# Alliance

**Construction Materials Limited** 

# A CONCRETE commitment to the Sustainable Growth of Hong Kong



Sustainability Report 2009 - 2010



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# **About This Report**

Alliance Construction Materials Limited (Alliance) is taking another step in its sustainability journey by publishing its first Sustainability Report 2009 - 2010 which highlights the latest Corporate Sustainability (CS) initiatives and performance.

This report uses the Global Reporting Initiative (GRI) G3 Guidelines as our starting reference point. It constitutes our CS Review since we must have a greater understanding of where we are today in order to move towards where we want to be tomorrow. As such we hope to report against the GRI G3 Guidelines more fully in our next report.

The Company's approach and good practices for incorporating social, environmental and economic considerations into our operations are presented along with case studies from a variety of programs and initiatives that have been implemented. Relevant objectives, targets and performance results are organized into graphs and charts to enable comparability over time and for benchmarking with local and regional best practice.

This report focuses on Alliance's Hong Kong operations, and presents a consolidation of our CS practices and challenges faced by the company and the industry sector. The report covers the company's performance for 2009-10 and demonstrates Alliance's CS achievements as well as how the Company has been engaging with its stakeholders.

Prior to compiling this report, a comprehensive CS performance review and stakeholder engagement was undertaken in order to define the scope and topics to be included. Stakeholder opinion was incorporated in order to present a balanced picture between the company's perspective and external views.

This report begins with an overview of the Company followed by an overview of our CS values and management approach of Alliance. Since stakeholders are considered an integral component of Alliance's sustainable business approach, a section is dedicated to detailing the engagement process, and the way in which stakeholders' opinion is incorporated into the company's CS development. The main body of the report is organized into four sections namely: Workplace, Community, Marketplace, and Environment. Each of these sections consists of statistics and case studies highlighting the relevant issues.

An electronic version of this report is available on Alliance's web site for download.

Website: www.concrete.hk

# Message from CEO



"to sustain our business we will strive for a balance between economic, social and environmental considerations in any decisions we make."

Welcome to the first Corporate Sustainability (CS) Report of Alliance. It is an important milestone for us to describe what sustainability means to our business and what we are doing to manage and improve our performance. For our stakeholders the CS Report provides a continuous platform for dialogue and allowing them to assess our sustainability performance. Internally the reporting initiative fits into a broader process for setting organizational strategy, implementing action plans, and assessing outcomes for our continual improvement.

While this is our first CS Report, the concept of sustainable business practices is not new to us. It is documented in our Guiding Principles that to sustain our business we will strive for a balance between economic, social and environmental considerations in any decisions we make. Being part of the HeidelbergCement Group we also support the commitment spelled out in the Sustainability Ambitions 2020. While determining our long term vision we place highest priority on: health and safety; a commitment to protect the climate; to further reduce our environmental impacts; while proactively involving ourselves in local community in order to be a good neighbor, and driving good practices within Alliance and the industry towards sustainable construction.

In this report we outline some successes we had during the reporting period, the challenges we are facing and the opportunities we may have for our business growth. However much emphasis is also made on what our responsibilities are and where we should focus on for the future. The Stakeholder Engagement Exercise we did earlier this year allowed us to know where we are falling short of their expectations. Their valuable input is already beginning to shape our future direction.

As the major construction materials supplier in Hong Kong we recognize that we have a leadership role in the industry, driving good practices and leading by examples; as such this has become part of our long term CS goal. To ensure that our CS initiatives are managed systematically we are integrating CS responsibilities into our internal management systems. In addition, we will seek all opportunities to build strong connections with the community as we endeavor to more favorably impact society and the environment.

We have made an important step publishing our first CS Report in 2010. It is our intention to issue this report every two years. I personally consider this report to be more than a static document, but also an invitation to create dialogue. Whether it is the exchange of innovative ideas with the customers and other business partners; communicating with our employees and potential employees about the working environment at Alliance; or listening to the communities where we operate about how to be a good neighbor. The continued dialogue and mutual understanding will benefit all and support the sustainable development of Hong Kong.



David Hogan
Chief Executive Officer





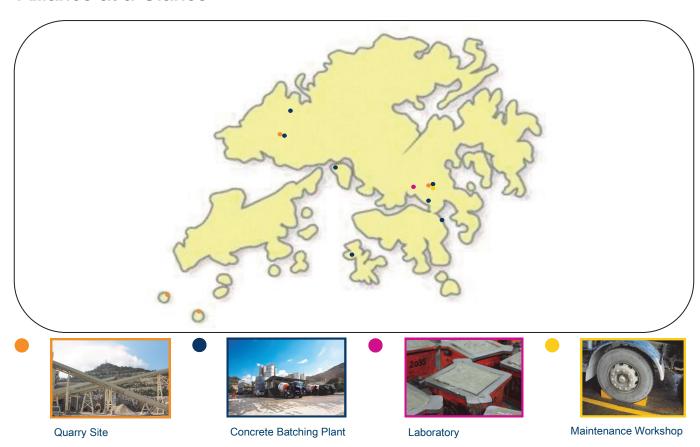






We operate in the aggregate and concrete industry sector, providing ready-mix concrete directly to construction sites in Hong Kong. Cement and aggregates form the basis of our raw materials and growth strategy and our core activity includes the production of aggregates and distribution of cement and aggregates, the two essential materials for concrete production. As our core value Leadership states we aim to create a high performance culture in our organization through excellence in cost and margin control and the highest standards in quality of our products and services. Further, since we operate in a difficult work environment, occupational health and safety are material to our core sustainability principles.

# Alliance at a Glance

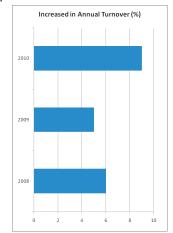


Alliance Construction Materials Limited is one of the largest suppliers of building materials to the construction industry in Hong Kong. The company was first formed in 2004 by the merging of two renowned companies—Hanson Limited (it is now part of the HeidelbergCement Group in Germany) and Cheung Kong Infrastructure's subsidiaries, Ready Mixed Concrete (HK) Limited ("RMC") based in Hong Kong. With over 40 years of experience from the two companies, Alliance retains a high degree of expertise within the Hong Kong construction materials business. Today, Alliance operates a total 7 concrete plants with 12 production lines, 3 quarries in Hong Kong and 3 quarries in the PRC. Our head office is located in Hong Kong and we currently have 280 full-time employees. In addition to the basic product line of concrete and customer services, we also provide best solutions to technical chal-

lenges within a highly engineering-based customer group.

## **Financial Performance**

Despite the onset of global financial tsunami and credit crunch in 2008 resulted in a severe global economic downturn as well as impacts to Hong Kong's economy, our businesses have performed well during this reporting period. We have recorded continuous growth in our annual turnover and, considering our market size this is an encouraging performance.



#### **Core Product**

#### Concrete

We operate in a network of strategically located concrete plants, fully equipped to serve the largest and most complex construction projects within Hong Kong. Our well known projects include Route 8—Stonecutters Bridge, East Tsing Yi Viaduct and Eagle Nest Tunnel; MTRC Kowloon Southern Link; Ocean Park Redevelopment and LOHAS Park Phase 1 to 3.

Alliance also has the largest and most modern fleet of eight cubic metre mixer trucks in Hong Kong. The state-of-art equipment fleet enables us to cater to our customer needs by consistently delivering concrete in a safe and timely manner.

Being the pioneer of ready-mixed concrete in Hong Kong, we continue to strive for new techniques, materials and ideas in order to cater to this ever changing construction market as well as the new and challenging projects coming on line. In addition to the standard concrete products, we offer a range of special concrete products such as the High Strength Concrete, EarlyCrete<sup>TM</sup> (High Early Strength Concrete) and FoamCrete<sup>TM</sup> to meet the specific requirements of our clients.

# **Aggregate**

As a leading aggregate supplier, Alliance offers a range of versatile aggregate products for use in concrete, asphalt, drainage, highways, constructions and marine usage. All our aggregate products are tested at our HOKLAS certified testing laboratory to ensure the highest quality products are compliant to the stringent specifications before being supplied to the market.



#### **Product Innovation**





Our Technical Team consists of specialists in the field of concrete technology and design of concrete mix. The high level of expertise and experience ensures we are able to comply with exacting project specifications and meet our client's requirements. The technical laboratory is well equipped with modern testing equipment to ensure a high level of materials compliance. We also provide a comprehensive range of concrete testing in accordance with a variety of standard testing methods and we are one of the first laboratories in Hong Kong to achieve the HOKLAS (Hong Kong Laboratory Accreditation Scheme) accreditation for concrete testing.

Such a high level of experience our Technical Team allows Alliance to develop specialized products such as high strength concrete, high early strength concrete and self-compacting concrete, for example. The Technical Team also provides independent quality control and assessment of the performance of the concrete batching plants and the raw materials that make up the base of our products. The team adopts a scientific and systematic approach to analyze and ensure the highest possible compliance and quality assurance of our products.

# Professional & Experienced

## **Corporate Governance**

"Our way of doing things is identified by accountability and responsibility by all; passion, high energy and timeliness, respect and teamwork."



