



Alliance 友盟

A joint venture company between



We **AGGREGATE** the local community & **CONCRETE** the sustainable development of Hong Kong



Sustainability Report 2015 - 2016






Welcome to our Sustainability Report 2015-2016

We are pleased to present Alliance Construction Materials Limited's fourth sustainability report.

In the following pages, you will meet Alliance's teams who work on the front lines and behind the scenes to deliver our products and services, and also hear from customers with whom we build our success.

We are more than a construction materials supplier. We are a total solutions provider that contributes to the building of our home and helping to connect Hong Kong.

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About this Report

We began reporting voluntarily with the first Alliance Report in 2011. Over the years, Alliance's approach to sustainability and how we communicate with our stakeholders has evolved and matured considerably. In a changing world, our long standing commitment to transparency and accountability in reporting remains unchanged, and is reflected in our Sustainability Report 2015-2016. This report is also available on our website www.concrete.hk

Reporting Period and Scope

This report covers Alliance's sustainability performance for the calendar year from 1st January 2015 to 31st December 2016 at our controlled assets where we set workplace HSE, green initiatives and other sustainability standards and can therefore enforce their applications. At our non-operated assets, such as Anderson Road Quarry and Huidong Quarry, we share our performance requirements and thereby seek to influence the assets to adopt them.

Reporting Approach and External Assurance

Sustainability is a fundamental principle for us, guiding our very actions. The reporting method provides details of the underlying key elements on which our reporting is based. This Report is guided by the GRI Sustainability Reporting Standard of the Global Reporting Initiative (GRI).

We have clear standards and reporting requirements. This Report has been assured by the HKQAA, a third party that reviewed all our data and self-declared GRI 'in accordance' option. This review helps to ensure consistent and objective data collection and reporting of our sustainability performance. The Independent Assurance Statement is provided on Page 67.

Ongoing Stakeholder Engagement

The basis of our sustainability strategy and reporting is defined by the intersection of what matters most to our stakeholders and what most influences our business success. We determine that intersection by engaging with both internal and external stakeholders through a variety of ongoing interactions and conversations that inform and guide our sustainability journey.

We want to Hear from you

We set high standards for ourselves and work hard to meet our stakeholders' expectations. Comments, suggestions and critiques on our sustainability practices and reporting are welcome.

Please send us a message via any means.

Alliance Construction Materials Limited

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CEO Message

The years 2015 and 2016 were important milestones for Alliance in terms of business and sustainability performance.

The growing economy and numerous major construction projects had contributed to the boost of sales volumes in the period across our two business lines: concrete and aggregates.

Regarding occupational health and safety, it is encouraging to see that our accident prevention efforts have paid off. The reportable injury cases as well as the road traffic incidents continued to remain at low level in the period.

While in environmental and climate protection, we achieved the certification for ISO 50001 Energy Management System in December 2015; as of the end of 2016, we managed to reduce the carbon intensity of our concrete operations by 20% as compared to the level in base-year 2007.

Alliance as a team also participated in variety of community activities contributing to our resources to promote caring of the community and betterment of the society.

In Alliance, we are never complacent. We are proactive and forward looking. The future outlook of the construction materials industry will be challenging in the face of political instability, economic uncertainty, scarcity of sites, labour shortage, and ever evolving needs of customers and the community.

With the support of our two shareholders – Cheung Kong Infrastructure and HeidelbergCement, we have strategically planned for the continuity and sustainability of our resources to provide innovative quality products and value added service to our customers. We have commenced the operations of our new mega concrete batching plant in Tsing Yi in July 2016; we improved the production capacity of our quarry in Guangdong Province in PRC in 2015 and expanded the operational capacity of our Tuen Mun aggregates depot in October 2015; we obtained the approvals and commenced construction of the new concrete batching plant at Tsing Tim Street, Tsing Yi in 2016.

People of Alliance are talented, passionate, innovative and committed. They are our most valuable asset and we will continue to invest in people and develop talents by training, coaching and proactive succession planning.

We had conducted intensive training in the past two years for our key customer accounts and operations teams to align our capabilities, products and services to address our customers' needs and to adopt a customer-centric approach across all our functions in delivering solutions to customers. Customer focus, service quality and product innovation are



the keys to achieve customer satisfaction and differentiate Alliance in the competitive market.

As the leading solution provider in the construction materials industry, we have every confidence to turn risks and opportunities into results in a sustainable way with focus on the triple bottom line: Planet (Environmental), People (Social) and Profit (Economic).

Since 2009, we gather facts and data every two years to build our Sustainability Report. Sustainability has always been the core of our business. We compile and create this fourth report, by migrating to the new GRI reporting standards, because we always seek to act in a responsible way towards our community and the environment.

I strongly believe that the success of Alliance is only made possible by the support and patronage of our valued customers, our people, business partners and all other stakeholders. I wish to express my gratitude and appreciation to all of them. We will continue to go hand in hand with all stakeholders in the journey of sustainability and position Alliance to contribute to a more sustainable future for all.

Vincent Yu
Chief Executive Officer

May 2017

About Alliance

Alliance Construction Materials Limited, a joint venture company owned by Cheung Kong Infrastructure Holdings Limited (CKI) headquartered in HK and the HeidelbergCement Group headquartered in Germany, is the leading concrete and aggregate solutions provider in Hong Kong. CKI and HeidelbergCement both strongly support Alliance providing us with both international background and local credentials.

Alliance was established in 2004 providing ready-mixed concrete and aggregates to local construction projects. In the reporting period, we operate 1 quarry in Hong Kong, 1 quarry in Guangdong Province in PRC and 8 concrete batching plants with 15 production lines in Hong Kong. As of December 2016, we had 263 full-time employees and 160 contract drivers.

Our business has continued to grow. The new mega concrete batching plant with large scale aggregate storage facility at Tsing Yi Island began commercial production in July 2016. A new concrete batching plant, also located at Tsing Yi Island is under construction. This new plant will come into operation in 2018. New facilities were added at Lamma Island concrete batching plant to cope with the increase in concrete demand. An Aggregate Depot located at Tuen Mun began operation in 2015, and we have 20 new trucks engaged in delivering concrete to our customers in 2016.

Our expanding operational capability continues to strengthen our leading position in the construction materials market in Hong Kong.

8 DECENT WORK AND ECONOMIC GROWTH



We actively support three sustainable development goals (SDGs) – Goal no. 8 ‘Decent Work and Economic Growth’, Goal no.9 ‘Industry, Innovation and Infrastructure’, Goal no.12 ‘Responsible Consumption and Production’. These goals are closely aligned to Alliance’s vision and strategies.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



SDGs are spearheaded by the United Nations. For more information, please visit <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>



Our Strategic Locations of Production Plants



1
Aggregate Depot

2
Quarries

8
Concrete Batching Plants

15 Production lines

Tuen Mun
Yuen Long
Tsing Yi West
Sai Tso Wan
Tung Chung

Kwun Tong
Yau Tong

Chai Wan
Huidong

Lamma

Our New Facilities



Concrete Batching Site Plant for Housing Authority Project

Tung Chung

- 90m³ per day designed capacity
- Single production line mobile plant
- facility for producing temperature controlled concrete

Concrete Batching Plant under construction

Tsing Yi

- 2,400 m³ per day designed capacity
- Two production lines
- 1,100 tonnes cement storage
- 1,700 tonnes aggregate storage
- Will commence production in 2018



Mega Concrete Batching Plant with large aggregate storage capacity

Sai Tso Wan Tsing Yi

- 3,000 m³ per day designed capacity
- Three production lines
- Aggregate and cementitious materials storage capacity is sufficient for continuous production over 3,500 m³ of concrete

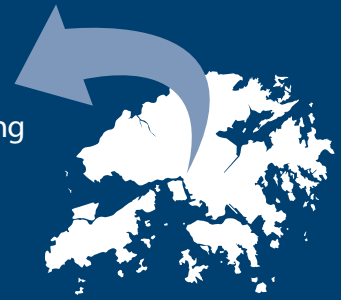
Our Vision and Strategies

Through reviewing ourselves by employee survey and conducting workshops, which covers range of topics mainly pivoting around Alliance business strategy, management team concluded Alliance vision and strategies to differentiate us in the industry.

