAN's footprints by region.

Materiality and data accuracy

Figures for the water and biodiversity indicators were not revised for previous years in order to reflect the new definitions and coverage. More specifically for water, as the WBCSD/CSI Task Force on Water Management has compiled a draft of new definitions for KPIs and methodology of measuring-estimating and reporting, this report includes comprehensive figures for TITAN's performance: the total Water Withdrawal, and Water Consumption (total and per ton of cement produced) is included, whereas the total of Consumption and Discharge is equal to the total Withdrawal. For the Biodiversity (local impacts) KPIs, TITAN has decided to increase the "coverage" reporting, to include all quarries in the Group, regardless of types of raw materials and the end usage. In other words, this year's report provides the results of analysis for the total number of quarries for cement plant feed and aggregates production. It follows that the local impact KPIs according to CSI definitions ("Active quarry sites with high biodiversity value", "Active quarries sites with biodiversity management plans", "Sites with com-

munity engagement plans”, and “Sites with quarry rehabilitation plans”) are now used for reporting performance over the full range of quarry operations for the Group.

Reporting and feedback expected from stakeholders

This Report is directed to key stakeholders, namely employees, shareholders, customers, suppliers, government and regulatory authorities, local communities and NGOs. It is also directed to potential investors, analysts and any other interested party. Feedback from all is welcomed at the following web address: csr@titan.gr. For more information please visit our website:

www.titan.gr or contact: Maria Alexiou, TITAN Group CSR Manager, Secretary of the TITAN Group CSR Committee, at csr@TITAN.gr, 22a Halkidos St., 111 43 Athens, Greece

GRI and U.N. Global Compact

TITAN declares that this Report fulfils GRI (G3.1) requirements for application level “A+” and this has also been verified by external independent Auditors.

TITAN has started following GRI Reporting Guidelines since 2003 when the first Group CSR and Sustainability Report was issued.

Following the GRI Guidelines has supported overall improvements in both internal and external communications, measuring long-term performance and expanding scope of engaging with stakeholders.

In 2007, TITAN Group adopted GRI G3 Guidelines and continued to invest in continuous improvement. In 2011, a step further was made by following the recently revised edition of the Guidelines G3.1.

Since 2010, TITAN was invited as a U.N. Global Compact member to join the process of self-assessment according to the new criteria set by the U.N. Global Compact Blueprint regarding Communication on Progress. TITAN declares this Report as meeting advanced level according to the Global Compact Communication on Progress criteria. The process of independent assurance of this Report has also covered the assessment for UNGC criteria for CoP.

DNV Assurance Statement

TITAN Group CSR and Sustainability Report 2011

Introduction

Det Norske Veritas Italia s.r.l. ('DNV Business Assurance') was commissioned by the management of TITAN Cement Company S.A. ('TITAN') to carry out an assurance engagement on the company's 2011 Corporate Social Responsibility and Sustainability (CSR&S) Report ('the Report') with respect to the Global Reporting Initiative (GRI) 2011 Sustainability Reporting Guidelines Version 3.1. ('GRI G3.1') and to the AccountAbility 1000 Assurance Standard (2008) ('AA1000 AS 2008').

We developed an assurance engagement in the full version of the 2011 CSR&S Report.

Please refer to the specific section of the Report concerning the composition of the TITAN Group and the boundary of the Report.

TITAN is responsible for the collection, analysis, aggregation and presentation of information contained in the Report. Our responsibility in performing the work commissioned is solely towards the Management of TITAN and in accordance with the terms of reference agreed on with the company. The assurance engagement is based on the assumption that the data and information provided are complete, sufficient and authentic.

TITAN's stakeholders are the intended recipients of the assurance statement

Scope of Assurance

The scope of work agreed upon with TITAN includes the following:

- Sustainability performance data and activities related to the period between January 2011 and December 2011, as contained in the 2011 Report.
- Evaluation of the Report's alignment with the Sustainability Reporting Guidelines, GRI G3.1 reporting principles and the requirements for an 'A+' application level.
- Evaluation of the Report against the UN Global Compact criteria relating to an "Advanced Level" Communication on Progress.
- Evaluation of Accountability Principles and Performance Information (Type 2) for a Moderate level of assurance, in accordance with the AA 1000 Accountability Principles Standard 2008 and AA1000 AS 2008.
- Evaluation of specific sustainability performance information:

- Report's alignment with the WBCSD CSI performance measurement and reporting guidelines in relation to CO2 (version 2) and H&S performance: reliability of CO2 and H&S performance data for 2011, presented in the specific section of the Report, and associated assertions.

- Extent to which the Report meets the Global Compact criteria relating to an 'Advanced Level' Communication on Progress.

- Our verification was carried out in February, March, April and May 2012. As part of this engagement we visited:

- Athens Headquarters
- Zlatna Panega Cement, Bulgaria
- Usje Cementranica A.D., Fyrom

The economic data and information have been obtained from the certified consolidated financial statements of TITAN Cement Company S.A.

Verification Methodology

Our assurance engagement was planned and carried out in accordance with the DNV 'Protocol for Verification of Sustainability Reporting', which is available on our website at www.dnv.com/cr.