The Executive Committee members (from left to right) Ms Ophelia Ng, Mr. Vincent Chan, Mr. Eddy Tsang, Mr. Lambert Leung, Mr. David Hogan, Mr. Ivan Chan, Mr. Ross Chow, Ms Lilian Wong, Mr. Nelson Pang

#### Governance

Good corporate governance provides a framework for leaders to oversee an organization in a transparent and accountable manner. Many successful companies put in place solid corporate governance measures which enable them to address risks and opportunities in a systematic and strategic manner. At Alliance, good corporate governance is in place to ensure compliance of both internal policies and procedures and external statutory requirements such as the implementation of various internal controls and reporting systems, as well as annual audits by both internal and external auditors. The Board of Directors which is comprised of Directors appointed from the parent companies (Anderson Asia/Cheung Kong Infrastructure & PICON/HeidelbergCement) carries out the fiduciary, equitable, statutory and contractual duties; and exercise care, skill and due diligence. The Executive Committee, comprising 12 members is responsible for the management of Alliance businesses, and reports directly to the Board.

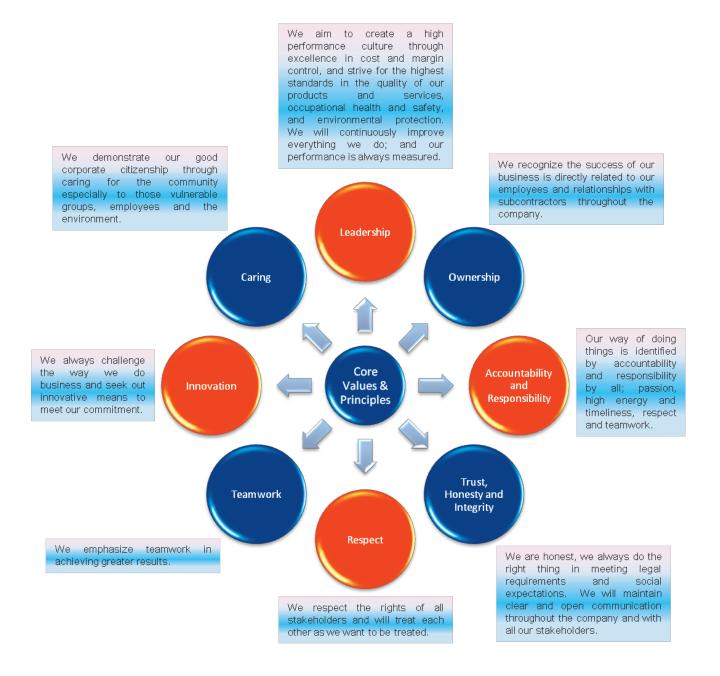
An integrated approach has been adopted for managing corporate sustainability issues throughout the company. The Risk Management Steering Committee which is chaired by the Chief Executive Officer and comprised of the senior management team of Alliance, sets policies and strategy, determines action plans that allow corporate social responsibility to be embedded into every business function. The committee also conducts regular performance reviews to evaluate how corporate sustainable goals have been or will be met.

#### **Code of Conduct**

Business integrity and ethical behavior, and how we treat our employees and business partners, are all seen by Alliance as fundamental for business sustainability. The Guiding Principles communicate with the entire Alliance Team what we value the most. This is articulated through a Code of Conduct and a series of Guidelines such as, the Business Integrity & Ethical, Racial Equality, and Anti-Harassment frameworks that provide the translation of our Guiding Principles into good practices.

# Core Value & Principles

The diagram below illustrates our eight core values which are touched upon throughout this report. These core values are in turn articulated through a set of principles which are helping to shape our management approach, which is explained in more detail in the following section. Our management approach has been shaped by our commitment to sustainability and the recognition that we can embed this commitment throughout our operations. This commitment we share with you our reader, throughout this report.



# Commitment to Corporate Sustainability

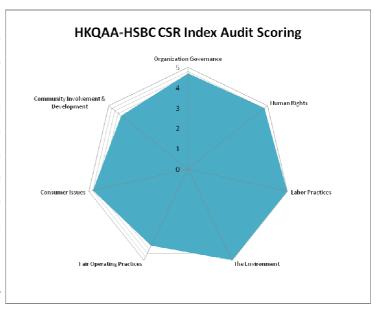


# Commitment to Corporate Sustainability

Alliance envisions becoming the leader in Hong Kong and the region for the provision of construction materials but, in particular to do this in a sustainable way. As stated in Alliance's Guiding Principles, sustainability is an integral element of Alliance's operations. Last year, we started a CSR project, where we reviewed our performance and subsequently identified future steps in order to move towards meaningful Corporate Sustainability. During this CSR project, we benchmarked ourselves externally across several developed European construction materials companies as well as local corporations, and found we fared reasonably well. On the other hand, we also conducted an audit through the HKQAA-HSBC CSR Index, and received the HKQAA-HSBC CSR Advocate Mark.

In looking forward, we believe we are taking another step to organize CS aspects systematically within

our operations and, we fully recognize this is the beginning of an on-going process. This will build on the Integrated Management System, as well as the safety and environmentally conscious culture we are presently nurturing. Alliance is working towards the ultimate goal of incorporating sustainability considerations into decision making at every operational department.



# **Management Approach**



Business in The Community (BITC)

In order to operate in a sustainable manner, we must address the risks as well as the opportunities that face the company and the industry as a whole. Alliance is operating in an increasingly challenging market, where we have to put greater effort in securing raw materials and land for our activities, while also complying with ever stringent regulations and urban planning policies. On the other hand, the launch of the major infrastructure projects will offer us opportunities and we will, as a result, formulate strategies to optimize our business growth. In addition, we also face two challenges that affect our industry sector at both local and global levels. Firstly, we are perceived to be a polluter, secondly the global trend for Carbon reduction puts pressure on the operations of our supply chain, from cement manufacturing, quarry operations to concrete production and delivery, all generate significant amounts of Greenhouse Gases. We talk about how

Alliance, for its Management Approach, uses a structure based on the Business in the Community (BITC) Corporate Responsibility Index framework - Workplace, Community, Market-place and Environment to help identify and organize important issues that need to be addressed and to help bring these issues together for this report. These issues encompass both the risks and opportunities facing our operations and the four foundations allows us to be more focused or strategic about our corporate sustainability.

we addressing this in the Environment section. We are very cognizant of both of these issues and as such have worked hard to reshape this perception of this industry sector combined with reducing our operation's Greenhouse Gas emissions. Further, as outlined in the Marketplace section we have started a pathway pursuing an industry-wide Carbon reduction initiative. If we are successful we will drive our operators to improve their energy efficiency and in turn contribute to the elimination of Greenhouse gases that are emitted from the manufacturing processes of our whole supply chain. Further in our Workplace and Community sections we present our ongoing and new initiatives that engage with our people and our neighbors. These initiatives helps us to ensure the well-being of our employees as well as listening to the concerns of our stakeholders.

# **Corporate Sustainability Risks**



# Supply of Raw Materials

In the foreseeable future, the existing quarry sites in Hong Kong will be exhausted since they are a finite resource, and under the current government policy the development of new quarry sites will be difficult. Consequently, the supply of raw materials in Hong Kong will rely on the supply from other companies' quarry sites in mainland China.

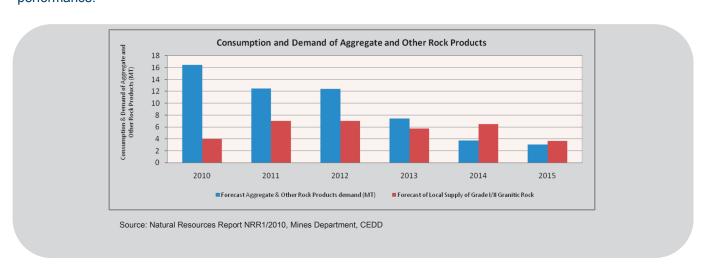
The increasing proportion of raw materials that will be supplied from other companies will affect the stability of our aggregate supply and the consistency of quality, challenging our business growth.

### **Environmental Requirements**

As a private sector operator we need to be able to justify both our investments and their returns. Therefore operating under the short-term contracts and licenses for quarries for example, puts us in a position where we must be conservative in our approach to long-term investments in environmental initiatives such as improving energy efficiency of the crushing facilities, or upgrading the mobile plants, or the dust suppressing facilities. Although we operate under increasing demands for more than environmental compliance, the short-term nature of the contracts create obstacles for advancement of our environmental performance.

# **Change of Urban Planning**

Land, in Hong Kong is a scarce resource to begin with and its supply for construction is tight, especially in urban areas. In particular, under the pressing public demand to increase the supply of residential housing, our existing job sites would be regarded as being more appropriate for residential development. Taking public perception and future urban planning strategies, in Hong Kong, into consideration we expect to face greater challenges in applying for contract extension of both the quarry and concrete plant sites.



# **Opportunities**

## New Quarry Site in Mainland China

A new quarry in Guangdong province, a significant milestone for the Company, is presently under development. This new quarry plant will assure stability in both the supply and quality of both aggregate and concrete. This project will also support the increasing demand for construction materials for Hong Kong.