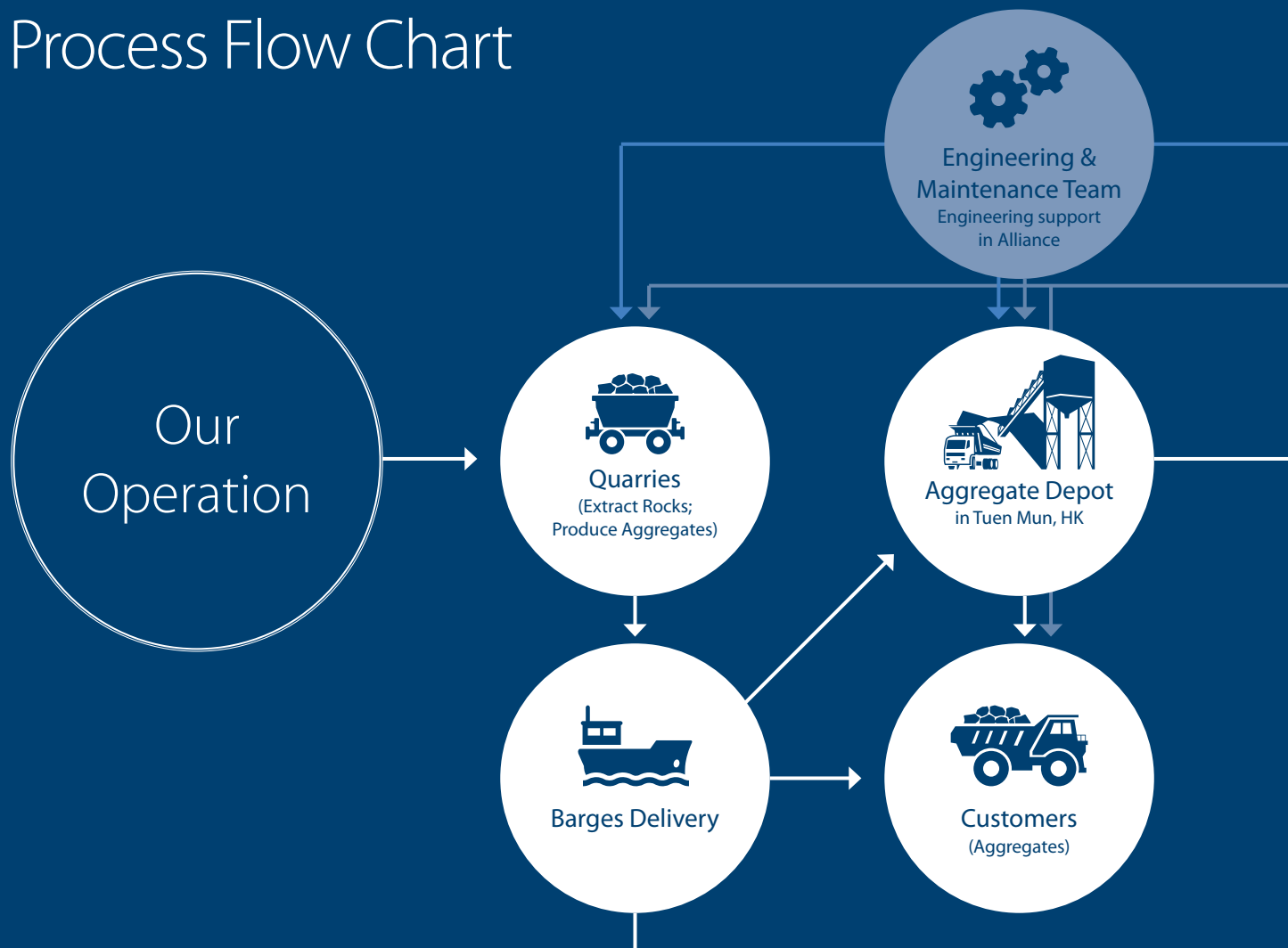
Vision

To be no. 1 total solutions provider of concrete and aggregates in Hong Kong

No. 1
in Hong Kong



Process Flow Chart



Strategies

Customer Focus

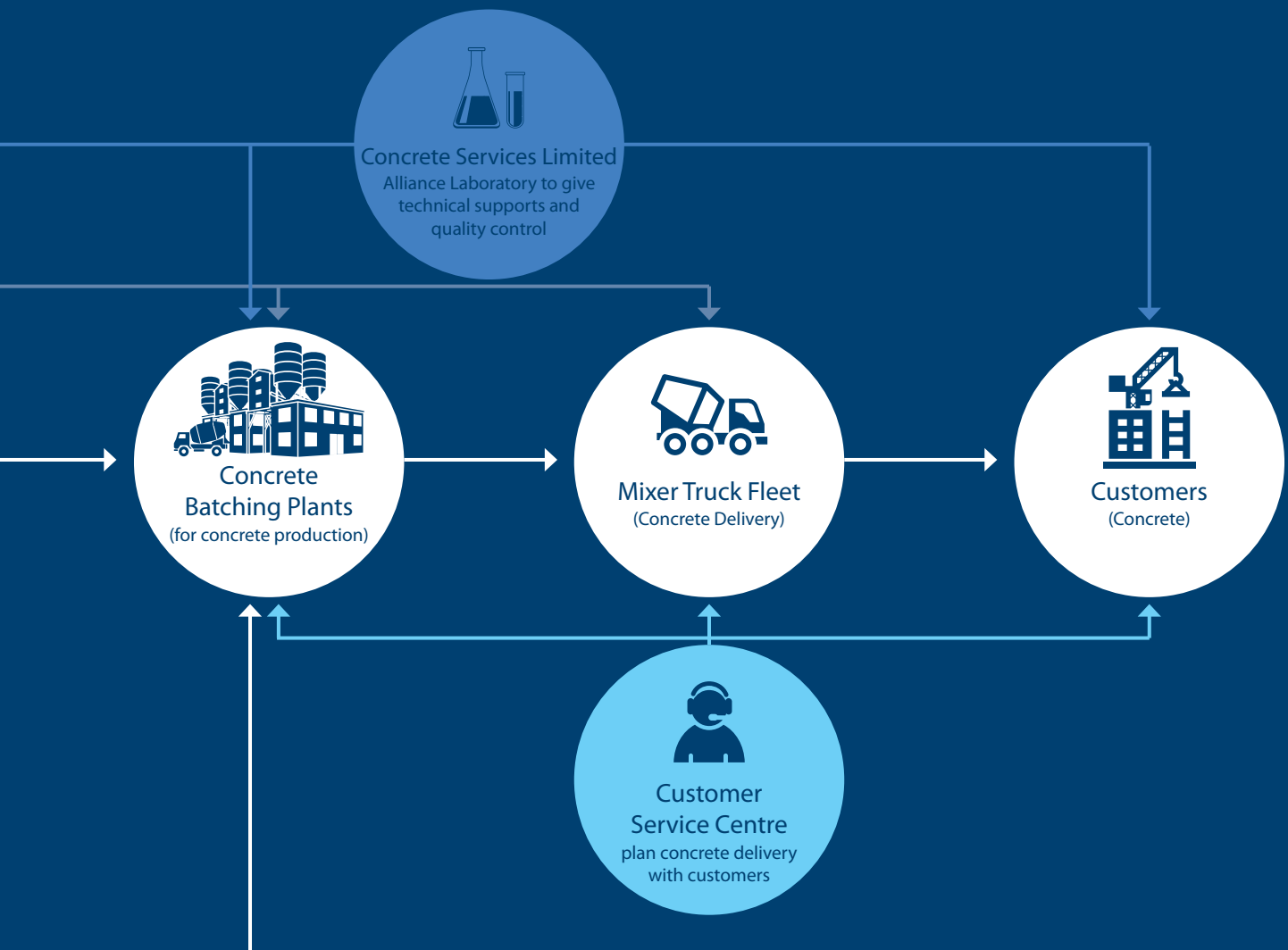
We build our success on our customers' success by getting the job done right every time.

People Development

Companies are all about people and the companies with the best talent win. We will continue to develop talent and performance by coaching and communication.

Operational Excellence

We will have to evolve and challenge each other to do things better. We shall continue to improve the performance at all operations/ functions and achieve cost leadership in a sustainable way.



Our People



Sam Yip

Technical Manager

We operate our HOKLAS accredited laboratory. Besides testings and designing concrete mixes; we also develop innovative products to suit customers' needs for a variety of projects.

Shirley Lam

Laboratory Manager

Having been in the industry for 20 years, our laboratory has always been the center for ensuring our concrete and aggregates to meet the quality standards.

YC Hung

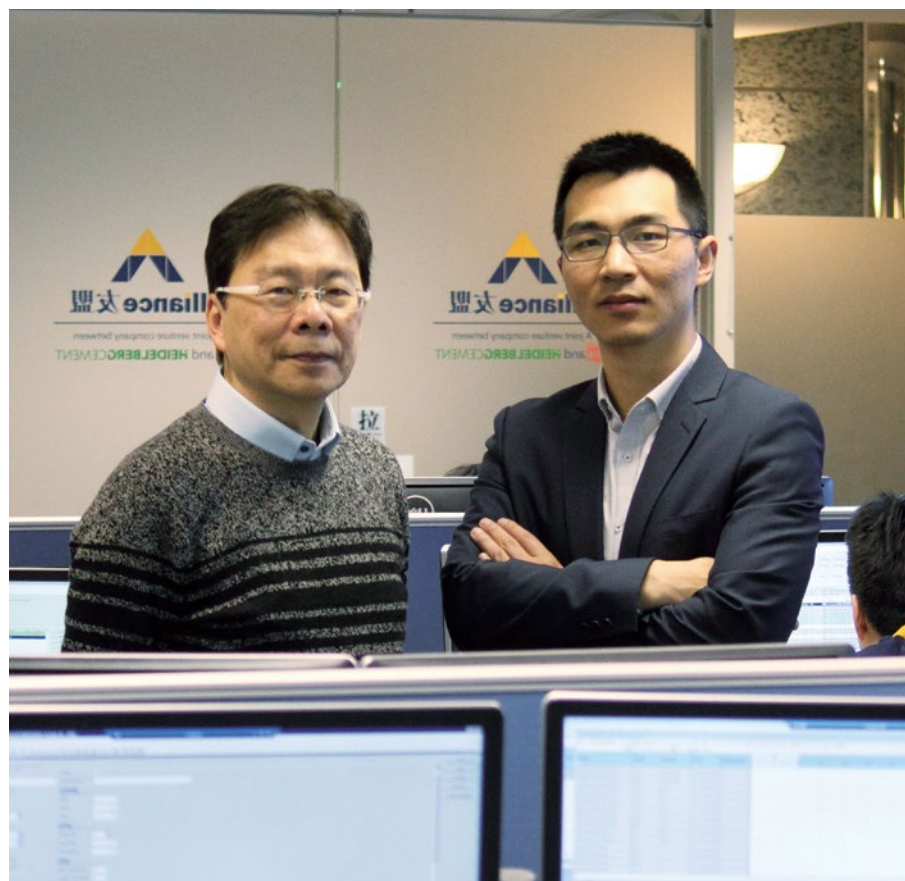
Customer Service Manager

Communicating with customers is my key role. I talk to customers on the phone and visit the sites to make sure I get the real picture in mind for more accurate orders pre-planning and deliveries; most importantly, to optimize our resources to meet customer requirements.

Joseph Wu

Assistant Operations Manager
(Aggregates & Logistics)

Tuen Mun Aggregate Depot was established in 2015. The depot is to support our aggregate sales and to provide raw materials supply to our concrete plants for concrete production. There are about 270 round trips at the depot each day to deliver to our concrete plants and our customers.





Kong Wai Keung

Area Production Manager

Delivering quality products on time is always the goal. My role as a production manager is overseeing 4 plants at Kowloon West area. On top of that, ensuring our people working safely and healthily are always our priority.

Fong Ping Hong

Area Production Supervisor

Engaging in the daily concrete batching plant operation means getting myself to adopt the Health, Safety and Environment best practices. Only when the health and well-being of everyone are in priority, our plant can operate smoothly.