The Report was evaluated against the following criteria in accordance with the Protocol:

- Adherence to the principles of Inclusivity, Materiality and Responsiveness, as set forth in the AA1000 AS 2008.
- The GRI G3.1, specifically with respect to reporting principles and the requirements for the 'A+' Application Level.

We evaluated extent to which the Report meets the Global Compact criteria relating to an 'Advanced Level' Communication on Progress.

Assessing Report's alignment with the WBCSD CSI performance measurement and reporting guidelines for CO2 (version 2) and H&S we performed verification activity at Group and regional levels: Athens (Head Quarter), Bulgaria (Zlatna Panega Cement) and Fyrom (Usje Cementranica A.D.).

The verification of CO2 data and information was carried out in line with the WBCSD CSI 'CO2 Accounting and Reporting Standard for the Cement Industry (version 2)'.

The verification of biodiversity and land

stewardship performance information was carried out in line with the WBCSD CSI 'Guidelines on Quarry Rehabilitation (December 2011)'.

The verification of H&S performance information was carried out in line with the WBCSD CSI 'Safety in the Cement Industry: Guidelines for Measuring and Reporting (October 2008)'.

We reviewed the sustainability-related statements and claims as part of the verification made in the Report and we assessed the robustness of the underlying data management system, information flow and controls.

We examined and reviewed documents, data and other information made available to DNV Business Assurance by TITAN.

We performed sample-based audits of the following:

- mechanisms put into practice by TITAN for the implementation of its sustainability policies, as described in the Report;
- processes for determining the materiality of the contents to be included in the Report;
- processes for generating, gathering and managing the quantitative and qualitative data included in the Report;
- on-site data management processes and alignment with TITAN Group's strategy, policies and processes.

We interviewed the CSR Department and a group of 34 people within the Company involved in the operational management of matters covered in the 2011 CSR&S Report.

We interviewed a selection of representatives from various categories of TITAN's stakeholders:

- three from local "Public Authority"
- two from "Employees"
- one from "Supplier"
- two from "Local Community"
- one from "CSR Networking"

Conclusions

It is the opinion of DNV Business Assurance that the 2011 CSR&S Report is an accurate and impartial representation of the company's sustainability-related strategies, management systems and performance. We evaluated the Report's adherence to the following principles on a scale of 'Good', 'Acceptable' and 'Needs Improvement'.

STAT-14873-2012-CSR-ENG-DNV

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- Inclusivity

TITAN is committed to a continuous dialogue with its stakeholders in order to detect their needs and to embed corporate social responsibility in all TITAN operations, adapting policies and practices to local market priorities and realities. Over the years TITAN has developed and consolidated a well-organized process for communicating and interacting with its stakeholders. Stakeholder engagement process and activities have been strengthened and shared across the organization, at Group and local level. TITAN's priority of continuing to build upon local stakeholder engagement efforts in coming years is important.

The Report reflects the noteworthy efforts of the Company to continually extend its commitment to stakeholder dialogue and engagement, as well as the range of channels used to ensure inclusion of stakeholders' interests. These efforts are valuable in enabling stakeholders to understand how the outcomes of TITAN's engagement activities represent influence the company's continued review and development and of its corporate strategies.

TITAN is committed to creating added value in partnership with its key stakeholders by developing a wide range of projects and activities. We recommend that TITAN starts to measure and report the positive impacts of these efforts upon its stakeholder base.

In our view, the Report displays a 'Good' level of adherence to the principle of Inclusivity.

- Materiality

TITAN CSR&S Report represents a communication tool oriented to transparency which is intended to inform stakeholders of corporate strategies and future actions, as well as performance and achieved results.

We commend TITAN's efforts to enrich the Report's contents through the inclusion of issues and indicators that are material to its stakeholders, as well as its efforts to promptly report in accordance with best available practices (e.g. 2011 WBCSD/CSI new Guidelines for Quarry Rehabilitation).

The Report reflects the Company's alignment of its materiality determination process with its processes for organizational decision-making and strategy development.

TITAN regularly conducts materiality assessment processes to identify relevant issues for its operations and its key stakeholders.

We believe that it is important to ensure that stakeholders are easily able to understand how the contents of the Report relate to the outcomes of stakeholder engagement activities developed during the reporting year and feedback received from stakeholders on Report itself.

TITAN's commitment to communicating its sustainability activities and performance through the issuance of locally developed CSR Reports is noteworthy. In our opinion, the role of the Group CSR function plays an important role in the coordination and coaching of local CSR champions in their efforts to identify and disclose information that is relevant to local stakeholders.

In our view, the Report displays a 'Good' level of adherence to the principle of Materiality.

- Responsiveness

TITAN through its CSR&S Report intends to be accountable for its policies, strategies and performance in relation to the issues considered relevant to its stakeholders. In accordance with its commitment to pursue a strategically oriented sustainable business model, TITAN integrates stakeholder views in its decision making and thus continuously develops its action plans and initiatives. The Report reflects the TITAN's efforts to respond to the main interests of stakeholders as well as how TITAN addresses such concerns.

TITAN has in place a process to communicate with stakeholders that is applied across the organization and the necessary competencies and resources to achieve its commitments. In order to ensure that TITAN continues to be able to respond to CSR&S issues and impacts in an accountable and comprehensive way that is consistent with stakeholder interests and expectations, it is important that TITAN carry on with its Group CSR training, guidance and support. This will enable the company to continue improving its engagement initiatives at local level and ensure that they remain responsive to stakeholder needs.