# Ten Major Infrastructure Projects

Since the government put forward the 10 major infrastructure projects for the economic development of Hong Kong, and encouraging the construction of residential buildings, we are expecting a subsequent increase in demand of construction materials in the coming years. We envision utilizing every opportunity to stay competitive, including future MTR projects and Express Rail Link for example.

# **Information Management (AIMS)**

In 2005, we commissioned Project AIMS which stands for Alliance Information Management System in view of determining a best-fit system to achieve data integrity, enhance management control and improve operational efficiency of our business.

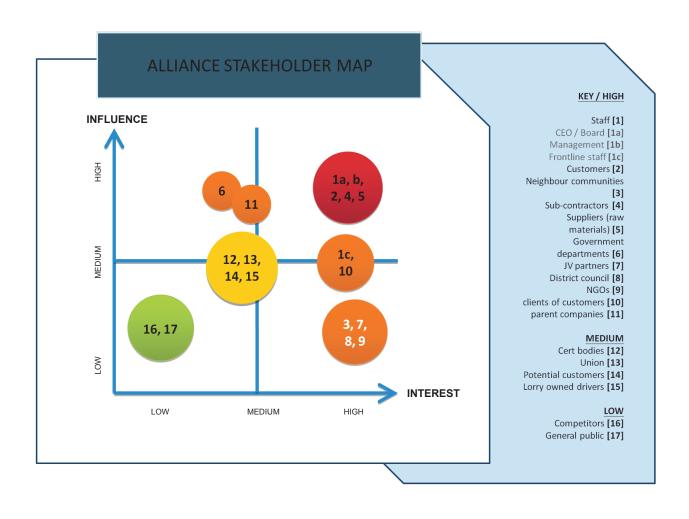
The Board endorsed in May 2010, the implementation of the core of the Project by integrating and automating most of the business processes. This entails the establishment of a Customer Service Centre offering efficient and superior services to our customers.

All in all, to ensure Alliance can optimize the business opportunities under this challenging environment, enhancing the implementation of sustainability principles would offer us additional strengths to achieve our goals. To this end, the following sections in this report will highlight the initiatives we have adopted to address the abovementioned aspects.

# Stakeholder Engagement

"We respect the rights of all stakeholders and will treat each other as we want to be treated."

Stakeholders are vital to our business, not only because they consist of our employees, but also consist of a variety of other parties who have significant influence as well as a great level of interest in our company. In order to identify and address the needs of our stakeholders, we commissioned a third party consultant to conduct an engagement exercise. The engagement process began with an open discussion about identifying who are our stakeholders and then undertaking an exercise called stakeholder mapping. This helped us to prioritize our stakeholders so that we may begin engaging with our key stakeholders. We then had the consultant engage with our stakeholders on issues that concerned them, such as corporate sustainability development as well as issues relevant to our operations and the community. Their comments were used to help develop this report and will be incorporated into our CS strategy and initiatives. Below is the Stakeholder 'Map' used for this our first CS review and report. As we continue to engage with each stakeholder group we are aware this 'Map' may change.



# **Top Management**

The Alliance top management team are responsible for strategy development and target setting. They were engaged using questionnaires in order to gain their opinion about and commitment to the CS strategy, their expectations of the report content, and how the report should address the management approach and targets. Overall CS is regarded, by the top management team as an important initiative for the long term success of the business. This success will enhance the effectiveness of corporate governance, the integrity of the decision making process and also the communication with our stakeholders.

# Middle Level Managers

Middle managers at Alliance perceive themselves as a bridge between the top management and the frontline staff. This group expressed the importance for the provision of clear direction and resources from top management so as to enable them to roll out the initiatives and to realize their innovative ideas with regard to CS. They were generally supportive of Alliance's intention to develop and report corporate sustainability, and the report is seen as a platform to build a positive relationship with the public by enhancing the community's understanding of the operations.

# Frontline Employees

Alliance employees were engaged through focus groups and the issues raised included: their expectations on the report content; their preferred channels to access the report; and how the report would address their needs. To address the concerns of our employees, Alliance plans to raise awareness of Alliance's overall CS approach and direction through the use of sustainability reporting. Enhancing feedback channels and avoiding extra workload for the frontline staff when implementing corporate sustainability remains a top priority.

# **Suppliers and Subcontractors**

Suppliers and Subcontractors are important partners in our business operations. They were engaged through focus groups and were consulted about their expectations of the report, their relationship with us and any relevant CS issues. Engagement with our suppliers and subcontractors indicates further collaboration and consultation with them to promote CS awareness and initiatives will be needed.

"We recognize the success of our business is directly related to our employees and subcontractors throughout the company."

#### **Customers &**

#### Clients of Customers

Our customers were surveyed using a questionnaire on both aspects of the product as well as the supply chain. As suggested by our customers, we must recognize the importance of producing a clear consistent and transparent sustainability report for our stakeholders, and we will prioritize the reporting performance data, including a year to year comparison of objectives, target and benchmarking against other organizations as much as feasibly possible.

# Neighbor Community (Tuen Mun District Councilor)

The Tuen Mun community, situated within the proximity of Alliance operations, was engaged through phone calls with the Tuen Mun West District Councilor. Environmental and social aspects of Alliance's operations, such as noise and air quality control in the community, were the main discussion topics. Relations with the Tuen Mun community still requires further development and engagement to communicate Alliance's commitment to the environmental and social responsibility in the community.

"We are honest, we always do the right thing in meeting legal requirements and social expectations. We will maintain clear and open communication throughout the company and with all our Stakeholders."

#### Government

The government, responsible for setting up regulatory requirements and providing quarry leasing, was represented by the Lam Tei supervisor who was contacted by phone. Regulatory issues and the government's impression of Alliance's CS performance were asked. Alliance will continue to maintain good compliance with government environmental and safety regulations.

# NGO (HKGBC)

HKGBC provides a platform for Alliance to excel in its environmental performance. Engagement was done through a face-to-face interview. Through our collaboration with HKGBC, Alliance will continue to develop opportunities for "green concrete" and promote the initiative to the construction industry. Environmental data, such as benchmarking local concrete's carbon footprint with overseas companies, is a major issue and will be explored over the coming year.



# Risk Management and Strategy Development

Stakeholders, such as employees, customers, the government, and the community, play a major role in Alliance's risk management. Stakeholder engagement allows us to minimize risks by assessing their needs and then developing strategies and policies to effectively address their concerns. Similarly, stakeholder engagement provides opportunities, for example, by improving relations with the community and government. More opportunities lie in greater cooperation with our business partners, such as our suppliers, subcontractors, customers, and the HKGBC. Engagement with our business partners ensures that our interests in corporate sustainability are aligned along with the benefits that come from collaboration.

## **Future Stakeholder Engagement**

It is envisaged that future engagement exercises could be enhanced in terms of scope and format in order to adopt engagement mechanism in a more strategic manner. The current engagement targeted the stakeholder groups that currently have significant influence. Additional groups will be engaged as necessary in view of further developing our CS initiatives and with the understanding that sustainability issues change or evolve over time. The following major suggestions have been made:

- Future engagement should target stakeholders' needs and perceptions of the industry
- Enhance face-to-face interaction
- Utilize indirect means such as surveys, and phone calls according to the scope and needs of engagement

#### Stakeholders' Quotes

Managers: "Implementing CS and to report is a good move and is a global trend; it also shows direction to staff and also shows to external parties."

Frontline staff: "It would be good to reflect staff's feedback in the report, and good to show the company's objectives and targets; face to face interaction with staff is crucial. Reporting is good way to show ACM's direction and it would show the strategy clearly."

Customer (CLP): "I believe it is important to be honest and transparent about the challenges the company is facing, and explain to readers the intended way forward. Any targets and/or objectives would also be useful."

Suppliers and subcontractors: "ACM should maintain open dialogue with suppliers before implementing any CS measures to avoid challenges in compliance. ACM should set a good example in CS for the suppliers and subcontractors to follow."

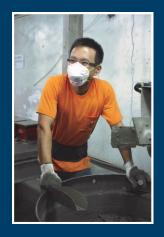
# Workplace

Reflecting one of our core values and principles, *Ownership*, we recognize that the success of our business is directly related to our employees and subcontractors. To fulfill this commitment, we are determined to create a safe, decent and equal-opportunities working environment for our workforce. To meet this end, we have in place a variety of policies and initiatives for employees to realize their greatest capacity.











#### **Human Resources**





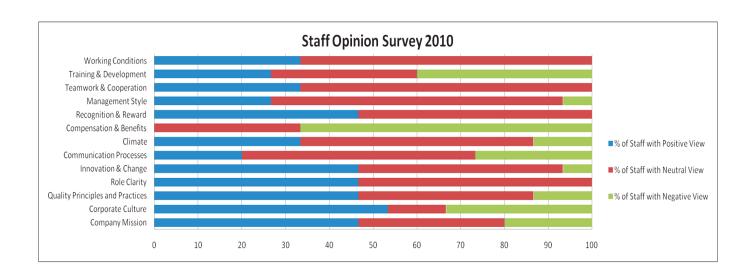


# **Decent Workplace**

We have put in place a range of policies to support our aim of providing a safe and healthy work environment including: A Code of Conduct; A policy for Racial Equality, and; A policy against Harassment. Such policies provide guidelines and set out procedures that will help to ensure that employees strive to create a responsible and fair workplace during their everyday duties. Each member of Alliance receives due care and consideration, and our Staff Handbook outlines the wealth of benefits we offer to our workforce.