CY Ng

Logistics Manager

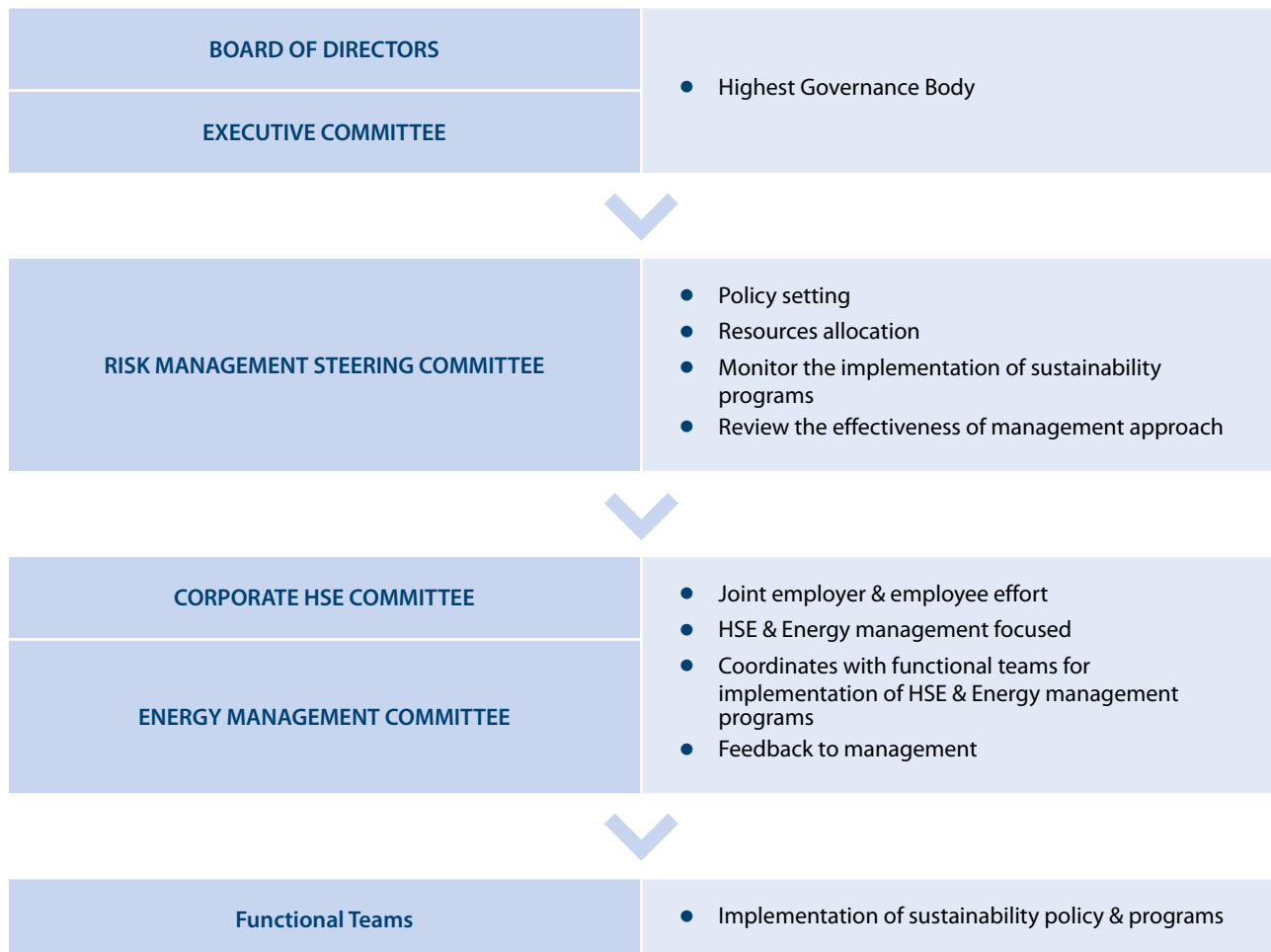
Additional 20 trucks joined our mixer truck fleet in 2016 to cope with the customer demand. We are still planning to expand the lifting capacity of our fleet to meet with future demand.



Corporate Governance



The Executive Committee Members:
 (back, from left to right) Ms. Ophelia Ng, Mr. Nelson Pang, Mr. Ross Chow, Mr. Vincent Yu, Mr. Durand Bembridge, Ms. Lilian Wong
 (front, from left to right) Ms. Sim Soek Peng, Mr. David Hogan, Mr. Lambert Leung, Mr. Ivan Chan, Mr. Eddy Tsang





We see compliance as an opportunity and a core part of our business sustainability.



Nelson Pang, Finance & Administration Manager, is also our Compliance Officer.

What is the policy for legal compliance in Alliance?

Whether it is a corporate governance consideration or for brand reputation, it is our policy to set legal compliance as a baseline. Being the market leader we strive for highest possible standards in everything we do. We expect legally and ethically impeccable conduct by our employees.

What do you consider the risk level for Alliance with regard to legal compliance?

Alliance is serving the local market and we have mainly operated in Hong Kong, a city with a robust legal system that is well established and has embedded a strong legal compliance culture. Compared to some countries where human rights and corruption concerns are pervasive, our legal compliance risk should be relatively lower. The serving of a single market also prevents us from managing different legal systems in different countries making our compliance less complicated.

The compliance and risk landscape, however, is continually changing. In Hong Kong, we are facing even more stringent requirements from, for example, environmental law and labour laws such as the occupational safety and health legislations, and from new laws such as the competition law. The increasing risks are further amplified by significant social, technological and economic changes. All these require us to be vigilant, and more proactive in responding strategically to both the regulatory challenges as well as the practical and social concerns.

How do we manage our legal compliance risks?

Our strategic approach to the management of compliance risks, rests on 3 pillars:

The first is to steer the compliance management from the

very top of Alliance. Our Board of Directors owns the fiduciary, equitable, statutory and contractual duties. We operate under the guidance, influence and have the support from, both parent companies, Cheung Kong Infrastructure Limited and HeidelbergCement. This has enabled us the capability to manage our compliance risks in a holistic and consistent way.

The second is where we define the compliance risk management as a core management process engaging all elements of the business. The risk management process which includes identification of compliance risks, the evaluation and treatment of the risks and, a regular performance review are all embedded within each of the business functions.

The third is where we support the process of compliance risk management through the use of specific management tools. For example, we developed a program for ensuring the compliance to competition law. The program consists of setting policy, provision of training and guidelines for employees, reporting mechanism and legal support. Our Integrated Management System also adopts preventive approach measures, driving the compliance to HSE legislation and other applicable standards.

Legal compliance in corporate governance and sustainability

Alliance is, like most businesses, facing growing pressure to explain and improve our sustainability performance, this pressure is accentuated by the hyper-connected world of digital media. In the face of more intense stakeholder scrutiny, we seek to move from building sustainability into our risk management approach to comply with regulations, but rather to integrate sustainability into our business strategy and organizational culture, making sustainability a core part of Alliance.



On-going Stakeholder Engagement

We consider stakeholder engagement an essential aspect of corporate governance. We, as the leading concrete and aggregate total solutions provider in Hong Kong, understand that regular dialogue with employees, customers, shareholders, community leaders, neighbours and suppliers through formal and informal channels is essential for the performance of our business, as well as developing and implementing our sustainability strategies.

We are always looking for ways to support our employees, customers and stakeholders to do more. This has inspired us that good ideas can come from anywhere - even those who may not be critical of us. This is why we conduct ongoing engagements with a broad array of stakeholders.

- We formally incorporate stakeholder feedback into our sustainability strategy and annual reporting efforts through our materiality assessment process.
- We survey customers regarding their satisfaction with our performance.
- Alliance employees participated in an employee engagement survey at end of 2015 and a forum was conducted to feedback the survey result. Furthermore, they are incorporated into Alliance business strategy.
- We have regular contact with our shareholders at monthly board meetings in Hong Kong or other engagement around the world, and in response to in-bound communications.
- We invite outside stakeholders, including government officials, NGOs, communities, neighbours to present their perspectives in our Sustainability Report.



Dr. Margaret Burnett

Consultant of the Sustainability Report

“Sustainability as a term was better understood to include social considerations. Engaging all employees in sustainability needs a higher purpose. Purpose does not change. It is the underlying reason for being, and guides you through a business landscape that is continually changing. It keeps you and your colleagues inspired and motivated.”



Miss Grace Tsang

Senior Lecturer of Hong Kong Institute of Vocational Education

“Having added sustainability as part of the curriculum, we would like to educate younger generation that apart from making profit as a business, caring for the community and the environment are equally important.”

Miss Nancy Chan

Student of Hong Kong Institute of Vocational Education

“Looking at the company’s website for its contribution to sustainability would definitely be one of my criteria to choose to work with after my graduation.”



Dr. Lorne Woodrow

Chief Geotechnical Engineer/
Mines & Superintendent of Mines of CEDD

“Product life cycle is a hot topic and is related to reduction in waste, carbon and natural resources usage. Conservation is the overall goal and to move forward, promotion and education should go hand in hand.”



Mr. Mok Wai Chuen, JP

Assistant Director (Air Policy) of EPD

“Alliance has made a strong commitment to deliver products and services in a sustainable way and they are looking to coordinate with government to work together to contribute to Hong Kong’s environment.”



Mr. Wong Tak Wai, David, JP

Assistant Director (Environmental Compliance) of EPD

“It is important to think about the circular economy in order to sustain raw materials consumption within the environmental limits. This will trigger more innovative products of more recycled content.”



Mr. Lau Hon Wah

Alliance Mixer Truck Driver

“I agree that health, safety and environment are the basic standards to be met as a leading company with international background and I think Alliance is doing a very good job on this. More communication is now conducted between us and senior management and I believe that our feedback is taken on board.”

Materiality Process

Materiality is a critical input into Alliance’s sustainability strategy because it ensures that we provide our stakeholders with the sustainability information most relevant to them. To determine this, we conduct a materiality assessment after all stakeholder feedback is collected:

- Conducted structured interviews with representatives from internal and external stakeholder groups in Hong Kong and China
- Interviewed members of Alliance’s directors, who has direct influence for company strategy
- Gathered feedback from dozens of regulators and other government department; communities; nongovernmental organizations (NGOs), including social and environmental activists and academics
- Reviewed the outcomes of stakeholder engagement efforts on sustainability issues. Relevant results from these engagements were shared with Alliance management team, who has direct responsibility for executing all company strategy.



Alliance ranked each issue’s relative importance based on an assessment of the aggregate feedback from stakeholders and Alliance management, and supported us in making final adjustments to the ranking before we presented it to the board members of Alliance.

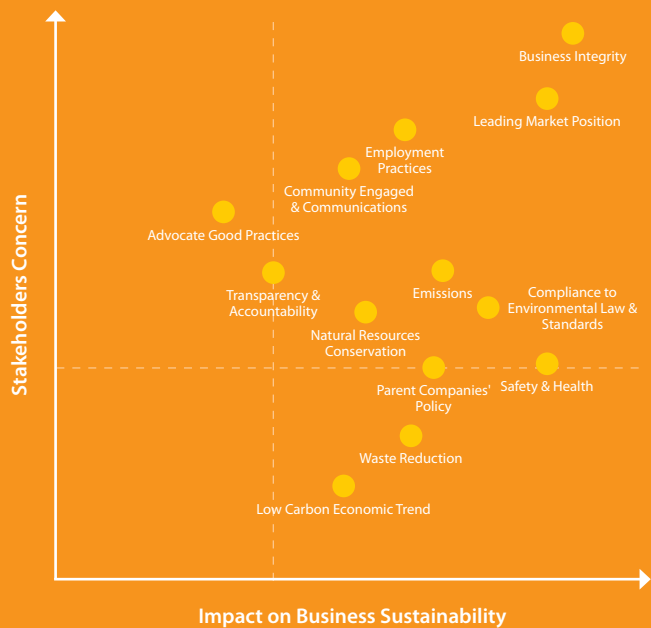
The primary result of our materiality assessment process was a set of ‘material aspects’ of sustainability for Alliance. We have mapped these material aspects on a ‘materiality matrix’ (next page). The vertical axis of the matrix is ‘Stakeholders Concern’ and the horizontal axis is ‘Impact on Business Sustainability’. These are the same axis definitions we used in our previous reports.