In our view, the Report displays a 'Good' level of adherence to the principle of Responsiveness.

- Completeness

TITAN reports extensive information which enables stakeholders to understand the company's sustainability performance and the context within which to analyse its performance. Information presented in the

Report reflects TITAN's commitment to transparency and its effort to not omit relevant information that would inform stakeholder assessments or that would reflect significant economic, environmental, and social impacts.

TITAN's substantial level of activity in the area of materiality assessment and stakeholder engagement enables the company to report on a wide range of sustainability topics.

We commend TITAN's commitment to various global CSR&S initiatives, such as the UN Global Compact Initiative, the Cement Sustainability Initiative of WBCSD and its engagement in the UN Global Compact process for Communicating Progress. Such activities will challenge TITAN to continue to develop and improve its CSR&S programs and performance as well as its commitment to disclosure of information that is material to its stakeholders.

TITAN has developed a variety of internal risk process, resources, and tools for managing different types of risk across

the company. These enable TITAN to comprehensively and consistently map its risks against its worldwide business activity. We recommend that Titan considers developing an umbrella risk assessment and management model to harmonize its risk management approach and maximize the positive financial and operational impact of managing risk in an integrated manner. We recall the importance of the results TITAN's risk assessment activity in shaping TITAN's CSR&S programmes and the development of communication of information that is material to stakeholders.

In our view, the Report displays a 'Good' level of adherence to the principle of Completeness.

- Principle of report quality

The Report reflects the company's commitment to represent activities and results relevant to the reporting year, both balanced and consistent with the organizational strategies.

The Report is a complete and impartial description of TITAN's sustainability impact.

In our view, the Report displays a 'Good' level of adherence to the principle of Neutrality.

The information contained in the Report is accurate and detailed. From our analysis of the data and organizational processes that generate them, we conclude that the data

included in the Report are the results of stable and repeatable activities.

In our view, the Report displays a 'Good' level of adherence to the principle of Accuracy.

The data included in the Report, the subject of our verification, were found to be identifiable and traceable; the personnel responsible for the data were able to demonstrate the origin and interpretation of the data in a reliable manner.

Over the years, the data collection system for environmental and health & safety issues has become mature and robust.

The data collection methods and processes for human resources, employees and certain types of social data need to be streamlined and automated in order to guarantee full data reliability.

In our view, the Report displays an 'Acceptable' level of adherence to the principle of Reliability.

Findings in relation to specific sustainability performance information, with a moderate level of assurance.

We assessed at Country and Site levels - Zlatna Panega (Bulgaria) and Usje Cementanica A.D - adequacy and effectiveness of the processes being implemented to collect, aggregate, analyse and report CO2 and H&S performance data.

This was carried out mainly through interviews with performance data owners and the review of data repositories and performance records. These visits also enabled DNV Business Assurance to assess compliance by the sites visited with Group procedures, processes and guidance. The assessment of data and information reliability was based on explicit assertions regarding sustainability performance on material issues and included a review of their completeness and accuracy. It also included a review of the methods, practices and tools used in the collection, aggregation/calculation, analysis, internal quality control and reporting of data and information, as it is transferred, managed and stored at different levels in the organization.

It is our opinion that the information and data communicated in the Report are reliable.

Regarding the alignment of reported information with the WBCSD-CSI guidelines, DNV also concludes that:

- CO2 - Boundary setting (at Group and site levels) meets the mandatory requirements of the relevant performance measurement and reporting standards and guidelines. Testing of the reporting systems currently in place demonstrated a robust and well managed

process for collection, management and reporting of CO2 performance data at Group level and in the sites visited.

- H&S - Robust corporate procedures and guidelines for H&S data collection, management and reporting exist at Group level. These are aligned with the principles and fulfil the requirements of relevant measurement and reporting guidelines. Corporate procedures and guidelines are generally well known and implemented in the countries and sites visited. There was good evidence of an improved process for internal verification and revision of reported data.

Based on the findings of this assurance engagement, the following recommendations are made to encourage continual improvement, not affecting the conclusions above:

- continue to raise awareness and internally verify compliance with Group data management and reporting guidelines and processes;
- update the internal reporting procedures at site level with information regarding electricity consumption.

Since 2010 TITAN started to expand its efforts for selfassessment by engaging in the UN Global Compact process for Communicating Progress. We assessed the extent to which the Report meets the Global Compact criteria relating to an 'Advanced Level' Communication on Progress.

The 2011 CSR&S Report meets the criteria for a Communication on Progress of 'Advanced Level'. Some recommendations were made to encourage ongoing improvement and a full description against the 24 GC Advanced Criteria.

No systematic or material errors have been detected for data and information verified in accordance with AA1000AS (2008).

DNV confirms that the GRI Application Level "A+" has been attained in reference to the various application levels defined in the GRI G3.1.

Opportunities for Improvement

The following is a summary of the observations and prospects reported back to the Management of TITAN. These do not, however, affect our conclusions regarding the Report, and they are indeed consistent with the management objectives already in place.

Over the years, TITAN has developed a strong commitment and noteworthy activities to drive sustainability across the value chain and with its stakeholders: we suggest starting to measure positive impacts and "added value" created.