Alliance takes into account employees' feedback, for example an employee opinion survey is carried out by our HR Department biannually. Effective communication is essential in order to get key messages that are of interest to employees, we use a variety of channels such as intranet, newsletter and regular on-site briefings.

In order to foster a healthy work-life balance, social activities for employees are organized on a regular basis such as the annual dinner and football matches.



# **Employee Training and Development**

As part of its human resources strategy to develop a highly competent and motivated workforce that is fully committed to achieving its corporate objectives Alliance has been providing and continues to provide training for employees. External and internal training courses and seminars relevant to job responsibilities such as IMS In-House Training, Induction Training and Training for Mixer Truck Drivers and Customer Service Training are arranged for our staff.

To support the personal development of individual employees, we appraise their performance annually against our common targets. From 2008 to 2010, our annual appraisal exercise covered 100% of our employees.

# Raising Awareness in CS





We would like to promote CS internally, and therefore are regularly communicating on sustainability issues with our staff through, for example, the company's newsletter "Alliance News", the intranet SharePoint, and face-to-face communication. For instance, anti-corruption policies and procedures are available to all employees via the company intranet and all new recruits receive awareness raising of anti-corruption issues through the company induction program. Since the establishment of Alliance, we have not received any citation for corruption. To prepare for the introduction of competition laws in Hong Kong, the Alliance Fair Competition Program was kicked-off by a series of compliance training sessions to the management team members. A code of practice was also written up giving the staff members guidelines on fair trading conduct.

Communicating other specific issues such as our updated environmental protection controls and procedures, we have published our "Energy Saving" Newsletter which promotes the Company's Carbon Footprint, details of which can be found in the Environment Section of the report along with details on the training sessions on noise pollution.



Safety Mixer Truck & Cement Tanker drivers award was organized to promote the importance of traffic safety.

# **Training for Mixer Truck Driver**

Mixer truck drivers are valuable assets of Alliance, and they form a vital part of the supply chain of our product. We have put in place a dedicated training program for newly joined drivers. The 30-day course consists of interactive elements such as lecturing, video/slide show, demonstration, comprehensive on-the-job practice. For instance, trainees are given the opportunity to shadow an experienced driver on their delivery of concrete to construction sites; to work for 5 days per plant so as to be familiar with different plant operations and site conditions.

A comprehensive Management Trainee (MT program has been initiated at Alliance in 2010 Recent university graduates join the company and are then subsequently rotated through different operational units in order that they gain experience and insight as to how the company functions. The MTs gain extensive exposure to the operations through the rotation to various departments, which include the Risk Team Quarry Division, and Concrete Division. We take seriously our responsibility in providing job opportunities for the younger generation while nur turing management talents to lead our company





As traffic safety is of paramount importance to both the driver and the public, to ensure the competence and safety attitude of the drivers is up to standard, the Hong Kong School of Motoring is engaged to run the driving safety training program. This consists of driving skills and behavior assessment, driving safety forums, on-road observations, driving safety remedial training and a seasonal Driving Safety Newsletter.

# **Health and Safety**



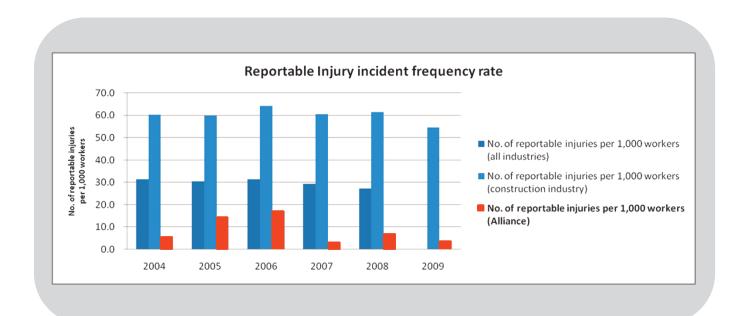
Shek O Quarry achieved the 3,000 days Lost Time Injury Free record on 26 February 2008

# Safety Policy and Commitment

As stated in the Occupational Health and Safety Policy, Alliance is committed to providing a safe and healthy work environment for employees, subcontractors and any person who may be affected by our operations. Not only do we view safety beyond a moral and legal responsibility, but as a prerequisite for us to achieve our primary mission of practicing the highest standards. We see health and safety as our core value which

supports our sustainable business success.

We manage health and safety systematically as part of the IMS, through continuous monitoring, reviewing, modifying, and the provision of training and information. Health and safety considerations are reflected in every aspect of our facilities and daily operations. A variety of initiatives such as design for safer plants and quarries, and establishment of a HSE Charter have been put in place to help us achieve our ultimate goal of being accident free.



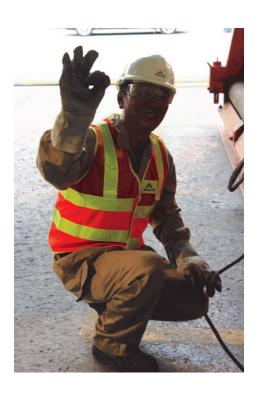
# Fostering a Positive HSE Culture

To implement health and safety measures throughout the workplace, we promote a safety culture, by highlighting that this more than providing just the basics for our employees. To support this safety culture, employees' rights to work in a safe and healthy working environment and their responsibility to contribute to the health and safety of the working conditions, are defined in the HSE Charter. In addition, Key Performance Indicators such as "positive reinforcement" and "show interest" have been developed to set safety behavior guidelines for employees e.g. Recognize safe acts when you see them (under "positive reinforcement"); contribute ideas/opinions on safety procedures (under "show interest").

|   | You have the right to                      |   | You have the responsibility to             |
|---|--|---|--|
| • | Have a safe and healthy workplace.         | • | Take care of yourself and not to endanger  |
| • | Be supplied with suitable and sufficient   |   | other people at work.                      |
|   | tools, materials and resources to perform  | • | Use personal protective equipment - pro-   |
|   | your job.                                  |   | tect them and report defects.              |
| • | Use personal protective equipment which    | • | Treat or handle equipment with care and    |
|   | is safe and sound.                         |   | report defects.                            |
| • | Return home in the same condition you      | • | Eliminate and/or report any hazards you    |
|   | come to work.                              |   | identify and report all injuries.          |
| • | Be respected and treated fairly and with   | • | Come to work in an alert state without the |
|   | justice.                                   |   | adverse effects of drugs or alcohol.       |
| • | A workplace free of harassment, threats,   | • | Respect and treat others fairly and consis |
|   | bullying and violence.                     |   | tently.                                    |
| • | Obtain sufficient information to carry out | • | Behave so as not to harass, threaten or be |
|   | the tasks assigned to you.                 |   | violent towards others.                    |
| • | Have adequate supervision to ensure the    | • | Use tools, materials and resources pro-    |
|   | job is done correctly.                     |   | vided carefully and conservatively.        |

# Managing the Potential Hazard of Serious Diseases

We place great emphasis on managing risks associated with pandemic diseases. Alliance has made sure that the company's employees, their families, and community members are aware of serious diseases, especially the Avian Flu, which has been of particular concern in the past few years. As such, we have put in place an Avian Influenza Pandemic Preparedness & Business Continuity Plan which sets guidelines, procedures and good practices to be adopted during an outbreak in order to ensure minimum disruption to the business and maintain the wellness of our staff. For instance, the plan outlines measures to be taken to cope with any foreseeable impacts that may arise in a pandemic influenza. It will be activated when WHO announces the Phase 5 Pandemic Alert Period. For example, our employees will be instructed to work at the back-up locations. In addition, an Advice to Travelers is available which sets out tips for our employees to follow before, during, and after traveling.

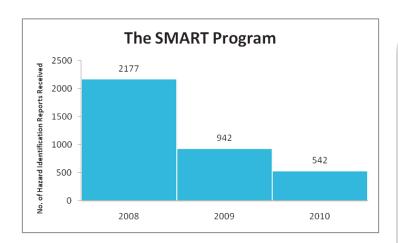


# Safety Awareness and Training

Awareness raising activities and training are regularly organized, such as Tool Box Talks and external HSE seminars. In the past year, we specifically targeted awareness of the potential of hazardous diseases. In addition, training for mixer truck drivers was a priority in order to control hazards during delivery.

# Safety for Mixer Truck Driver

Safety information ranging from Alliance's HSE policy to general safety issues relevant to the truck operations is communicated to the drivers. Following the completion of training, a performance evaluation is conducted, and regular assessment is in place to ensure maintenance of skills.



## "5S" and "SMART" Program

The 5S Good Housekeeping Management Plan forms an integral part of the IMS. The 5-S's are: - Structurise, Systematise, Sanitise, Standardise & Self-discipline. Not only have the 5S fostered a safer workplace, but also enhanced staff morale, comfort, productivity and efficiency\*. Awards, e.g. the Silver Award of Good Housekeeping Plan organized by the OSHC, have been received recognizing Alliance's effort in implementing 5S Program.