We have addressed the issues our stakeholders most want to hear about in later parts of the reports. If there is any issues that you think has not been adequately addressed in this report, please let us know.

Materiality Matrix

The GRI standard recommends that reporters define the vertical axis as 'Influence on Stakeholder Assessments and Decisions'. We believe this represents little or no change in meaning from 'Stakeholders Concern'. GRI also recommends that reporters define the horizontal axis as 'Significant Economic, Environmental, and Social Impacts.'

After careful consideration, we chose to retain our definition of the horizontal axis (Impact on Business Sustainability) in order to focus the materiality matrix on our overall sustainability strategy. Our approach also maintains consistency with our previous materiality assessment and ensures Alliance-specific material aspects stand out clearly for our management and stakeholders. The relevant scope and aspect boundaries are consistent with previous reporting periods as well.



Material Aspects Table

| Material Aspects | Materiality Level | How we addressed |
|---|-------------------|---|
| Governance | | |
| Business Integrity | High | <ul style="list-style-type: none"> Company Policy and Code of Conduct Internal Control Programs & Audits Provision of training and legal supports to employees |
| Parent Companies Policy | High | <ul style="list-style-type: none"> Internal audits and controls from parent companies Internal reporting and review |
| Transparency & Accountability | Medium | <ul style="list-style-type: none"> Reporting Stakeholder engagement |
| Environment | | |
| Compliance to environmental law & standards | High | <ul style="list-style-type: none"> ISO14001 Environmental Management System Disclosure of environmental performance On-going dialogue and engagement with neighboring communities and other stakeholders |
| Emissions | High | <ul style="list-style-type: none"> Emission reduction targets System/process optimization and upgrading of facilities |
| Waste reduction | Medium | <ul style="list-style-type: none"> Innovation on waste reduction and recycling Waste reduction target |
| Natural Resources Conservation | High | <ul style="list-style-type: none"> Product innovation Recycling facilities and program ISO50001 Energy Management System & energy saving target |
| Economic | | |
| Leading Market Position | High | <ul style="list-style-type: none"> Holistic customer focus management System/process optimization Optimization of productivity and capacity |
| Low Carbon Economic Trend | Medium | <ul style="list-style-type: none"> Carbon Footprint management & reduction target |
| Social | | |
| Safety & Health | High | <ul style="list-style-type: none"> OHSAS18001 Safety Management System and total safety management approach Employee and sub-contractor engagement |
| Employment Practices | High | <ul style="list-style-type: none"> Employee engagement Decent Workplace commitment |
| Community engagement & communications | High | <ul style="list-style-type: none"> Community dialogue and engagement On-going environmental impact assessment & mitigation |
| Advocate good practices | Medium | <ul style="list-style-type: none"> Collaboration with trade associations, institutions, and other professional bodies External benchmarking |



Me

Our Behaviour, Our People

We value a passion for quality and a brand that our business partners would like to work with. Our behaviours represent what we stand for as a corporate citizen and an employer. These values and behaviours are embodied by our employees at every level, function and geography of our business.



In this Section

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[Training & Development](#)

[Work Life Balance](#)

[How We Challenge Ourselves](#)

[We are Reliable](#)

[We Do Things Bigger, Better and Faster](#)

Our people are vital to our business. We maintain a constant dialogue with them about our sustainability strategy and actions. This keeps us focused and lets us know when they see an opportunity for us to do more and do better.

Staff Forum was held to allow top management to reveal the results of Alliance cultural survey conducted at the end of 2015. The survey aimed to provide the business a view of

how our employee saw about where we were today, what was doing well and where we needed to improve. It was to ensure Alliance would be in the very best shape to meet the challenges in future. Apart from the survey, focus groups and face-to-face interviews, conducted by an independent party, were also conducted to receive different feedback from across the whole of Alliance.



Feedback Result

- We have Huge Pride
- We have High Loyalty
- We Care
- We are Strong in Execution

We need to work on

- Communication with Frontline
- Performance Management
- Show you where we are in 3 years time



Health & Safety

Ross Chow

General Manager – Quarries
Chairman – Corporate HSE Committee



Our health and safety management emphasizes “Visible Leadership” and “Take Action” to work safely and to remove risks and hazards from the workplace as soon as they are spotted.



Alliance's Corporate HSE Committee is a joint employer and employee forum for managing workplace health and safety and is underpinned by our 3 essential principles in health and safety management:

Incident Prevention – We believe that all incidents are preventable and have to be prevented and that all workers have the right to go home safely after their shift.

Visible Felt Leadership – We consider that good practices need to be driven from the top. The responsibility for good health and safety practice begins with the workplace leaders; while top management owns the ultimate responsibility for our overall health and safety performance.

Employee Involvement – Employees are most capable to identify risks and hazards from their workplaces; their cooperation is paramount in the promotion and achievement of safe and healthy conditions.

I am honored to be the Chairman of the committee which enables me the opportunities to work closely with our employees for the creation of a "Harm Free" workplace. Our approach to health and safety management is very practical. We always emphasize the "take real action" as we know for sure that "lip service" can never remove any risks and hazards from the workplace.

As the Chairman of the committee, I have a very key role to play, which is to motivate the committee members to be aware of and collect any workplace health and safety concerns from their teams and then raise them in the committee meetings, which is the first step for most of the improvement initiatives. Being the General Manager of Quarries, I am also in a good position to put forward improvement initiatives since I have first-hand information and study results from the committee.



(from left to right) Mr. Vincent Lo (Assistant Technical Manager), Mr. Durand Bembridge (General Manager-Concrete), Mr. Vincent Yu (CEO), Mr. Sam Yip (Technical Manager), Mr. Ross Chow (General Manager-Quarries)

In health and safety management we emphasize Visible-Felt leadership. The monthly management site visit enables the top management to listen and discuss directly with the operative teams.

For the fostering of a health and safety culture within the organization, our HSE Climate Survey which is carried out every two years has confirmed a positive health and safety culture to be in place. This has reflected positively in our accident prevention results. Our challenge now is to break through the plateaued health and safety performance, even though it is relatively high. Once again the visible-felt leadership matters.

Putting health and safety management into the wider sustainability framework, protecting our employees from occupational health and safety risks and hazards is one of our sustainability priorities since employees are the most valuable asset in helping us to realize our business goals. Our stakeholders have also suggested to us to advocate good practices within the industries. This should be our next "real action" to take, thus contributing to the sustainable growth of the industry and the wider community of Hong Kong.



Mr. Jacky Tsang (Production Manager)(right) represented West Kowloon Concrete Plant to receive the Best HSE Performance Award 2014 from Mr. Vincent Yu (CEO)(left) during the annual HSE Promotion Day on 8th March 2015

We recognize the performing teams and individuals who take real action improving the workplace health and safety environment.



(from left to right) Mr. Ross Chow, Mr. Vincent Yu and Mr. Durand Bembridge represented Alliance to receive the Best in Class, Health & Safety Performance Award, Best in Class, Environmental Performance Award and Best in Class, HSE Initiative Award from HKCMA in the Director's Awards for HSE Excellence 2016-2017 awards presentation ceremony.



Safety by Design

Case Study: Tsing Tim Street Concrete Batching Plant Construction Project

Mark Cheng

Project Manager



“Safety by Design” can eliminate risks and hazards from entering the work place, which will allow workers to be more productive in daily work.



Having worked in the construction materials industry for almost 20 years as well as being involved in numerous concrete plant and crushing plant design and construction projects, I understand the importance of the ‘Safety by Design’ concept. Good design can eliminate many hazards before they enter the workplace. When designing our Tsing Tim Street Concrete Batching Plant our Safety by Design concept applied to both the construction stage and the operations.

During the construction stage we recognized that ‘fall from height’ protection, safety controls for lifting operations, risks and hazards from congested worksites, and machinery safety were major considerations for the implementation of incident prevention measures. As such the plant structure and other production facilities were pre-fabricated instead of the on-site installation. This will minimize the exposure of workers to working at height. The just-in-time materials delivery according to the plant construction progress prevented an excessive amount of materials being delivered which would cause insufficient space for lifting operations and the provision of an obstacle free passage for vehicles and site workers. We achieved on time completion of construction in a safe manner as a result of the pre-planned lifting operations, the pre-fabricated edge and other components of the plant structure.

To meet both the operational needs and safety concerns, our design incorporated the lessons learned from past experience, inputs from users, and evaluations of the

production processes. For example, we consolidated the waste water sources into one area which both, shortened the distance of the waste water flow, while preventing the spread of slurry water to other parts of the plant yard. The combination of the one-way traffic and separation of pedestrians from heavy traffic spots minimized the risks from heavy trucks and mobile plant movements. We installed local isolators facilitating the application of Lock-out Tag-out procedure. The installation of maintenance platforms eased the difficulties the maintenance staff had when carrying out machinery maintenance and repair at height or in awkward locations. The application of computerized simulation programs for the plant structure and production facilities design enabled the precise calculation of, for example, the obstacle free access and egress, headroom, and gradient of inclined surfaces. All these are effective and durable means of creating a healthy and safe working environment for our employees.





Collaboration with Sub-Contractor

William Kwong

Project Manager
Edwin Lai International Limited



Collaboration between employer and sub-contractor enhances mutual trust, which is essential to the success of construction projects.



“Safety is a Priority” is a clear signal we have when working for Alliance. Alliance’s early involvement of safety personnel in to the project planning as well as the support given in the review and approval of safety methods and risk assessment have enabled us to consider in great detail the major risks and hazards that may occur in the construction process. This involvement helps us to determine effective control measures before the project starts. For major projects, such as the construction of the Tsing Tim Street Plant, we also

have regular meetings that involve the planning for the following week as well as the daily planning and review.

Although the project safety management requirements and site safety controls are most stringent, we appreciate the collaboration between Alliance’s project team and ourselves as the sharing of knowledge and information, effective communications and the supportive attitude are key elements of a successful contractual relationship and are essential to the success of any construction project.



(from left to right) Mr. SK Wu (Risk Manager), Mr. Vincent Yu (CEO), Mr. David Hogan (Director), Mr. Ross Chow (General Manager-Quarries), Miss Brenda Ching (Communications Manager)

The HSE Seminar is an annual event which provides an opportunity for the management to openly discuss the workplace HSE issues at different levels.