The Report disclosures of TITAN's environmental expenditure: in order to better disclose the Company's commitment and efforts in the environmental area it is important to specify the criteria for the reporting and interpretation of the investments and costs in a more detailed manner.

The LA2 indicator has been partially reported. We urge TITAN to establish systems to cover and disclose all information according to the GRI 3.1.

DNV's Competence and Independence

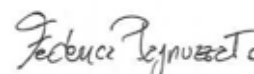
DNV is a leading provider of sustainability services, including the verification of sustainability reports. Our environmental and social assurance specialists operate in over 100 countries.

DNV Business Assurance was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV Business Assurance maintains complete impartiality toward stakeholders interviewed during the verification process. DNV Business Assurance expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

For Det Norske Veritas Italia

Federica Pagnuzzato

Project Manager



Antonio Astone

Reviewer




Agrate Brianza (MB), 2012-05-29


STAT-14873-2012-CSR-ENG-DNV

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**Report
Application
Level**

		C	C+	B	B+	A	A+
Standard Disclosures	Profile Disclosures	Report on: 1.1 2.1 - 2.10 3.1 - 3.8, 3.10 - 3.12 4.1 - 4.4 , 4.14 - 4.15	Report Externally Assured	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17	Report Externally Assured	Same as requirement for Level B	Report Externally Assured 
	Disclosures on Management Approach	Not required		Management Approach Disclosures for each Indicator Category		Management Approach disclosed for each Indicator Category	
	Performance Indicators and Sector Supplement Performance Indicators	Report fully on a minimum of any 10 Performance Indicators, including at least one from each of: social, economic, and environment.**		Report fully on a minimum of any 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility.***		Respond on each core and Sector Supplement* indicator with due regard to the materiality Principle by either: a) reporting on the indicator or b) explaining the reason for its omission.	

* Sector supplement in final version

** Performance Indicators may be selected from any finalized Sector Supplement, but 7 of the 10 must be from the original GRI Guidelines

*** Performance Indicators may be selected from any finalized Sector Supplement, but 14 of the 20 must be from the original GRI Guidelines

see www.titan.gr (CSR section, Investor relations section)

see 2011 TITAN GROUP Annual Report and Financial Results

■ Indicates core indicators











■ Indicates additional indicators

■ Indicates core indicators that are partially met








GRI G3.1 Disclosure Section

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Strategy and Analysis	1.1 – Statement from the most senior decisionmaker of the organization (e.g., CEO, chair or equivalent senior position) about the relevance of sustainability to the organization and its strategy.	p. 6,  p.6																											
	1.2 – Description of key impacts, risks, and opportunities	p. 5-6, 8-9, 12-16, 18-21, 24, 26, 28, 32,  p. 8-9, 11																											
Organizational Profile	2.1 – Name of the organization	TITAN Group																											
	2.2 – Primary brands, products, and/or services	p. 4-5, 12-13, 23,  p. 17																											
	2.3 – Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	p. 10, 14-15,  p. 3-4																											
	2.4 – Location of organization's headquarters	22A Halkidos st., 111 43 ATHENS, GR																											
	2.5 – Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	p. 4-5, 10,  p. 3-4																											
	2.6 – Nature of ownership and legal form	TITAN Group parent company is TITAN Cement Co. S.A.																											
	2.7 – Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	p. 4-5, 10,  p. 3-4, 16																											
	2.8 – Scale of the reporting organization	 p. 5, 8-9, 14																											
	2.9 – Significant changes during the reporting period regarding size, structure, or ownership	p. 5, 10, 14-15, 20, 24,  p. 5-9																											
	2.10 – Awards received in the reporting period	p. 18, 26, 28, 31-33, 46-47, 51																											
Report Parameters	Report profile	3.1 – Reporting period (e.g., fiscal/calendar year) for information provided	1.1.2011 - 31.12.2011																										
		3.2 – Date of most recent previous report	21. 5. 2011																										
		3.3 – Reporting cycle (annual, biannual, etc.)	The reporting cycle is annual																										
		3.4 – Contact point for questions regarding the report or its contents	p. 57																										
	Report scope and boundary	3.5 – Process for defining report content	p. 56-57																										
		3.6 – Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).	p. 4-5, 10-11, 56-57,  79 - 80																										
		3.7 – State any specific limitations on the scope or boundary of the report	p. 56-57																										
		3.8 – Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	p. 56-57																										
		3.9 – Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	p. 10-11, 56-57																										
		3.10 – Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/ acquisitions, change of base years/periods, nature of business, measurement methods).	p. 10-11, 14, 16, 20, 24, 56-57																										
		3.11 – Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	p. 8-11, 14, 35																										
GRI Content Ind. Assurance	3.12 – Table identifying the location of the Standard Disclosures in the report.	p. 62-67																											
	3.13 – Policy and current practice with regard to seeking external assurance for the report	p. 4, 56-57																											
Governance, Commitments and Engagement	Governance	4.1 – Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	p. 14-15,  p. 34-36, 40-42																										
		4.2 – Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement).	The Chairman of the Board is a non-executive member AR p. 34-36, 38-39																										
		4.3 –For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	<table><tr><td>Corporate Governance</td><td>Total Number</td><td></td><td></td></tr><tr><td>Independence of Directors towards Management</td><td></td><td>Male</td><td>Female</td></tr><tr><td>Independent/Non-Executive Directors</td><td>8</td><td>8</td><td>-</td></tr><tr><td>Chairman</td><td>1</td><td>1</td><td></td></tr><tr><td>CEO</td><td>1</td><td>1</td><td></td></tr><tr><td>Executive Directors</td><td>4</td><td>3</td><td>1</td></tr><tr><td>Total</td><td>14</td><td>13</td><td>1</td></tr></table>	Corporate Governance	Total Number			Independence of Directors towards Management		Male	Female	Independent/Non-Executive Directors	8	8	-	Chairman	1	1		CEO	1	1		Executive Directors	4	3	1	Total	14
Corporate Governance	Total Number																												
Independence of Directors towards Management		Male	Female																										
Independent/Non-Executive Directors	8	8	-																										
Chairman	1	1																											
CEO	1	1																											
Executive Directors	4	3	1																										
Total	14	13	1																										