The Safety Management Reporting Tool (SMART) Program has been a successful initiative since its launch in 2007 which promotes staff participation in HSE management. Under the program, Alliance employees are provided with a channel to proactively report hazardous scenarios in the working environment. Hazard Identification Reports (HID) are available at worksites for staff to record emerging incidents. Systematic procedures have been put in place to monitor and resolve the hazardous conditions identified. Incentives are provided in the form of badges of recognition in order to encourage staff participation in SMART. For employees who report more than 20 HIDs, an Alliance Half-Blue Badge will be awarded, and an Alliance Full-Blue Badge for more than 50 HIDs. The active participation of staff to the SMART program had resulted in the removal of thousands of hazardous conditions from the worksites.

# **Design for Safer Plants**

An example of an improvement measure brought about by the SMART program was the change to the traditional trench cleaning process. A significant amount of manual work is required, including lifting of trench covers, shoveling, and transporting. Although this did not result in injuries or occupational illness, some of the working conditions were considered unacceptable. Therefore, an initiative has been implemented which utilizes a selfrefitted bucket attached to the mini-loader. The initiative effectively eliminates potential hazards with regard to manual work, and at the same time, the working efficiency was substantially enhanced. As a result, the newly designed machine enables the work to be completed by 1 worker and within 1 hour which previously required to carry out 4 times per week and took 4 man-hours each time.





<sup>\*</sup> Based on findings of the "HSE Climate Survey" between 2007 and 2009. This survey is repeated every two years and will be monitored closely for data reliability.

# Community









Another core value and principle, *Caring*, shapes how we behave as a good corporate citizenship. By caring for our community, especially towards those vulnerable groups, our employees and the environment we remind ourselves both how fortunate we are and that as a business we are not separate from our surroundings.

# **Donation & Volunteering**

In 2009 a volunteering policy along with a set of guidelines was put in place to encourage our employees to participate in community activities. In addition, we have organized and taken part in a variety of community activities which have brought about mutual benefits to our staff and the public. Moving forward, as a result of our stakeholder engagement and management workshop it is clear that we have an imperative to do more within the communities in which we operate and we wish to do so in a meaningful and structured way. Among the wealth of community programs and initiatives we have organized and participated in, the following case studies highlight some of our major involvement.

#### **Blood Donation**

"It is more blessed to give than to receive" is a proverb you may be familiar with. It is not difficult to understand, but to really appreciate its meaning, practicing it, is perhaps the best way. The head office staff at Alliance had the opportunity to practice this meaningful proverb in May 2010. CEO, Mr. David Hogan, led his team of 7 to the Hong Kong Red Cross Blood Transfusion Service Centre, who specially organized this Blood Drive for the tenants of Harbourfront. The entire blood donation process took about 30 minutes and was done without any pain or discomfort.

Having a blood reserve is important for operations that require a large amount of blood, such as transfusion therapy for patients with blood cancer. Compared to the difficulties of those patients that require regular blood transfusions, donating blood is a blessing. We deeply appreciate the meaning of "it is more blessed to give than to receive".







# Occupational Safety & Health Carnival

Alliance volunteers hosted a game booth in the Tuen Mun Occupational Safety & Health Carnival in March 2010. The Carnival is an annual event of Tuen Mun Occupational Safety & Health Week, organized by the special Occupational Safety & Health Working Group under the Commerce, Industry & Housing Committee of Tuen Mun District Council. Students of Tuen Mun Yuk Chi Resource Centre were invited to participate in hosting the booth to help encourage active communication and relationship building between the Tuen Mun District, Alliance and the students.



Alliance has been awarded the Caring Company Logo for 4 consecutive years since 2006









# Staff Volunteering Services

To help promote the culture of volunteering, our staff members are encouraged to participate in variety of activities during office hours. In 2010, our charity activities increased compared to 2009 which offered our staff more opportunities to appreciate the joy of doing voluntary services for local charities.

Moreover, the first summer internship program launched in 2010 on one hand offering the students an opportunity to gain on-the-job experience, which allowed them to practice what they have learnt from the classes; the Company also got insights from these fresh eyes for improving our operations.

# **Community Donation**

We have been actively contributing to the community through donations. In 2010, a total of HK\$43,844 was donated by Alliance to the community. The donations included \$34,944 to Hong Kong Red Cross for China Earthquake Relief and \$3,100 for Hong Kong Community Chest in the Dress Special Day. In 2009 we donated a total of \$26,050, in which \$10,600 was raised for Hong Kong Community Chest for the Walks for Millions and \$7,600 for ORBIS Pin Campaign. In 2008, our employees donated an amount of \$94,100 to Hong Kong Red Cross for China Earthquake Relief; making the total donation made in 2008 to \$108,720.

# Summary of Charitable Donations and Volunteering Services in 2010

| Used Baby Items Recycle Project: Our volunteers from maintenance team provided transportation service for the Hong Kong Caritas in collecting used baby strollers for their Used Baby Items Recycle Project.  | August to September 2010 |
|---|--------------------------|
| Computer Recycle Project: Transportation service was provided to the Hong Kong Caritas in collecting used computers for their Computer Recycle Project.   | September 2010           |
| Job Placement Program for staff members' children: To provide employment opportunities to young persons, children of staff members will be considered to be trainees in the job placement program. A team member's daughter had participated in the subject program during her summer vacation. | September 2010           |
| <u>Dress Special Day</u> : The Dress Special Day held on 28 September. A total 29 participants joined the event and raised of \$3,100.  | September 2010           |
| Donation to Yuk Chi Resource Centre: A donation of \$2,900 was made to the centre to support their charitable works for mentally disabled young persons.  | September 2010           |
| Summer Internship Program: A Summer Internship Program was organized with the Institute of Vocational Education offering their students on the job training experience.   | August 2010              |
| Blood Donation: 7 Head Office staff participated the Blood Donation event.  | May 2010                 |
| Donation to The Hong Kong Red Cross: A donation of \$34,944.40 was donated to The Hong Kong Red Cross for the Qinghai Earthquake 2010.  | April 2010               |
| Employing vulnerable/unemployed young persons: Three unemployed young persons from the Hong Kong Caritas were employed for two weeks.   | March 2010               |
| Occupational Safety & Health Carnival: We provided volunteers assisting the Yuk Chi Resource Centre to man 2 game booths in the Tuen Mun Occupational Safety & Health Carnival.   | March 2010               |
| Marathon Charity Concert: Representatives from the company participated in the fundraising Marathon Charity Concert organized by the Society for the Blind and raised \$1,800.  | March 2010               |
| Charity Run: Representatives from the company joined the charity run raising fund for the mentally disordered persons.  | January 2010             |

# **Community Involvement**

Alliance proactively contributes to the community, not only through direct donation, but also by providing support through in-kind means such as knowledge sharing and maintaining dialogue. By successfully enhancing the public's understanding of our business and operations, our corporate sustainability development will be built on the basis of concrete public support. The following highlights some examples of such activities.

| Shek O Quarry  |   |  |  |  |
|----------------|---|--|--|--|
| October 2010   | Organization: The University of Hong Kong—Division of Landscape Architecture Faculty of Architecture A group of students from the University came to visit Shek O Quarry in October 2010 to study landscaping, rehabilitation and water drainage system.  |  |  |  |
| January 2010   | Organization: Malaysia Quarries Association South-East Asian representatives visited Shek O Quary to see how rehabilitation projects and landscaping design is carried out in the Hong Kong quarry.   |  |  |  |
| May 2009       | Organization: The University of Hong Kong A group of students and their professor visited our Shek O Quarry for a Hong Kong geology lesson. Due to the nature of the operation, the soil in the quarry was removed and the earth was excavated layer by layer. Different stratums were exposed and can be reached easily, providing a good learning place for the geology students. |  |  |  |
| June 2008      | Organization: Southern District Council A group of representatives from Southern District visited our Shek O Quarry to see our quarry operations, and the rehabilitation progress. We introduced our environmental control measures at the quarry regarding water circulation, dust, and noise control and monitoring.  |  |  |  |
| Lam Tei Quarry |   |  |  |  |
| October 2010   | Organization: CEDD Organized by the CEDD, the Tuen Mun District Council visited Lam Tei Quarry to understand Alliance quarry operations and environmental control measures, such as dust suppression, noise control and the rehabilitation progress.  |  |  |  |
| March 2010     | Organization: Society of Accredited Safety Auditor Organized by the Society of Accredited Safety Auditor, good OSH practices were shared in the experience sharing session.   |  |  |  |

# **Reducing our Operational Impacts**

## Mitigation of Operational Impacts on the Neighborhood

We diligently minimize our operational impacts on the community by implementing various preventive and mitigation measures. Under the Integrated Management System, we have implemented an enclosed plant structure to isolate the noise source as well as to prevent dust emission. We have also implemented slurry and waste water treatment facility for recycling the waste water, we have done this to mitigate impacts from our high impact activities such as excavation, blasting, and concrete batching.

# **Noise Pollution Control Policy & Training**

Alliance recognizes that our daily operations may generate some potential nuisance noise to our neighbors and recognizes that noise pollution is a major part of our impact on the environment. As well as compliance with stringent legal requirements, we put in place a Noise Pollution Control Management Plan which governs the site activities, ensuring every reasonably practical control measures are enforced to prevent noise pollution from our operations. The management plan also considers the awareness of employees and thus requires the provision of noise pollution control training to the workers. Regular reports to the senior management team as well as conveying of noise complaints and inquiries to our most senior levels ensures that any nuisance to our neighbors will be handled properly and in a timely manner.