(from left to right) Mr. Edward Yip (HSE Manager), Mr. Paul Chung (Quality Manager), Mr. Wayne Yu (HR Manager) and Mr. Beta Wong (Customer Service Manager) represented various teams to receive the Safety Performance Awards in the 14th Hong Kong Occupational Safety & Health Award Forum and Award Presentation Ceremony organized by the Occupational Safety & Health Council.

Stanley – Our Retiree talking about Health and Safety

Brenda Ching, Communications

Manager (B): Hello Stanley, would you let us know more about you and your background?

Stanley (S): It's my pleasure Brenda. I started at a very young age in the industry with a passion in mechanics. I was given a lot of opportunities to learn about mechanics at work in the day and attending school in the evening. So basically, I was learning while working. Then I got a chance to work at the quarry which should be of no surprise that blasting was very risky and of not-so-good quality at that time. Quarry benches were not implemented. We had long working hours and we just used towels to cover our noses and mouths at the time of blasting. Comparing to the practices we have now, it was quite unsafe.

B: I can only imagine all the dust and dirt around, and mud covering your face and overalls. Do you see significant changes in Health and Safety in the past 37 years?

S: I see there is a huge change of physical action and mindset in safety. A lot more resources were in place building up a safe culture in Alliance. Staff now see this as priority and are always well equipped with PPE without any reminder required at all. As well as health and safety, quality has been enhanced greatly leading to higher customer satisfaction. Image of Alliance is also being strengthened.

B: I wonder what makes you stay in the industry for such a long period of time?

S: There are several reasons. Management is the key. I see leaders in our management team that lead us the vision and direction and also give me a degree of flexibility to complete challenging projects and tasks. Shek O Quarry was one of them, of which at the same time gave me great satisfaction upon project completion. Working hard in a safe environment is also very important. If it was not the management team putting health and safety as the priority, it would be difficult for all of us to achieve these high standards, and so that we could concentrate working on daily operations very safely. And of course, I spent a long time here working together with different colleagues, so relationships were built up and became friends.

B: If there is one thing you would like to do but have not done, what would it be?

S: That would be being part of concrete operation team. As I have always been in the quarry field, it would be of very helpful and great experience to take part in concrete operation to understand fully how they look at aggregates as raw materials and get a different perspective.

Stanley So

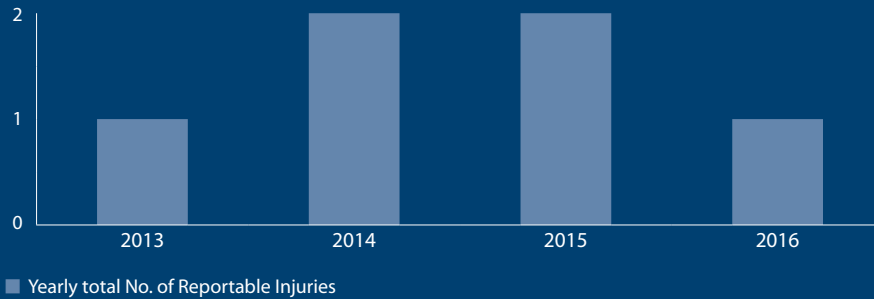
Former Operations Manager - Eastern PRD

Retirement after 37 years in the Industry

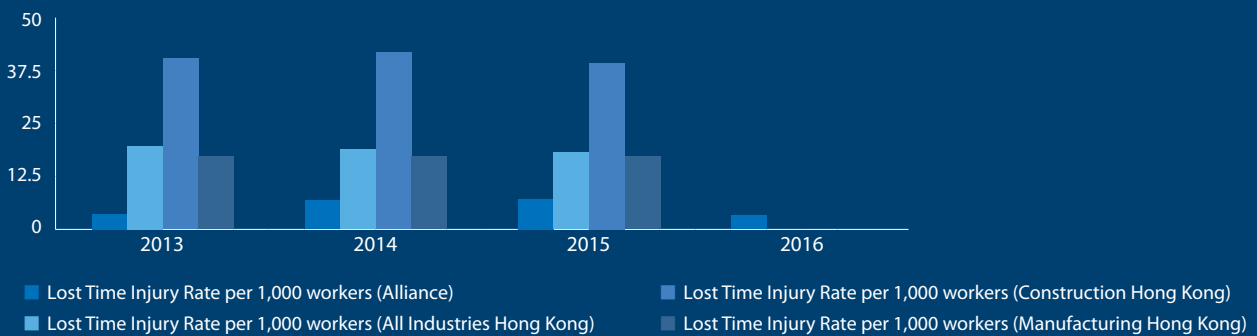


Safety Statistics

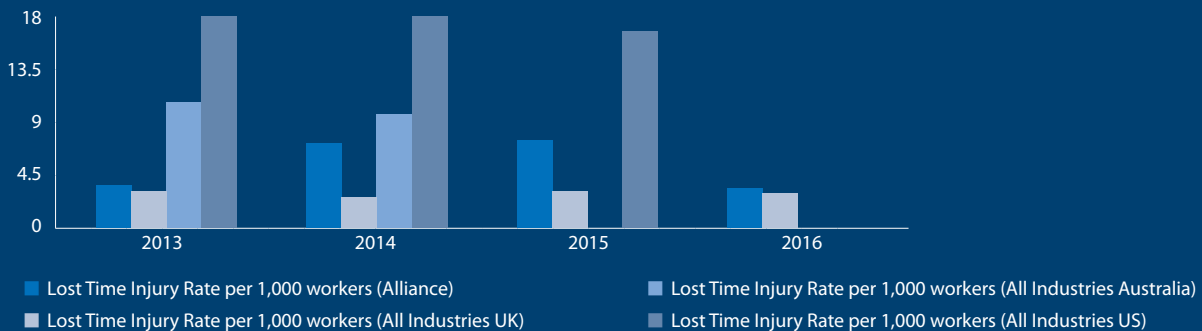
Yearly total No. of Reportable Injuries



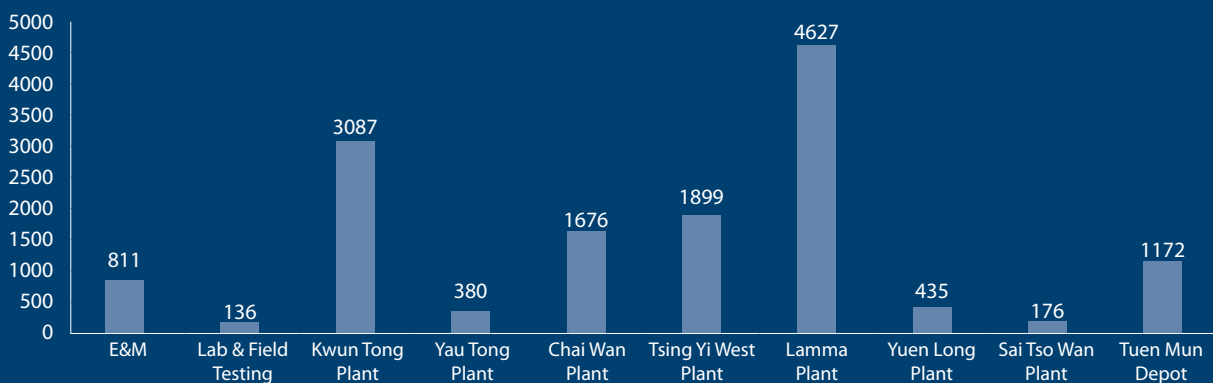
Safety Statistic Benchmarking (Hong Kong)



Safety Statistic Benchmarking (Other Countries)



No. of Lost Time Injury (LTI) Free Days (as at 31/12/2016)



Training & Development



Training and Development

Training and development is one of the key Human Resource functions within Alliance's sustainability strategy. It is the pivot of our succession planning and performance management, and a core part for realizing our customer focus and operational excellence goals.

Within the reporting period 2015-2016, on top of our continued investment in employees and drivers health and safety training and technical training, we engaged RogenSi and launched a series of extraordinary leadership training sessions including; key account management training, coaching and communication skills training. These training initiatives aimed to equip our staff with the necessary sets of skills to support our customer focused business strategy.

In driving ethical business behavior, we provided competition law training to Managers, which is a regular exercise to ensure our Managers are up-to-date with the status of law enforcement and have the highest level of awareness. We also invited trainers from ICAC to deliver talks to our employees promoting awareness of anti-corruption behavior.

To fulfill employees' personal development needs we sponsored 10 employees for their professional development.

Nurturing the younger generation

We understand how important it is to properly establish a talent pool within the organization. Our succession planning not only mitigates the loss of human capital from retirement, we also transmit knowledge to a younger generation. We are equipping them with necessary skills for taking on their predecessors' roles to carry them forward in a rapidly changing market.

Management Trainee Program

Bryan Wu and Carmen Yan joined Alliance as Management

Trainees in June 2016. Before joining Alliance Bryan worked in the IT industry in the United States after he obtained his Bachelor Degree in psychology; while Carmen worked in the fire safety engineering field with her manufacturing systems engineering background.

Bryan and Carmen are in their first year's training program. Bryan has completed his rotations with the technical team, quality assurance, concrete production, customer service centre, and logistics. Carmen has also finished her training in customer service centre, logistics, E&M, project management, technical and quality assurance, and concrete production. In addition to their on-the-job training Bryan and Carmen also attended the Occupational Safety and Health Training Program in the evening.

Bryan considered his psychology studies at university to have enabled him with fresh eyes to observe the operations from different angles, despite having to overcome the steep learning curve in technical and engineering skills. Carmen's engineering background is an advantage for her to pick up new skills and knowledge in concrete technology as well as the design and maintenance of production machinery. Working alongside an experienced manager in every stop has enriched her management skills.

Both Bryan and Carmen appreciated the opportunities they encountered at the frontline operations, such as carrying out the raw material testing, working as a batcher in a concrete batching plant, or conducting the health and safety inspections at the worksites. All these experiences gave them a greater understanding of how each and every part of the business operates, and getting a real taste of the realities of frontline operations.



From left to right Mr. Bryan Wu, Mr. Vincent Yu, CEO, Ms. Carmen Yan, Mr. Durand Bembridge, General Manager.

The future belongs to the young – Let's look at what they think

There was a lively atmosphere at the restaurant on a Saturday afternoon in April 2016, where the casual lunch meeting among Alliance's younger generation was being held. This was an opportunity for 17 of them to get together to discuss how they looked at their career at the present moment and challenges they would face as time goes by.

What are your priorities in choosing a career?



Opportunities

Getting development opportunities and further education and training at work is the major factor for me to continue my career with the company. At Alliance, I have a lot of opportunities, trainings (on the job or class training), and learnings through rotation at different roles.