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Governance	Governance	4.4 – Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	 p. 42-44 Following an application submitted by any Shareholder to the Company within at least 5 full days prior to the General Meeting, the Board of Directors shall be obliged to provide the General Meeting with the requested specific information on the Company's affairs, to the extent that it may be useful for the actual assessment of the items on the agenda. No formal mechanism is currently operating to provide recommendations or direction to the highest governance body by employees.
		4.5 – Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	 p. 33 - 39 Living TITAN values is estimated as one of the key criteria of annual performance appraisals of all managers (including top executives) and a number of employees. Moreover, CSR advocacy is one of the three criteria and conditions considered for career development opportunities.
		4.6 – Processes in place for the highest governance body to ensure conflicts of interest are avoided.	 p. 36 -37, 40, 42 Members of the Board of Directors are obliged to immediately disclose to the Board of Directors their interests which may arise from Company transactions and any other conflict of interests with those of the Company or its related parties. Given their access to privileged information, they are obliged not to use such information to directly or indirectly purchase or sell shares in the Company or related companies which are traded on a regulated market for their own benefit or for members of their family. They are further obliged not to disclose that information to other persons nor exhort third parties based on said privileged information they have to purchase or sell shares in the Company or its related companies which are traded on a regulated market.
		4.7 – Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	p. 21,  p. 33
		4.8 – Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	p. 6, 14-15, 17-18, 21, 56-57 The Code of Conduct covers all key social and environmental issues, like human rights, bribery and corruption, climate change and supply chain management
		4.9 – Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	p. 14-16,  p. 31-33, 40 - 41
		4.10 – Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	 p. 37 - 38 The evaluation of the Board and the Board Committees is made annually by the Board members, by answering a detailed assessment questionnaire, the results of which are presented to Board and discussed in Board session(s). The questionnaire is divided in sections referring to the composition (size, competencies, mix of skills of the Board members etc), structure, work procedures and effectiveness of the Board and the Board Committees as well as on the Board's consideration and contribution to shareholder value, Company strategy and values etc. (a) on the Group's operating results and net profits and (b) on the performance of the Company's share compared to the performance of the merchantable shares of other high cap companies in the building materials sector internationally and (c) the performance of the Company's share in relation to the performance of the ATHEX FTSE 20, ATHEX FTSE 40 and FTS Eurofirst 300 indexes.
	Commitments to external initiatives	4.11 – Explanation of whether and how the precautionary approach or principle is addressed by the organization (the organization's approach to risk management in operational planning or the development and introduction of new products)	p. 24-33 and 44-52,  11, 27 - 29, 40 - 41
		4.12 – Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	p. 4, 8
		4.13 – Memberships in associations (such as industry associations) and/or national/international advocacy organizations	p. 5, 70
Stakeholders' engagement	Stakeholders' engagement	4.14 – List of stakeholder groups engaged by the organization	p. 16-17
		4.15 – Basis for identification and selection of stakeholders with whom to engage	p. 16
		4.16 – Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	p. 16-17
		4.17 – Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	p. 16-17, 23