Conveying of aggregate is carrying out by dust tight conveyor system



Discharge is properly treated to ensure meeting the most stringent standard



Noise and other pollutants are isolated in an enclosed structure



Plant facilities always maintained in a clean and tidy manner



Dust suppression measures minimizing the nuisance to our neighbor





# Marketplace



Alliance operates in a competitive market in terms of product and service quality, and we also face a wide array of challenges from rising stakeholder expectations with regards to our environmental and social aspects. Therefore we continuously look into innovative ways to adapt our products and services.

# **Business Opportunities**



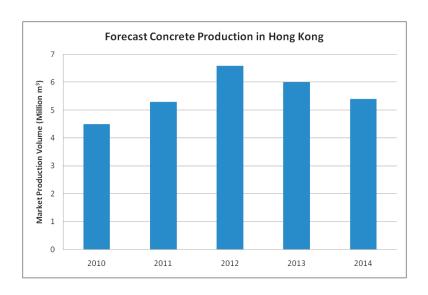
# **New Development in Guangdong Province**

We have embarked on the development of new Quarries in Guangdong Province, China, which will provide us with further capacity to expand our operational scope. As the outlook for quarry and production facility development in Hong Kong is becoming uncertain, we are proactively looking into opportunities in Mainland China.

# **Ten Major Infrastructures**

To counter the effect of financial tsunami, the Hong Kong government setout a blueprint for 'Ten Major Infrastructures' at the end of 2008. It also pledges to speed up the tender progress of all infrastructures and public works tenders to stimulate the economy and to create more job opportunities for construction works.

With commencement of the key infrastructure projects and revival of the property market and recovery of stock market, concrete volume demand will be rising in the coming 5 years. In anticipating of a growing market environment coming forth, Alliance strategically seeks to pursue business growth by identifying areas for improvement and development of action plans to well place the company to harvest from the increase in market volume.







A growing market in coming 5 years is anticipated

## Roles in the Industry

Currently we operate 3 stone quarries and 7 concrete batching plants in Hong Kong and as one of the major concrete suppliers in Hong Kong we have a market share of approximately 25-30%. As a result, we have a steady supply of concrete raw materials and manufacturing capacity available and within easy reach of our customers. Notwithstanding the challenges we face with quarry licenses and urban planning constraints in Hong Kong, our investment in Mainland China quarries provides us with positive prospects for sustaining the demand for construction materials in Hong Kong. In addition, we will look into ways to differentiate our business by investing in product innovation and engaging new partnerships, examples of which are illustrated below. We will continue to strive for the leadership position in the industry.

#### Hong Kong Construction Industry

With the approval of HK\$120 billion of public works, the industry is predicted to flourish in the near future. However, challenges still exist:

- an aging workforce
- failure to attract young talents because of long working hours and difficult working conditions
- frequent unpaid wages from subcontractors

Long-term planning and cooperation from stakeholders in the industry (E.g. Government, developers, contractors) is urgently needed to build a young and skilled industry that offers attractive employment.

# Engagement with The Hong Kong Green Building Council (HKGBC)

Alliance is one of the institutional members of HKGBC. Institutional Members include, but are not limited to influential businesses and organizations that are engaged or have an interest in green buildings.

We have joined the committee of HKGBC as a representative of the construction materials industry. We will stay engaged and work with HKGBC to be kept updated about the future trends in construction needs. Ultimately we

HKGBC leads the green building movement in Hong Kong, promoting the adoption of green building standards, and the construction and maintenance of green buildings. Its aim is to improve the quality of the build environment for the benefit of the community of Hong Kong at large. Green buildings are occupied structures that are environmental and sustainable throughout their life cycle.

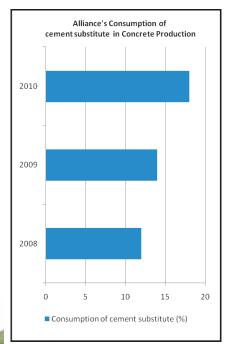
The economic benefits from green buildings is exceptional; case studies show that through energy-conscious designs of new buildings, energy saving of 20 to 70 percent is possible.

envision being involved in the development of a trade-wide standard for green construction materials so we can promote sustainable buildings within our sphere of influence.



# **Green Concrete**

Cement is one of the core elements in concrete. It contributes, however, a large portion of Greenhouse Gas emissions during its manufacture, since it requires high temperature treatment during production. In order to address this issue, green concrete will be the way forward. This can be achieved by reducing the cement content in concrete, resulting in the reduction of our carbon footprint. We continue to look at new ways to increase the proportion of cement substitutes while maintaining the performance and quality of concrete.







# Why Green Concrete?

Contemporary Concrete Production and Eco-friendly Enhancement Options

Taking into account how much energy is required to produce the concrete components, as well as to heat, mix, and transport concrete, it can easily be concluded that the use of traditional concrete in green buildings is not at all effective in decreasing the carbon footprint of its users.

### Concrete Carbon Footprint

The carbon footprint is a measure of the amount of carbon dioxide emitted through fossil fuel combustion. It is often expressed as tons of carbon emitted per annum. Traditionally the concrete industry has been considered a major producer of GHG emissions, due to the high environmental footprint of cement. It is estimated that during production, for 1 ton of cement approximately one ton of CO<sub>2</sub> will be released. The world's total production of cement in 2008 was 2.84 billion tons, which positions cement together with fossil-fuel burning and gas-flaring as one of the top-emitter industries.

Currently, the concrete industry is taking a number of steps to reduce the carbon footprint of concrete, from using less Portland cement, to using more fly ash, or to using slag to enhance the mix with chemicals that allow working with less water. Furthermore, the introduction of the coarse aggregate cooling system helps to find more innovative solutions, including carbon sequestration.

Source: Qatar: Green Concrete Technologies

# Partnering for Success

# **Procurement Practices - Vendor Evaluation for Fairness**

Alliance has a procedure to evaluate contractors and suppliers with respect to health & safety, environmental aspects, and quality issues. Vendors include raw materials supplier, logistics services, and facilities providers as well as the related activities that take place in our premises. Departmental Managers, Risk Managers, Procurement Managers, and our Quality Manager are responsible for assessing, reviewing, and recommending vendors needed for their respective departments.

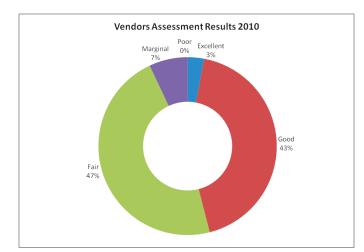
Potential vendors are assessed based on the following criteria:

- Historic performance
- Past job references
- Health & safety performance
- Environmental performance
- Insurance policy
- Quality of products/services provided

In addition to the above criteria, a Green Purchasing Guideline was published in 2010 to assist the managers evaluating the environmental impacts of the products/ services that are to be purchased and giving them guidance balancing the environmental considerations and the operational needs.



Subcontractors and/or suppliers who meet the requirements will be put on a list of approved vendors. Vendors are reviewed annually on their performance and in the case of unsatisfactory performance, the vendors are issued a warning letter. If the unsatisfactory performance persists, they will be suspended or removed from the Approved Vendor List.

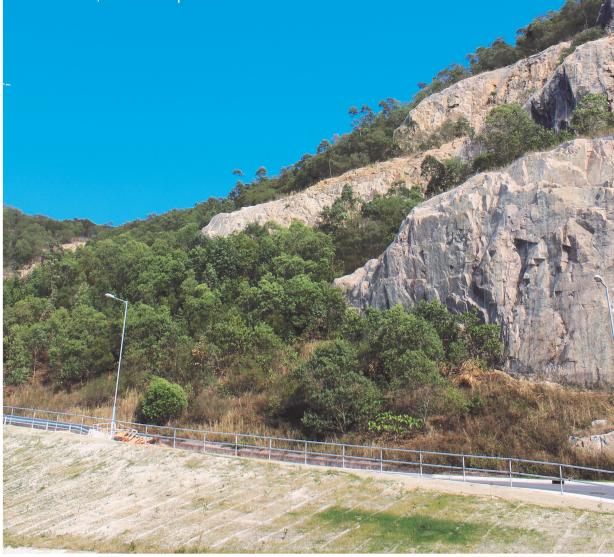


During the vendor assessment period between July 2009 and June 2010, out of the 290 vendors, 7 were graded as "Excellent"; while 125 were graded as "Good".

In 2009, 73 new vendors were enlisted, and 3 were removed; in 2010, 37 new vendors were enlisted and 3 were removed.

# **Environment**

Alliance strives for the highest standards in environmental protection. In order to protect the environment and pursue the sustainable development of our business, we commit to ensure our employees, suppliers, vendors, and subcontractors comply with the environmental policy we have implemented. This includes but is not limited to: meeting or exceeding applicable environmental protection legislation and standards, ensuring the responsible use of energy throughout our business, conserving natural resources, and making efforts in improving our operations to minimize waste, greenhouse gas emissions, and other pollutants.