Work-life balance

I look at work-life balance at quite a high priority when choosing a career. We work hard to get paid. The salary we got would be a payback to our parents and enjoy our time with our beloved ones.



Open to new ideas

This is quite an important element in a company to embrace momentum and be forward-thinking. Construction material industry is always considered to be old-fashioned with long history. However, I see Alliance never stay stagnant. Senior management listen to our ideas, move forward to do analysis and studies, we then get the chance to implement to gain hands-on experience.

How do you see the future?



Hong Kong is no longer the fast-growing economic miracle it was in the 1980s. Yet, the standard of living has improved constantly, we are the most educated generation with the greatest material abundance.

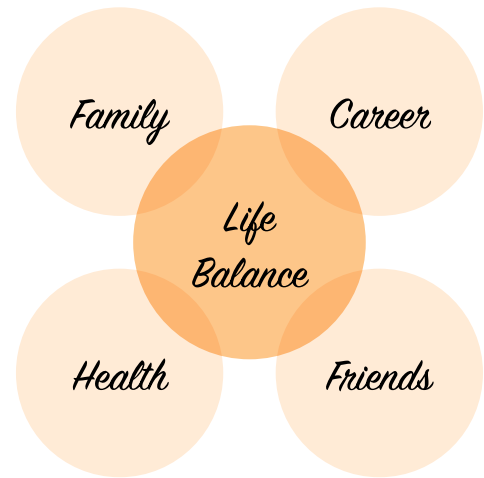
I am still optimistic of our future. In terms of career, I believe putting the right people in the right place, so we can make the most of our potential and abilities would always be the best solution.



There is no right or wrong answer to the question of what the future will bring. In order to be ready for tomorrow, we just have to set the right course today.

Work Life Balance

We believe that success means helping our employees strive a balance across their working life and social life. To support this belief we provide opportunities for employees to take part in and enjoy family activities and social life outside of the work environment. These activities are optional, but we hope they provide an opportunity for employees to also get to know each other away from the pressures of work.





We challenge ourselves to be better

Railway Project at West Kowloon

Express Rail Link (XRL) is a cross boundary transport project which will provide high speed rail services between Hong Kong and China. Alliance Concrete Batching plant was erected on-site for the project.

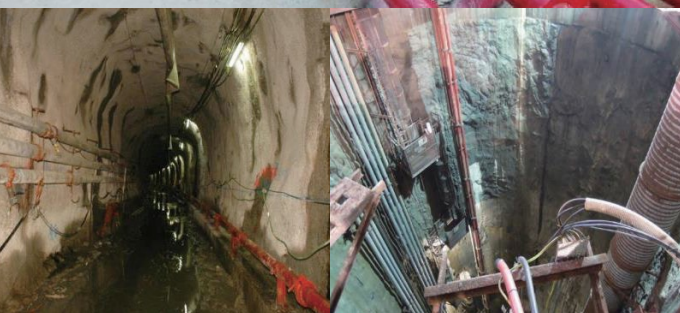
Challenge

Concrete with high workability is flowable and normally does not set in an hour and a half. Casting highly flowable concrete mix at steep roof slab of buildings means concrete is going to flow from the top to bottom end of the slope, which makes concrete pouring difficult.

Solution

Alliance technical and operation teams had been working very closely with customers on designing and producing suitable concrete mix, so that concrete could be poured at the slope without segregating at the bottom end.

Stringent quality control was applied to optimize the flow value of concrete to facilitate pouring efficiency.



Harbour Area Treatment Scheme (HATS) Project

HATS is a major Government infrastructure project in Hong Kong to build the sewage conveyance system to collect and treat sewage on both sides of Victoria Harbour. Alliance supplied lining concrete to our customer for the construction of sewage tunnels from Aberdeen to Sai Ying Pun.

Due to the constraints of construction site, concrete

- should be smoothly pumpable without segregation or susceptible blockage for a long distance up to 1.3km;
- should be able to remain flowable for 4 hours (normal concrete will dry up in 1.5-2 hours);
- should be able to have early strength development in 12 hours;
- should be able to flow through 90° bends pipeline in order to reach

We conducted a number of trials with customer before commencing supply of concrete to the project to address these stringent and unique requirements.

With the effort of our professional technical and operation teams, concrete mix was designed to suit customer's needs and it was able to be pumped over 2km horizontally.

We are Reliable

Our dedicated engineering team is the center of our facilities management. We apply a preventive maintenance approach, which is a planned and controlled program of periodic inspections and services as well as performance testing and analysis, ensuring the working conditions of the production and delivery facilities.



Jacky joined Alliance in 2012 as an Assistant Engineer, responsible for the maintenance and repair of the concrete batching plants. Jacky normally starts his day by communicating with the site maintenance team in order to understand how the maintenance and repair works have been undertaken.

Jacky takes his duties for health and safety at work seriously. He allocates much of his time to safety evaluation of the jobs while inputting all necessary safety control measures into the Job Orders so that the maintenance team can follow. For the sub-contracting jobs, the collaboration between production team, sub-contractor, engineering team and the safety personnel, has ensured that all aspects of the job will be thoroughly considered so any potential risks, including health and safety hazards will be dealt with properly and in a timely manner.

To Jacky and the entire Engineering & Maintenance Team maintaining our production facilities to the highest possible standard of reliability is important for realizing our customer focus and operational excellence goals. Through the application of our Preventive Maintenance Program, and use of technologies such as thermal imaging, ultrasonic detection, we were able to attain the utilization rate of 99% in this reporting period.

Diary on 22/2/2016

- Discussion with Maintenance Foreman & 0800 verifying preventive maintenance/inspection records*
- 0900 Attend Corporate HSE Committee*
- 1130 Site inspection at CWP*
- 1430 Pre-work meeting with sub-contractor*
- 1530 Safety evaluation of planned maintenance jobs and generate Job Orders*
- 1700 Communicate with site maintenance team for any problems they encountered during the day and for the preparation for night shift maintenance*

Jacky Kwok
Assistant Engineer

**2015-2016
UTILIZATION RATE
OF CONCRETE
BATCHING PLANTS**

99.66%

This is How We Do Things Bigger, Better and Faster

Innovation and operational excellence are our sustainability priorities. The application of Information Technology allows us to do things BIGGER, BETTER, and FASTER, supporting our customer focused strategy in a highly competitive market.



More accurate business planning

Increasingly, Speed and accuracy are at the heart of making right business decisions.

Every delivery is optimized by our logistics optimization system and tracked constantly in real time by our GPS system. This allows our customer service managers to monitor and extract delivery data to be able to analyze where the inefficiencies exist e.g., such as traffic or waiting times and subsequently make suitable changes to better serve our customers. Our management teams collect the data on a periodic basis and analyze the trends and patterns in the delivery cycles, customer sites and inefficiencies in order to plan for the long term.

More effective marketing

An effective and accurate way of finding target customers, discovering their needs, and building a strong relationship.

In our "Sales is a Science" project, we are building a marketing model that can assist our sales teams in forecasting market trends and target products for our customers. This will allow them to better foresee and anticipate the products that our target customers will want and tailor our marketing campaign to guide their purchases.

Better customer support

High level of customer satisfaction is the key to success, and cannot be achieved without a real time customer support process.

Whenever our customers want to check the current status of their delivery, our Customer Service Centre (CSC) team can log in to our GPS system and tell them the real time status of the delivery, e.g., where the truck is currently located or the progress of the unloading. Should there be an issue on site and our customer wants to make a change to the order, our CSC team can input the updated requirements into our ERP which, sends the information to our logistics real time optimizer that will reschedule the delivery. This real time knowledge and immediate action to unforeseeable changes allow us to achieve a high level of customer satisfaction.

More effective resources management

IT plays a vital role in automating our solutions to resources management problems.

Our MRP Systems calculate the aggregate demand for each of our plants based on the future concrete orders and automatically places an order for a scheduled delivery by

barge via our logistics optimization system. This calculation of aggregate demand ensures that aggregates are only delivered to plants when required.

This reduces the inefficiencies caused by for example, under-used barges, waiting times and unnecessary journeys, the redirection of aggregates due to underutilization of materials. The automated system removes the guess work, speeds up the process, and is vital for improving our resource management.

More systematic management and real time monitoring

IT solutions continue to increase our productivity, efficiency and effectiveness of business operations and communication.

The real time monitoring of delivery through GPS and logistics optimization systems ensures that the current status of our customer's deliveries are communicated to our Allocators at the CSC. This will allow our Allocators to immediately react to issues and dynamically plan the future truck resources and ensure that our customers' orders are delivered on time and that our truck resources are effectively utilized.





We

Customers, Suppliers, and Industry form WE

In Sustainable Development, we understand that we can do little if we work alone. We work together with our Customers, our Suppliers and the Industry in order to bring about positive changes across the entire supply chain.



In this Section

Market

Customers

Supply Chain

Industry

Market



Kevin Man, Sales and Marketing Manager – Concrete (left) and Michael Xu, Sales Manager – Aggregates (right)

The construction materials market experienced rapid growth since the launch of the Ten Major Infrastructure Projects in 2008. With these projects entering their completion phase, the market in coming years will be sustained by the Three Runway System project, Central-Kowloon Route, infrastructure works at Kai Tak, North East New Territories New Development Areas, and public and private housing projects.

In the aggregate and rock products market, the consumption of rock materials in reclamation, such as sand fill, granular fill, pell-mell and armour rocks, and subsequently subbase for site formation and road works, should support growth in the short to medium term. Alliance's continuous effort to develop multiple sources of raw materials and logistics capability has prepared us well for the customers' demand and needs. Leveraging our extensive networks and expertise in construction materials we are also looking for business opportunities in the South-east Asian market.

Against this growing construction market in the near term, contractors are however facing some challenges, such as, the increase in the cost of construction and materials, shortage of skilled labour, tight construction timelines, and restricted working time due to environmental requirements. All these factors have pushed for high expectations for productivity and efficiency, including the aggregate and concrete supply and delivery.

To cope with the changing demand and maintain the highest degree of customers' satisfaction, we increased



In light of the rapidly changing market, Alliance has strengthened its market position by responding quickly to the growing demand for Green products.



our production and delivery capacity in both product lines of aggregate and concrete. Further, we upgraded our facilities in order to improve our productivity and logistics efficiency, innovated our product designs and optimized our processes. We also provided some solutions to help civil work contractors to reuse the locally excavated materials from their projects.

With the advance of IT, contractors are more actively considering the adoption of intelligent Building Information Model (BIM); comprehensive material tracking systems using RFID technology, which uses Auto-ID that can easily integrate with the logistics flow, and; quality assurance flow and BIM to assist and organize the whole material tracking process. Alliance is actively exploring and collaborating with contractors for the use of QR code technology to streamline the site administration processes.