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Disclosure on Management Approach			
Economic	Economic performance	EC1 – Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	p. 10, 13  p. 5, 8-9, 13 -15
		EC2 – Financial implications and other risks and opportunities for the organization's activities due to climate change.	p. 14 -17, 34-35  p. 28
		EC3 – Coverage of the organization's defined benefit plan obligations.	 p. 65-66
		EC4 – Significant financial assistance received from government	No financial support was received in 2011
	Market presence	EC5 – Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	p. 21
		EC6 – Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	p. 23
		EC7 – Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	p. 21 All senior managers are hired from local community. Expatriates support the integration of new plants or acquisitions into the Group. In 2011, only 2 senior managers were expatriates.
	Indirect economic impact	EC8 – Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, inkind, or pro bono engagement.	p. 13
		EC9 – Understanding and describing significant indirect economic impacts, including the extent of impacts.	p. 12-13, 17
	Disclosure on Management Approach – Environmental		
Environmental	Materials	EN1 – Materials used by weight or volume	p. 12-13, 38-39
		EN2 – Percentage of materials used that are recycled input materials	p. 38-41
	Energy	EN3 – Direct energy consumption by primary energy source	p. 13, 38-39, 64
		EN4 – Indirect energy consumption by primary source	p. 13, 38-39, 64 Indirect energy consumption is related only to electrical energy consumed for production activities. Taking into account that electrical energy consumption represents a relative small percentage of 12-13% of the total energy consumed and the overall unavailability of reliable information to calculate indicators like the amount of primary fuels consumed for the production of the electrical energy, such indicators are not provided in this report.
		EN5 – Energy saved due to conservation and efficiency improvements	p. 38-39, 46
		EN6 – Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	p. 38-39, 46, 48
		EN7 – Initiatives to reduce indirect energy consumption and reductions achieved.	p. 38-39
	Water	EN8 – Total water withdrawal by source.	p. 37
		EN9 – Water sources significantly affected by withdrawal of water.	p. 37, 50
		EN10 – Percentage and total volume of water recycled and reused.	p. 37
	Biodiversity	EN11 – Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	p. 42-43, 54
		EN12 – Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	p. 42-43, 47, 51, 54
		EN13 – Habitats protected or restored	p. 42-43, 50, 51
		EN14 – Strategies, current actions, and future plans for managing impacts on biodiversity.	p. 42-43
		EN15 – Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	p. 42
	Emissions, effluents and waste	EN16 – Total direct and indirect greenhouse gas emissions by weight.	p. 13, 34-35, 55, 64
		EN17 – Other relevant indirect greenhouse gas emissions by weight.	p. 34-38
		EN18 – Initiatives to reduce greenhouse gas emissions and reductions achieved.	p. 9, 24, 34-35, 44-46,
		EN19 – Emissions of ozone-depleting substances by weight.	Not relevant to TITAN Group operations
		EN20 – NO _x , SO _x , and other significant air emissions by type and weight	p. 36, 54
		EN21 – Total water discharge by quality and destination	p. 37
		EN22 – Total weight of waste by type and disposal method	p. 40-41 The majority of waste produced (167,830 t/year) are recycled off-site, the remaining amount of waste (56,460t/year) is landfill.
		EN23 – Total number and volume of significant spills	No significant spills have been recorded throughout the year
		EN24 – Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	Not relevant to TITAN Group operations
		EN25 – Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	p. 37, 42

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Disclosure on Management Approach		
Environmental	Products and services	<p>EN26 – Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation. p. 12-13, 34, 44, 47-49</p> <p>EN27 – Percentage of products sold and their packaging materials that are reclaimed by category. All packaging materials used for bagged cement (i.e. bags, pallets) are reclaimed at delivery or reused and recycled by customers.</p>
	Compliance	<p>EN28 – Monetary value of significant fines and total number of non-monetary sanctions or noncompliance with environmental laws and regulations. The monetary value of all fines related to environmental issues was €43,138</p>
	Transport	<p>EN29 – Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce. All transportation means used by TITAN Group are monitored and controlled so as to reduce to a minimum environmental impacts. Priority is given to transportation of goods by train and boat, allowing optimization of resources and less impact on the environment. TITAN operates relevant terminals and railways to meet this aim.</p>
	Overall	<p>EN30 – Total environmental protection expenditures and investments by type. p. 3-4, 10</p>
	Disclosure on Management Approach	
Labor Practices and Decent Work	Employment	<p>LA1 – Total workforce by employment type, employment contract, and region, broken down by gender. p. 20-21</p> <p>LA2 – Total number and rate of new employee hires and employee turnover by age group, gender, and region. p. 20-21 Employee turnover per country in 2011 was: Albania: 10%, Bulgaria 11.4%, Egypt: 2.7%, F.Y.R.O.M: 8.1%, Greece: 17%, Kosovo: 8.2%, Serbia 5.5%, Turkey: 9.4%, U.S.A.: 15.3%</p> <p>LA3 – Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation. p. 20</p> <p>LA15 – Return to work and retention rates after parental leave, by gender. p. 20 TITAN follows the Greek law which prevents any kind of dismissal after parental leave.</p>
		<p>LA4 – Percentage of employees covered by collective bargaining agreements. All employees are covered by collective bargaining agreements.</p> <p>LA5 – Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements. TITAN Group follows E.U. and national legislation in respect to notice period.</p>
	Occupational Health and Safety	<p>LA6 – Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs. p. 15</p> <p>LA7 – Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender. p. 18-19</p> <p>LA8 – Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases. p. 17-18, 27, 30, 32</p> <p>LA9 – Health and safety topics covered in formal agreements with trade unions. p. 18</p> <p>LA10 – Average hours of training per year per employee by gender, and by employee category. p. 21-22</p>
		<p>LA11 – Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings. p. 21-22, 24-25, 27, 31, 33</p> <p>LA12 – Percentage of employees receiving regular performance and career development reviews, by gender. p. 20-21 All female managers as presented in p. 20 and a significant number of female professionals in different Group functions (like Investor Relations, Finance, etc)</p>
	Diversity & equal opportunity	<p>LA13 – Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity. See GRI indicator 4.3 and p. 21-22.</p>
	Equal	<p>LA14 – Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation. To retain high qualified personnel TITAN follows as standard practice a policy which defines basic salary in each country along with market conditions and collective agreements when applicable. No difference is possible for the same job.</p>