# **Our Policy**







Our commitment towards protecting the environment and the continuous efforts made have been recognized by the government departments and other organizations. (Left: Sek O Quarry was given the Bronze Award in the Considerate Contractors Site Award Scheme; Right: Alliance received the 2009 Hong Kong Construction Environmental Award from the HKCA)







ISO 14001 : 2004 Certificate No.: CC 3328



OHSAS 18001 : 2007 Certificate No.: CC 3329











**CSR Advocate** 

since 2009

# **Air Emission Control**

Respirable dust is one of the significant air emissions from our quarry and concrete batching plant activities. We are dedicated to ensuring that dust generated at our company's worksites is suppressed and therefore have introduced several measures at our plants to protect our people and the environment around us.

Operating under the Specified Process License, Alliance is required to take all practical measures and maintain high standard of housekeeping to minimize the emission of any air pollutants from all fugitive sources in the quarry.







The dust tight structure confines the dust at its source minimizing the emissions entering the surrounding environment.

In Lam Tei Quarry, our newly designed crushing plant, conveyor belts and screening house are completely enclosed within a rigid structure. This full enclosure eliminates the impact of wind and weather on the site, thus minimizing dust emissions entering the atmosphere. Other measures include the use of water sprinklers and water trucks. Frequent spraying of water reduces dust emissions at Alliance's plants. Automatic water sprinklers are installed at the hopper, haul road, stockpile and aggregate free falling point to suppress the emission of dust. In addition, water trucks travel around the quarry and wet haul roads to prevent the rise of dust resulting from the logistics movement inside the quarry. Water used in this process, like other water we use in our operations come from recycled sources.



Dust emission suppressed by sprinkler system

# Waste Reduction & Management

Under the Waste Disposal Working Instruction as part of our IMS, the following measures are adopted to tackle the waste generated from our activities.

# **Chemical Waste**

Chemical waste generated from our operations such as, mineral oil, lubricant oil, residue and battery contaminated with heavy metals, is collected by our appointed licensed chemical waste collectors. Suitable containers for collection and temporary storage of the chemical waste are provided by the collector. The containers are labeled appropriately with information provided by the waste collectors. Due care has been taken to prevent any leakage, and measures have been put in place such as bund wall or drip tray to control any spillage.



# Solid Waste

We sort solid waste into different categories for subsequent treatment. For instance, general non-recyclable refuse is stored in enclosed bin and dumped as domestic waste; sludge, returned concrete and spilt aggregate is stored at the dry-out bay. We appoint licensed solid waste collectors to collect and remove the sludge in the dry-out bay.



For used parts produced during maintenance, we require Line Managers to contact the Engineering and Maintenance Department to collect and dispose the spent parts. All maintenance, monitoring and records relating to the waste disposal are properly maintained (please refer to Summary of Key CS Statistics).



Coarse materials settled in the sediment pits before further treatment of the slurry water



Filter press greatly reduced the water content in the solid waste

# **Slurry Water**

Slurry water is a combination of liquids and solids (such as aggregates and dirt) that result from mining and concrete manufacturing processes. Slurry water can result in indirect greenhouse gas emissions associated with landfill waste handling and water treatment processes. The Risk Management Team and Operation Team have conducted a study on our slurry water treatment system. Based on the results, a treatment system which consists of a reclaimer and a filter press has been suggested to treat the slurry water. Since 2007, we have installed the system at several concrete plants; not only has the waste water treatment greatly improved the quality of the water, but also reduced the water content in waste by a total of over 40%. Reduction in the water content also lowers the waste volume required for delivery of the waste to the landfills for disposal.

# **Quarry Rehabilitation**

Under the quarry contracts granted by Civil Engineering and Development Department, specific terms and conditions specify our obligation to carry out quarrying and rehabilitation works. Experts are employed to develop the landscaping and rehabilitation plan for restoring the quarry sites to useful lands with soil and water management system improved.



The contract for the Rehabilitation of Lam Tei Quarry commenced in July 2007 for a period of 7 years. Under the contract, we are required to carry out planting works as part of the landscape rehabilitation of the quarry, as well as to maintain the previously completed landscape works that were carried out at the quarry site prior to the contract.

Since then, a few minor slopes at the periphery of the site area have been completed. Landscape rehabilitation works have also been carried out, including the planting of approximately 1,900 seeds trees and shrubs which cover an area of approximately 3,150m². More than 5,100 seeds trees have been in-fill planted within the previously completed landscape area to enhance the overall landscape and to provide better screening of the rock slopes.

In the next few years, more landscape work will be carried out and it is estimated by the time of completion of the quarry in 2014, approximately 25,000 seeds trees and shrubs will have been planted, which covers a total area of approximately 43,000m<sup>2</sup>, including over 400 climbers and creepers to provide greening of the rock slopes.





The landscape work has returned the slopes to a state that "blends in with the vegetation pattern in the areas adjacent to the Site".

# Shek O Quarry

Since 1994 the Shek O Quarry has undergone 16 years of progressive restoration and the rehabilitation is now complete. This restoration involved a planned and sequenced set of management measures that applied to the planted areas, the woodland, scrubland and amenity landscapes from the new Shek O Road slopes down to the new sea shore, beaches and headlands.

Since the beginning of the project, more than 160,000 seeds trees and shrubs have been planted as part of the landscape rehabilitation work. Overall, approximately 22.5 ha of the quarry area has been rehabilitated, with the completed areas fully vegetated, along with a tree canopy over 10m in height.

The formation of the marina cove at the quarry site has made the D'Aguilar Peninsula once more the Island's scenic peninsula.









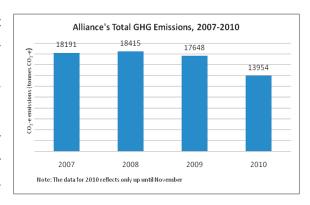


# Climate Change

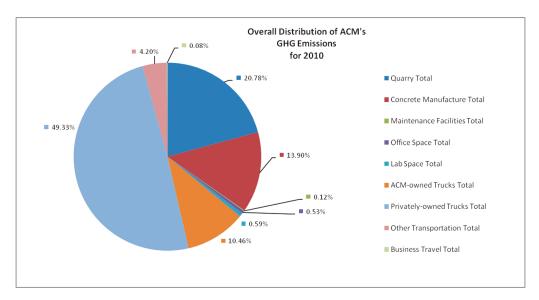
Climate change has become one of the greatest threats to our world. Effects of climate change have become more noticeable and Alliance recognizes that some of our practices can contribute to climate change. The burning of fossil fuel produces carbon dioxide and other greenhouse gases which contribute to climate change, however fossil fuels are currently vital in maintaining our site operations and delivering products to our customers. Therefore, ensuring the highest energy efficiency possible in our operations whether through directly burning fossil fuel or consuming electricity from the grid, is critical for sustaining our business and helping us reduce our impact on the environment. Currently, we have focused on reduction in our energy consumption, increasing our efficiency and as a result have gained many co-benefits. In addition, it is clear that the industry will need to move beyond just ecoefficiency and we aim to be a part of that process.

# **Carbon Footprint**

In order to measure the greenhouse gas emissions that result from our operations, we began calculating our operational carbon footprint in 2007. The results provided valuable information for us to identify opportunities for reduction. By using the 2007 results as a baseline, we have determined our carbon reduction target to be to reduce 10% of the greenhouse gas emissions by year 2012 and 15% by year 2020. Under this commitment, our total greenhouse gas emissions have shown a general decreasing trend.



The following diagram shows an overall distribution of Alliance's GHG Emissions in 2010:



As shown, privately-owned trucks are the largest contributor to Alliance's total GHG emission, followed by emissions from quarries.

# **Energy Efficiency**

In our attempt to reduce the carbon footprint of our daily operations, Alliance has put in place a number of measures to reduce energy usage at our worksites, ranging from simple installations to more complicated systems improvement. In addition, the Energy Saving Project Team was set up in late 2008 to coordinate the energy saving studies and initiatives, and to monitor the carbon footprint. Line Managers and operatives are encouraged to innovate and implement strategies to increase energy efficiency and reduce emissions. An Energy Saving Fund was also established to finance the energy saving initiatives.



# **Engineering**

Operation teams have worked with the E&M Team to re-engineer the plant facilities with an aim to facilitate the energy saving initiatives. Examples of the engineering measures that we have implemented in the operations include:

- To separate the power circuit of the plant facilities into groups so that minimal electrical facilities will be used according to actual production needs;
- To replace a high powered dust extractor with two lower powered units to avoid over powering the operation during low production time;
- Installation/replacement of higher efficiency capacitors to improve the power factor of the concrete batching plant;
- Other energy saving initiatives adopted in workplaces, such as: flood lights at Kwun Tong Concrete Plant
  controlled by timers; dust extractors interlocked with the central mixer operation; isolation of air compressors
  so that air compressors can be triggered separately according to actual usage;
- Application of LED lighting and T5 fluorescent light;
- Installation of Nano Reflector to reduce the number of ceiling lights at the Head Office.