We foresee being "Green" and "Low Carbon" as the trend for the local construction market. We support the development of local Carbon Labelling Scheme for Construction Products, the introduction of Ground-granulated blast-furnace slag (GGBFS) as secondary cementitious material in concrete production. In addition, we supply regionally sourced aggregates to minimize the Carbon Footprint from transportation. These are some example initiatives we have adopted to support this emerging Green economic trend. We will continue to focus on green marketing efforts, so we continue to be the preferred company of choice from product to service.

Customer



We build our success on our customer's success by getting the job done right every time. Our Customer Focused strategy aims to yield the best results for both our customers and Alliance.



Customers are at the heart of our efforts. We put customers' needs at the center of our focus when creating our products and services. By placing our focus on our customers we can offer them a consistent and superior experience throughout the process from, before purchase, technical study, project solution, delivery and all after sales services.

Our expertise in aggregates and concrete product engineering and production enables us to tailor our products to provide a total solution for our customers' projects; helping them to cope with the ever-changing project demands. For example, our SuperpumpCrete™ is characterized by super workability and retention for extra-long distance pumping. The SuperliteCrete™ is a superior lightweight concrete product with thermal and acoustic insulating properties making it appealing to various interior and exterior building applications. The EarlyCrete™ develops strength in very short period of time helps tackle the challenge of tight working times, such as the need to re-open traffic within a number of hours for highway jobs. In aggregates supply, the application of washed crushed rock fine to replace sand in reclamation works, has minimized the environmental impacts on marine ecology



Dr. Wolfgang Dienemann from our parent company HeidelbergCement sharing his expertise in sustainable concrete solutions to our customers during the Technical Luncheon on 27 November 2015

that may occur during sea dredging for sand. While at the same time ensuring the stable supply of the manufactured material for major infrastructure projects. Our strong network in quarry products provides consistent support to local development projects, such as for the sourcing of large amounts of rock armour from the region for the construction of the seawall in major projects.

We are very aware of the importance of intimacy with our customers and having a fast response to project specific requirements. We seek all opportunities to provide value-added services to our customers. For example, we are able to provide our customers with real-time status of their concrete delivery, thus facilitating their site arrangement and planning. The provision of comprehensive data regarding ordering and supplying, help our customers in their project management review and improvement. We offer concrete technology training to our customers to enhance their



technical knowhow of concrete products and the associated concreting methods. Our verified Carbon Footprint data and the self-developed Carbon Calculator are initiatives we have made available to support our customers' active low carbon purchasing choices, while also facilitating their project Carbon Footprint calculation.



Technical training on concrete testing provided to site personnel from our customer, Dragages on 25th May 2016



Shirley Lam, Laboratory Manager, provided concrete technology training to staff from our customer Leighton Asia

Listen To What Our Customers Say



Christophe Glava

Alstom
Project Manager
of MTRC SCL 1120



We put great emphasis in running a sustainable business and we look for business partners with the same vision.



Brenda Ching, Alliance Communications Manager (B): Hi Christophe, Alliance has been working with Alstom since 2015, how is the experience so far on ballast quality?

Christophe (C): Brenda, so far we have been receiving good quality ballast from Alliance which is fulfilling the stringent requirements of the project. We appreciated all the efforts made since one of the most demanding applications for crushed aggregate is railway ballast. Railroad ballast serves as a bed for railroad tracks and provides track stability, drainage, and support of significant loads carried by the railcars.

B: Would you say Alliance is a total solutions provider?

C: Definitely, I would describe Alliance as one-stop total solutions provider, from sourcing of material, stringent quality control at the source to delivery. There is a single contact point, which ensures clear communications whenever needed.

B: Thank you for your time today. Would you have anything to add in terms of sustainability?

C: Sustainability is at the heart of Alstom's strategy and I am glad that Alliance is sharing the same ground with us.



There were challenges for both of us at the beginning of the project, yet through constant communication, we understood each other's difficulties and so overcame the challenges.



Iain Hubert

Leighton Asia
Project Director of HKZMB
Passenger Clearance
Building Project

'Quality consistency and on-time delivery of concrete is always the key to us. We never have any quality issue with Alliance, yet timely delivery was the only issue we had at the very beginning of the project. Yet through constant communication, we understand each other's difficulties and so overcome the challenges.' Iain Hubert said.

During the conversation, Iain highlighted the importance of customer satisfaction, environmental and health & safety performance, and product responsibility to the sustainable growth of Alliance. These aspects are also emphasized by Leighton Asia. Iain also mentioned that there would be a great opportunity for companies that go further than just being "green"- which is a must for us all today. Waste is an issue. The key is how we reduce waste right at the beginning of the supply chain and how waste can be reused whenever possible.

Alliance has been working with Leighton Asia for more than 20 years. Alliance is committed to building deep and lasting relationships with our customers. We aim to improve ourselves to deliver tangible, technical solutions that make a difference to our customers.



And These Are What We Have Done

Aggregates

Alliance has been supplying quality aggregates to local concrete industry, asphalt industry and major infrastructure projects. Since 2014, Alliance has been supplying large quantity of concrete aggregates to the floating concrete batching plant producing concrete for different contracts of the mega project, Hong Kong-Zhuhai-Macao Bridge. Our quality and stable supply is highly valued by our customer as we enabled their concrete production go smoothly to meet project demand.

The reclamation works of Three Runway System Project at the Hong Kong Airport requires a huge quantity of quarry products, which include sand blankets, marine filling, stone columns and armour rocks. Alliance is pleased to be able to source and supply quality washed crush rock fine (WCRF) for several DCM projects (DCM stands for non-dredging method of deep cement mixing). We worked with our supplier to overcome all the technical difficulties as encountered and produced the WCRF that meets the most stringent technical and environmental requirement.

Despite of the tight schedule and difficult site conditions, we were able to supply 24 hours per day, 7 days per week so that our customer could complete the sand laying works in a timely manner. High appreciation from our customer was gained.



In December 2016, we supplied 2,500 tons of armour rocks for our key customer project. We delivered the required loads of armour rocks within one-weeks' time upon confirmation of order.

Our customer highly appreciated our service and sourcing capability. The delivery did not come easy, it would not happen without the good collaboration among different Alliance teams with our customer.

Alliance is also supplying aggregates to precast concrete manufacturers in Pearl River Delta Region, which in turn these precast concrete products to be supplied to Hong Kong market. Our aggregates are fully comply with Construction Standard for Concrete and are widely used to produce façade of Housing Authority's projects and precast concrete segments for civil projects.



Concrete

Alliance had been supplying concrete for continuous 5 months in 2015 to the major concrete structure of Tsing Yi TYTL 185 Logistics Centre. It is strategically located at the heart of Tsing Yi, immediately adjacent to Container Terminal 9 and Stonecutters Bridge offering easy access to arterial roads and major business districts. The site has an area of about 21,000m² and is designated for logistics development purposes. The main contractor is Able Engineering Company Limited (Able), which has been one of Alliance's key customers for more than 10 years.

Total amount of concrete supplied was 130,000m³ from Tsing Yi West Plant, Kwun Tong Plant and Yau Tong Plant. In order to fulfill the tight concreting schedule, we supplied concrete 7 days a week and made a record of highest concrete volume per day of 2,300m³. Alliance team was invited to topping out ceremony on 20th August 2015 to celebrate the construction works along with contractor, Able, and other stakeholders.



Alliance is participating in the Hong Kong – Zhu Hai – Macau Bridge Hong Kong Boundary Crossing Facilities project by supplying concrete to contractors, including China Harbour Engineering Limited, Leighton – Chun Wo Joint Venture and China State Construction Engineering Corporation for the Hong Kong Boundary Crossing Facilities (HKBCF) works at Tung Chung Artificial Island.

The total concrete volume of the mentioned project works requires about 370,000m³. Alliance had been supplying 700m³ daily for almost the whole year in 2015. Alliance maintains its leading position in fulfilling such demanding concreting program.

Supply Chain



Gary Lam

Procurement Manager



Our objective is to create long-term societal value for all stakeholders involved in bringing our products and services to the market.



Sustainability in the supply chain has become essential for Alliance to delivering long-term value for all stakeholders involved. There is a paradigm shift for our purchasing approach from being dominated by traditional challenges of lowering costs, ensuring just-in-time delivery, to increasingly having to consider the impacts throughout the lifecycle of goods and services.

With sustainability principles being an integral part of Alliance's business, we extend our sustainability measurement to our suppliers during the vendor enlisting process and in the annual performance assessment. This helps us to push the sustainability practices in our supply chain. Our "local supplier preferred" purchasing practice has minimized the occurrence of corruption and human rights risks such as child labour or forced labour, which may occur in other countries. As such we are able to focus on our suppliers' occupational health and safety practices, environmental performance, and other Corporate Social Responsibility (CSR) considerations in the sustainability screening process.

Whether we are the supplier for our customers or as a purchaser, we respect the fair competition principle. Our purchasing policy and the relevant governing procedures, the tendering and subsequent cross-team tender review processes were developed and implemented for ensuring the legal compliance to, for example, the competition law; while fulfilling the corporate governance requirements.

We seek all opportunities to collaborate with our suppliers, as they are important business partners supporting our business growth. The supporting of major aggregate supplier for their development of quality management system and environmental initiatives in their quarry site; we collaborate with our contractors on project safety and health management, as well as the sharing our experience with our suppliers are examples of our efforts in influence our suppliers' practices.

We recognized that on our vendors list there is more than 80% of our suppliers that are small and medium enterprises. This may mean they do not necessarily have the resources and experience for managing their environmental or sustainability issues. We are making more effort toward the future, whether it is through provision of training or information or through partnering or collaboration, to give them necessary support in enhancing their sustainability performance so that they will grow with us.

Partnering for Success



We treasure the long term partnering we have with Alliance. Their sustainability good practices have inspired us and driven our improvement in quality management and environmental protection.



Jacky Lai

Director of Tai Sheng Quarry

Partnering with Alliance

We have been a supplier of aggregates to Alliance since 2012. Unlike others, our relationship with Alliance is a long-term partnering one. Alliance's expertise in the building materials business, along with all the support that they have given us has convinced us that Alliance is a long-term business partner. The strong partnership has supported both of our organizations' growth.

Business integrity is a key to maintaining this collaboration

Alliance's emphasis upon quality management, and the corporate governance policies and procedures, inspired not only our aggregate business but other businesses within the group. Our common objective of viable growth enabled us to overcome all the challenges we experienced in the last 5 years.