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Disclosure on Management Approach		
Human Rights	Investment and procurement practices	<p>HR1 – Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.</p> <p>p. 20-21 No significant investment agreement took place in 2011. All major projects are completed.</p> <p>HR2 – Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and actions taken. Principles 1, 2, 3, 4, 5, and 6</p> <p>p. 20-21, 23 All contractors providing services in TITAN premises are screened for health and safety and within the scope of this screening respect for human rights is also examined</p> <p>HR3 – Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.</p> <p>p. 20-21 approx. 30% and all new hires</p>
	Non-discrimination	<p>HR4 – Total number of incidents of discrimination and corrective actions taken.</p> <p>No such case was reported in 2011.</p>
	Freedom of Association and Collective Bargaining	<p>HR5 – Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.</p> <p>Unions are established and operate freely in all countries including Albania and Egypt.</p>
	Child labor	<p>HR6 – Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.</p> <p>TITAN Group employs only people over 18 years old. All contractors are screened for child labor.</p>
	Forced and Compulsory Labor	<p>HR7 – Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of all forms of forced or compulsory labor.</p> <p>No such risk has been identified from relevant assessments at TITAN operations including long-term contractors.</p>
	Security Practices	<p>HR8 – Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.</p> <p>All security personnel is regularly trained.</p>
	Indigenous Rights	<p>HR9 – Total number of incidents of violations involving rights of indigenous people and actions taken.</p> <p>No violations have occurred at any TITAN operations related to indigenous people.</p>
	Assessment	<p>HR10 – Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.</p> <p>30% of our operations (Bulgaria, F.Y.R.O.M., Albania, Serbia).</p>
	Remediation	<p>HR11 – Number of grievances related to human rights filed, addressed, and resolved through formal grievance mechanisms.</p> <p>2 cases were reported in Egypt and were properly addressed and resolved.</p>
Disclosure on Management Approach - Society		
Society	Local Communities	<p>S01 – Percentage of operations with implemented local community engagement, impact assessments, and development programs.</p> <p>p.15-17, 23</p> <p>S09 – Operations with significant potential or actual negative impacts on local communities.</p> <p>p. 12-13</p> <p>S010 – Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.</p> <p>p. 21</p>
	Corruption	<p>S02 – Percentage and total number of business units analyzed for risks related to corruption.</p> <p>p. 15</p> <p>S03 – Percentage of employees trained in organization's anti-corruption policies and procedures.</p> <p>On an annual basis approximately 25% of employees and new hires are trained in organizations, anti-corruption policies and procedures.</p> <p>S04 – Actions taken in response to incidents of corruption.</p> <p>No such incident has been recorded in 2011</p>
	Public Policy	<p>S05 – Public policy positions and participation in public policy development and lobbying.</p> <p>p. 5-6, 8-9, 17-18, 21, 31, 33</p> <p>S06 – Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.</p> <p>Contributions to political parties, politicians and related institutions are not permitted according to TITAN Group Code of Conduct, except in the U.S.A. where such contributions are allowed by law and where TITAN follows the relevant legal framework.</p>
	Anti-Competitive Behavior	<p>S07 – Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.</p> <p>None</p>
	Compliance	<p>S08 – Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.</p> <p>No fine or non-monetary sanction has been imposed for non-compliance</p>

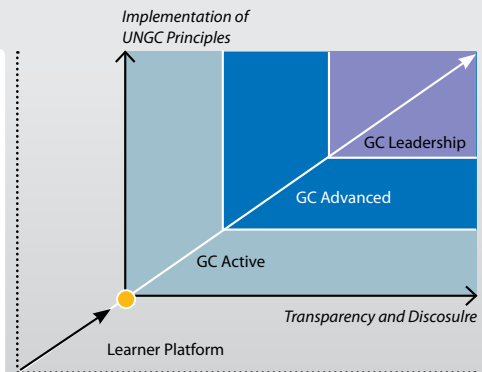
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Disclosure on Management Approach – Product Responsibility			
Product Responsibility	Customer Health and Safety	<p>PR1 –Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.</p> <p>PR2 – Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.</p>	<p>All products are assessed accordingly for health and safety impacts during development, production, transportation and use</p> <p>None</p>
	Product and Service Labeling	<p>PR3 – Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.</p> <p>PR4 –Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.</p> <p>PR5 – Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.</p>	<p>Material Safety Sheets accompany all TITAN products, and for bagged cement health and safety information is printed on the bag. Relevant information for ready-mix concrete loads is included in the invoice issued and delivered to each customer</p> <p>None</p> <p>p. 17, 23</p>
	Marketing Communications	<p>PR6 – Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.</p> <p>PR7 – Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.</p>	<p>TITAN follows relevant developments in legislation, international standards and voluntary codes, so as to continuously adopt its practices and ensure compliance with best practice</p> <p>None</p>
	Customer Privacy	<p>PR8 – Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.</p>	<p>None</p>
	Compliance	<p>PR9 – Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services.</p>	<p>None</p>