Translucent cladding to allow penetration of natural light



30% of Head Office's ceiling lights reduced after the installation of nano reflector

# **Initiatives at Concrete Plants**

Since the purchase of grid electricity forms the major part of the energy consumption profile of our concrete batching plants, enhancing the electricity efficiency is seen as an important way to achieve our GHG reduction goal. The following initiatives have been put in place in the concrete batching plants to eliminate potential energy wastage:

- Elimination of central mixer idling time by improving the logistics inside the concrete batching plants;
- Batching arrangement in low-demand period to avoid unnecessary running of both production lines:
- Administrative control to prevent unnecessary use of electrical appliances such as the airconditioners and lighting;
- Relocation of switches of the lighting system in the concrete batching tower from the control room to more convenient position in the batching tower to encourage staff to switch off the lighting when not in use;
- To detect faulty equipment by infrared camera for prompt repair and maintenance avoiding unnecessary energy loss.



To detect faulty equipment by infrared camera





# Fuel Reduction in Load & Haul Operation in Lam Tei Quarry

In Alliance's 2008 Carbon Footprint report, the fuel consumption from the load and haul operations accounted for 64% of the total GHG emissions from the quarry operations. Improving the fuel efficiency of the load and haul operation has thus become the major GHG reduction goal in Lam Tei Quarry.

A study on the in-quarry logistics was carried out in 2009 to review:

- The types of mobile plants and trucks engaged in load and haul operation;
- The combination and ratio of trucks to front-end-loaders or excavatiors and their operating practices;
- The idling time for both the mobile plants, trucks and the primary crusher;
- The haul road conditions.

By modifying the load and haul operations and improving the haul road conditions, the energy efficiency of the load and haul operation was improved by 20% in 2009.

# Summary of Key CS Statistics

| Item   | Unit   | 2008             | 2009      | 2010            |
|--|--|------------------|-----------|-----------------|
|  | Environm   | ental            |           |                 |
| Material used from recycled source (PFA)                               | Percentage ( % )                                     | 12               | 14        | 17*             |
| Diesel consumption   | Litres   | 4,669,741        | 4,782,052 | 4,053,423*      |
| Gasoline consumption   | Litres   | 67,978           | 100,833   | 81,004*         |
| Electricity consumption  | kWh  | 8,339,571        | 6,571,591 | 5,014,216*      |
| Water consumption  | m³   | 345,900          | 371,713   | 275,681*        |
| Total greenhouse gas emissions   | Tones of CO <sub>2</sub> -e                          | 18,415           | 17,648    | 13,954*         |
| Total direct and indirect greenhouse gas emissions (Scope 1 & Scope 2) | Tones of CO <sub>2</sub> -e                          | 18,251           | 17,476    | 13,825*         |
| Total indirect greenhouse gas emissions (Scope 2)                      | Tones of CO <sub>2</sub> -e                          | 5,596            | 4,313     | 2,864*          |
| Other relevant indirect greenhouse gas emissions (Scope 3)             | Tones of CO <sub>2</sub> -e                          | 163              | 172       | 129*            |
| Concrete solid waste generation  | Tones  | 37,107           | 45,979    | 48,422 <b>*</b> |
| Chemical waste   | Tones  | 23.5             | 23.5      | 22.3*           |
| Metal recycled   | Tones  | 106              | 124       | 26*             |
| Conviction to environmental legislation                                | No. of cases   | NIL              | NIL       | NIL             |
|  | Human Resources &                                    | Labor Practices  |           |                 |
| No. of employees (full-time)   | Number   | 260              | 262       | 260             |
| Employee turnover rate   | Percentage ( % )                                     | 9.1              | 8.4       | 13.8            |
| No. of Lost Time Injuries (LTI)  | Number   | 2                | 1         | 2*              |
| Lost Time Injuries (LTI) frequency rate                                | No. of LTI /<br>100,000 man-<br>hours exposure       | 0.29             | 0.15      | 0.35*           |
| LTI Severity Rate  | No. of days lost /<br>100,000 man-<br>hours exposure | 22.3             | 2.12      | 16.12*          |
| Employee Training (External Training)                                  | Hour/staff   | 2.2              | 3.0       | 4.0             |
| Employee Training (Internal Training)                                  | Hour/staff   | 22.2             | 26.4      | 22.4            |
| Employees receiving annual performance appraisal                       | Percentage (%)                                       | 100              | 100       | 100             |
| Total number of incident of discrimination and action taken            | Number   | Nil              | Nil       | Nil             |
| Conviction to health & safety, and other labor legislation             | Number   | Nil              | Nil       | Nil             |
| C  | ommunity Involveme                                   | nt & Development |           |                 |
| Participation to charity/volunteering services                         | Number   | 3                | 4         | 17              |

<sup>\*</sup> data reflects up to November 2010

# Recognition

Alliance continues to operate under best industrial practices and our efforts have been recognized through a number of awards received over recent years. Moving forward will continue to use our awards to help drive improvements in health and safety as well as giving recognition to our people.

| Selected Awards & Recognitions   |             |
|--|-------------|
| Proactive Safety Contractor Award (HKCA)   | 2004 - 2010 |
| Considerate Contractor Site Award Scheme—Silver Award (Development Bureau)                                   | 2007        |
| Class of Excellence Wastewise Label - HK Award for Environment Excellence (Environmental Campaign Committee) | 2008        |
| Green Medalist - Hang Seng Pearl River Delta Environmental Award   | 2008 - 2010 |
| Safety Gold Award (HKCA)   | 2008        |
| Construction Safety Award Scheme - Silver Award (Labour Department)  | 2009        |
| The HK Federation of Insurers Award for Excellence in OSH - Silver Award                                     | 2009        |
| HKQAA - HSBC CSR Advocate Mark   | 2009 - 2010 |
| Safety Performance Award (OSHC)  | 2009 - 2010 |
| Good Housekeeping Award - Merit Award (OSHC)   | 2010        |

"We create a high performance culture through excellence in cost and margin control, and strive for the highest standards in the quality of our products and services, occupational health and safety, and environmental protection. We will continuously improve everything we do; and our performance is always measured."



# Business Objectives 2011

# Excellence in Innovation & Quality

- Industry-wide green initiatives
- Developing innovative products

# Leading Market Position

- Build innovation teams
- Optimization of processes & systems
- Securing aggregate source
- Compete for talents

# Employer of Choice • Employee engagement • Health care & promotion • Employee training &

- competency

   Upgrade standards &
- systemsPartnering & relationship management with subcontractors

# Action Items

# Environmentally Responsible Business

- Environmental awareness
- Improve energy management
- Reduce carbon footprint
- Increase waste reduction
- Better water management
- Continue environmental impact mitigation
- Research environmental adaption

# Community Engaged

- Improved stakeholder engagement
- Employee volunteering
- Focused support of charity
- Developing partnering with communities
- Aim for transparent reporting

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# **Verification Statement**

## **Objective of Verification**

Hong Kong Quality Assurance Agency (herein "HKQAA") was appointed by Alliance Construction Materials Limited (herein "ACML") to conduct an independent verification on its Sustainability Report 2010 (herein "the Report").

HKQAA's verification was performed in January 2011 at ACML's head office and the objective of this verification exercise was to provide an independent review on the materiality, completeness, accuracy and reliability of the information presented in the Report. The verification also aimed to assess the data management system for collection and consolidation of data for the Report.

# Scope of Verification

HKQAA's verification was limited to the information presented in the Report for the period from 1<sup>st</sup> January 2010 to 31<sup>st</sup> December 2010 with respect to ACML's economic, social and environmental. The Report described the past performance of AMCL on safety and health, social, economic and environmental aspects.

# **Verification Methodology**

Our verification process has comprised an on-site interview with responsible senior staff like Human Resources Manager, Operations Manager, Assistant Quality Manager and Procurement Manager, a review of the Report and supporting documents, records, data along with the methodologies used, following with sample selection of representative data from the data management system to verify the performance of various Corporate Sustainability indicators.

### Conclusion

Based on the scope of the verification and the information and data available for review during the verification process, objective evidences were found to support the following conclusions:

### 1. Materiality

The Report has demonstrated ACML has a high commitment to manage its sustainability issues and to look forwards to continuously improving the reporting structure and contents.

### 2. Completeness

Since it is the first Sustainability Report of ACML, there are still rooms for improvement. However, the Report is still able to provide a general overview of ACML's performance with respect to its core activities and to outline their targets and programs on environment issues.

### 3. Accuracy and Reliability

The data and information presented in the Report were widely checked and assessed in details. It is found that they were consistent with supporting materials examined by HKQAA assess team. Based on the information provided for the verification, it was our opinion that ACML has a well-established internal reporting mechanism and review system which can ensure a reasonable level of accuracy and reliability for the information presented in the Report.



# **Recommendation for Future Report**

For future report, it is recommended to make reference with the G3 Guidelines of Global Reporting Initiative (GRI) Version 3.0 (G3) to provide a more comprehensive reflection of ACML's performance on economic, social and environmental aspects. Further opportunities for improvement on the reporting structure and content will been separately submitted to ACML for their consideration on the compilation of the Sustainability Report in next cycle.

Signed for and on behalf of HKQAA

Mr. King Hong Thomas MA

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Lead Auditor, Strategic Business January, 2011



# Your Feedback

Thank you for reading Alliance's first Sustainability Report. Your feedback and comments are valuable in helping us to move forward in our sustainability journey.

Please contact us for any enquires.

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