Advanced criteria summary

Strategy Governance and Engagement	<p>High-level sustainability strategy in line with GC principles</p> <p>Decision-making processes and systems of governance for corporate sustainability</p> <p>Stakeholder engagement</p>
U.N. Goals and Issues	<p>Actions to support broader U.N. goals and issues</p>
Human Rights Implementation	<p>Commitments, strategies or policies on human rights</p> <p>Management systems for the integration of human rights principles</p> <p>Monitoring and evaluation mechanisms for human rights integration</p> <p>Outcomes of human rights integration</p>
Labor Principles Implementation	<p>Commitments, strategies or policies on labor</p> <p>Management systems for the integration of labor principles</p> <p>Monitoring and evaluation mechanisms for labor principles integration</p> <p>Outcomes of labor principles integration</p>
Environmental Stewardship Implementation	<p>Commitments, strategies and policies on environmental stewardship</p> <p>Management systems for the integration of the environmental principles</p> <p>Monitoring and evaluation mechanisms for environmental stewardship</p> <p>Outcomes of environmental principles integration</p>
Anti-Corruption Implementation	<p>Commitments, strategies or policies on anti-corruption</p> <p>Management systems for the integration of the anti-corruption principle</p> <p>Monitoring and evaluation mechanisms for anti-corruption integration</p> <p>Outcomes of integration of the anti-corruption principle</p>
Value Chain Implementation	<p>Implementation of the Global Compact principles in the value chain</p>
Transparency and Verification	<p>Profile and context of operation of the company</p> <p>Transparency and disclosure high standards</p> <p>Independently verified by a credible third-party</p>



Acronym or abbreviation**Explanation**

AA 1000 APS	AccountAbility 1000 Accountability Principles Standard
AA 1000 SES	AccountAbility 1000 Stakeholder Engagement Standard
AF	Alternative Fuels
ASE	Athens Stock Exchange
ASTD	American Society for Training and Development
ATEX	ATmospheres EXplosives - French acronym
BASD	Business Action for Sustainable Development
BOD	Board of Directors
BU	Business Unit
CEO	Chief Executive Officer
CJSI	Concrete Joint Sustainability Initiative
CoC	Code of Conduct
CP	Career Preheater
CSI	Cement Sustainability Initiative
CSR	Corporate Social Responsibility
DMME	Division of Mining Mineral and Energy
EBRD	European Bank for Reconstruction and Development
EEAA	The Hellenic Recovery and Recycling Corporation -Greek acronym
EIAS	Environmental Impact Assessment Study
ELOT	The Hellenic Organization for Standardization - Greek acronym
EM	Eastern Mediterranean
EMS	Environmental Management Systems
EPA	Environmental Protection Agency
ERT	European RoundTable of Industrialists
ESG issues	Environmental, Social and Governance issues
ESIA	Environment and Social Impact Assessment
GC	Global Compact
GET	Group Engineering and Technology
GHG emissions	GreenHouse Gas emissions
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit The German Society for International Cooperation -German acronym
GRI	Global Reporting Initiative
H&S	Health and Safety
HR	Human Resources
IBAT	Integrated Biodiversity Assessment Tool
ICC	International Chamber of Commerce
IDP	Individual Development Priorities
IFC	International Finance Corporation
IPPC	Integrated Pollution Prevention Control
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
KPI	Key Performance Indicator
LD	Liaison Delegate
LTI	Lost Time Injury
LTIFR	Lost Time Injury Frequency Rate
NGO	Non Governmental Organization
NRMCA	National Ready-Mixed Concrete Association
OH&S	Occupational Health and Safety
OHSAS	Occupational Health and Safety Assessment Series
PEF	Processed Engineered Fuel
QMP	Quarry Management Plan
R&D	Research and Development
RDF	Refused Derived Fuel
REC	Regional Environmental Center
RP	Rehabilitation Plan
SA 8000	Social Accountability 8000
SE	Stakeholder Engagement
SEE	Southeastern Europe
SEE&EM	Southeastern Europe and Eastern Mediterranean
SNCR	Selective Non-Catalytic Reduction
SRF	Solid Recovered Fuel
ST	Separation Technology
STAR	Supervisor Training and Resources
STEP	Self-Training E-learning Program
TAL	TITAN America Leadership
U.N.	United Nations
UNEP	United Nations Environment Program
UNGC	United Nations Global Compact
VTCA	Virginia Transportation Construction Alliance
WBCSD	World Business Council for Sustainable Development

The power of collective action

TITAN memberships and cooperations

United Nations Global Compact	http://www.unglobalcompact.org/
European RoundTable of industrialists (ERT)	http://www.ert.eu/
World Business Council for Sustainable Development (WBCSD)	http://www.wbcsd.org/
WBCSD / Cement Sustainability Initiative	http://www.wbcsd.org/
Cembureau - The European Cement Association	http://www.cembureau.be/
Global Reporting Initiative	https://www.globalreporting.org/
CSR Europe - The European business CSR network	http://www.csreurope.org/
Hellenic Network for Corporate Social Responsibility	http://www.csrhellas.gr/
Hellenic Federation of Enterprises (SEV)	http://www.sev.org.gr/
American-Hellenic Chamber of Commerce	http://www.amcham.gr/
Hellenic Institute for Occupational Health and Safety (EL.IN.Y.A.E.)	http://www.elinyae.gr/
Industrial Education Vocational Training Center - Hellenic Federation of Enterprises	http://www.ivepe.gr/
The Portland Cement Association (PCA)	http://www.cement.org/

Acknowledgements

The contents and structure of this Report are the responsibility of the Board of Directors' Corporate Social Responsibility Committee. In addition all Group Departments and numerous individuals made their own valuable contribution and we would like to thank them all. Special thanks to all our employees and stakeholders who have participated in the assessment processes providing feedback and helping our continuous improvement.

We also like to thank our auditors for their comments and suggestions which have contributed in our efforts to integrate best practices in our Report.