Sharing of good practices

Not only did Alliance support our development of a Quality Management System that enabled us to obtain the first ISO9001 certification in the region, our on-going sharing of good practices, such as the quarry rehabilitation and pollution control good practices, resulted in the upgrading of the environmental performance in our Tai Sheng Quarry.

Way Forward

To cope with the dynamic markets here in HK and on the Mainland, that present on-going risks, we work to find ways to turn these challenges in to opportunities. We see long term partnering, such as with Alliance, that emphasizes mutual benefits and trust, shared common values such as business integrity and sustainability, as the means to enable both organizations the competitive advantage for growth in this "white-water world".



Mr. Vincent Yu & Mr. Jacky Lai



Management team of Alliance & Tai Sheng

Industry

Alliance's purpose is to contribute to the development of Hong Kong and the connection of Hong Kong society. We aim to achieve a sustainable built environment. We understand that to realize this vision, we cannot work alone and have to collaborate with all stakeholders in the industry. Being one of the leading organizations in the construction materials industry we accept our advocacy role of driving sustainability good practices. When we reflect on our priorities we seek opportunities to engage with many stakeholders so we can inform good practices, and to communicate resilient design and construction with concrete, aggregates and other quarry products.

Actions we have taken towards a sustainable built environment in this reporting period include:

Action on Product Quality

Through the representation of trade associations such as, Concrete Producers Association of Hong Kong, Hong Kong Contract Quarry Association and the Institute of Quarrying (Hong Kong Branch) we contributed to the development of the construction standard CS3:2013 Aggregates for Concrete, and have achieved full compliance to this standard, also verified by an independent auditor in 2015. We also supported the development of the Product Conformity Certification Scheme for Aggregates for Concrete (PCCS-AC) by Hong Kong Concrete Institute; and pioneered to have the first PCCS-AC certification in 2016.



We work together with our stakeholders to achieve a sustainable built environment.





Both construction material standards put in place most stringent requirements in both the quality management processes and aggregate sampling and testing, ensuring the traceability of the aggregate sources and the product quality.

Action on Environmental Good Practices

We took a leading role in the liaison with the Environmental Protection Department (EPD) for the review and upgrade of the Best Practicable Means for Concrete Batching Plant (BPM). The new Air Quality Objectives (AQOs) were launched in 2014. According to Hong Kong Government's prediction, with the implementation of all the proposed mitigation initiatives, reaching these tightened AQOs will be attainable in 2020. Despite the concrete industry not being considered by the Government as significant contributor to air pollution, to uphold our environmental responsibility, through the Hong Kong Construction Materials Association (HKCMA), the concrete industry initiated the liaison with EPD, resulting in the revised BPM, which included upgraded air emission control measures, subsequently launched in 2015.

Action on Waste Reduction

We continued using alternate material such as fly ash (PFA) in producing concrete and, shared our experience and knowledge in sustainable concrete solutions to clients, consultants and other institutions with an aim to drive innovation in product design.

Our wastewater treatment system which, consists of concrete reclaimers and filter presses is a proven technique for waste water recycling and waste reduction in concrete batching plants. While we continue to invest in such facilities in our new concrete batching plants, we also shared this environmental good practice with clients and other stakeholders.

Action on Carbon Reduction

Although concrete's thermal mass saves energy and carbon, its embodied Carbon, mainly from the cement content needs to be reduced. Our action on Carbon lies in two main



streams: innovate in sustainable concrete solutions and the product Carbon Footprint and reduction. Through disclosure we continue to drive the Carbon Footprint reduction within the industry. We also collaborated with other concrete producers, and contributed ideas to CIC's development of the Carbon Footprint Label scheme for construction materials.

Action on Occupational Safety & Health

Through HKCMA we showcase some good practices in occupational safety and health to other member companies. The benchmarking of incident prevention performance and sharing of safety and health management experience have resulted in the upgrading of many safety and health standards.



Our Home Hong Kong



Community and Environment

Environmental Protection and Social Responsibility are main pillars of Alliance's corporate philosophy, which support our aim of building a better home Hong Kong.

In this Section

[Community](#)

[Environment](#)

Community Development

Alliance and our employees focus on contributing time and resources to promoting caring of the communities where we work and live. Individually, employees are encouraged to actively engage in activities that contribute to the betterment of society through volunteering time and skills or investing monetary resources in worthwhile community projects and initiatives. In 2015-2016, we placed our efforts in caring for children, the elderly and those in need, such as the street drifters.



Alliance runners turned sweat into love and care. Throughout the years, Alliance runners have helped charitable organizations raise funds for their services and support to vulnerable groups.

For the last three years, we collaborated with United Christian Nethersole Community Service to organize a Christmas party for the elderly so we could bring them the gift of friendship and joy. Our Volunteer Team celebrated the joy of the season by giving our elderly guests the gift of smiles, laughter and companionship.



The Salvation Army Orienteering 2016: To Navigate Nathan Road at Night to Light up People in Darkness



Alliance sponsored 2 teams to participate in this event held on 29th October 2016, to help raise funds for the Army's services for street sleepers and young night drifters.

The aim of this event is to draw attention to the plight of those struggling with life on the street, in particular during the night. The participating teams had to pass through many checkpoints from Tsim Sha Tsui to Sham Shui Po.

These checkpoints represented those areas where young night drifters and street sleepers tend to gather. Through participating, the runners experienced the hardship that these young homeless people experience, and thereby becoming more aware of how they can lend care and support. The Alliance Teams finished the run in 2 hours and ranked 5th and 7th out of 32 corporate teams.



Hayley (left): "I saw the dark side of Hong Kong during the run; we should make more efforts to light up people in darkness."
Beta (right): "The living conditions of those homeless are poor. Hopefully the fund raised in this event will give them some supports."



Dixon (left): "It's the first time I join the run; tough but satisfied as our efforts should have given some supports to those in need."
Mike (right): "It's good to see organizations including Alliance are keen to contribute to the community development. I'm proud to be the employee of one of those."

Our Approach in Environmental Management



Durand Bembridge

General Manager
Concrete



In 2015-16 we continued minimizing our environmental impacts, conserving resources, improving energy efficiency, and reducing our GHG emissions; all major components in our environmental management approach.



As a new comer to Alliance and the local construction materials industries, one of the observations I have after working for almost a year here is the challenges the industries have in balancing the environmental and development needs in such a densely populated city. To bring in new ideas and all the environmental good practices from my home town in Australia is thus a mission I have to both Alliance and the industry.

On-going dialogue with Stakeholders

Our on-going stakeholder engagement enabled us to know that our stakeholders have high expectations of our environmental performance in particular, pollution controls, resources conservation, waste reduction, and carbon reduction. The on-going dialogue with our stakeholders has driven us to improve our environmental performance over the years. For example, we progressed to upgrade our dust filtering systems in all our production

lines reducing the emission concentration from the exhaust points. We invested in our waste water handling system and put in place additional waste water treatment plants in our concrete batching operations in order to ensure that the quality of our water discharge can meet the most stringent standards. In waste reduction we continued collaborating with our customers to reduce the concrete waste volume due to over ordering or other operational issues. We also initiated studies exploring the recycling opportunities for concrete waste.

Risk-based thinking in Environmental Management

We apply risk-based thinking in our environmental management. To tackle the risks from, for example the most stringent legal and licensing requirements, we endeavor to identify and mitigate any negative impacts we may have to the environment; we also explore any opportunities from the growing trend towards a green economy. The development of ISO50001 accredited energy management system in 2015 is a follow through to all our carbon reduction initiatives since 2008, which enables us to uphold our climate protection responsibilities, while better preparing us for any low carbon business opportunities in the future.

An advocate for the sustainable growth of local construction materials industries

With our global background and all the support we receive from HeidelbergCement we are more than capable to introduce global best practices to Hong Kong and to drive their uptake in local construction materials industries. We take up a leading role in the liaison between the concrete industry and Environmental Protection Department for the review of the Air Quality Objectives and the Best Practicable Means for concrete batching plants. Through our affiliation with the HKCMA and other institutions we shared our experience with Carbon Footprint measuring, energy management and sustainable concrete solutions all of which support our advocacy role in the sustainable growth of construction materials industries in Hong Kong.



Mr. SK Wu, Risk Manager represented Alliance to receive the CarbonCare Label Award from CarbonCare Asia. Alliance received the CarbonCare Label for 2 consecutive years since 2015 as a result of our continuous carbon reduction achievement.



Mr. Durand Bembridge received the Environmental Merit Award from Mr. David Wong, Assistant Director of EPD during the Hong Kong Construction Environmental Awards Presentation Ceremony.

Selected Environmental Achievement

| | |
|---|--|
| Conviction to Environmental Law | 0 (2015-2016) |
| Sites implemented ISO14001 Environmental Management System | 100% |
| Sites implemented ISO50001 Energy Management System | 100% |
| Carbon Intensity per 1m ³ Concrete Produced (2016) | reduced by 20% (as compared to base-year 2007) |
| Embodied Carbon in 1m ³ Concrete (2016) | reduced by 5% (yearly comparison) |
| Head Office Electricity Intensity per 1m ² (2016) | reduced by 33% (as compared to base-year 2014) |

Energy and Carbon Reduction



(Right two) Vincent Yu, CEO, was invited to the opening ceremony of shell gas station cum launching of B5 diesel



Carbon and energy management are important attributes of Alliance's business and an opportunity for creating long term stakeholder value.



To uphold our responsibilities for climate change protection, we started to capture the Carbon Footprint of our operations in 2008. The Carbon reduction goals we set ourselves have driven the improvement of our energy efficiency. At the end of 2016, we saw the Carbon Intensity of our concrete operations had reduced by 20% compared to our 2007 base-year.

The measuring of the embodied Carbon of our concrete products since 2011 had enabled us to understand better where the embodied Carbon came from, and subsequently to identify the reduction opportunities.

In this reporting period, our climate protection actions have focused on:

Energy Management

We implemented the energy management system according to the requirements of ISO50001. The upgrading of our energy management included establishment of the energy management system and integrated it into the existing Integrated Management System; the review of major energy uses within our Hong Kong operations; carried out studies in various sites to evaluate their energy consumption profile and efficiency; determine the performance indicators and energy saving targets, and; the ISO50001 certification in December 2015.

Reduced the Carbon emissions from transportation

We continued to fade out the older concrete mixer trucks and cement tankers in order to reduce the Carbon emissions from transportation. Compared to older models, the emission level of the EURO V trucks is 20% less. As at end of 2016 90% of our mixer truck fleet had been replaced with EURO V.

We started to power our concrete mixer truck fleet with B5 biodiesel. The initiative not only contributed to reduction of some GHG emissions, also supported the promotion of using alternate fuel in our communities.

Through product innovation to reduce climate change impacts

We continued promoting the sustainable concrete solutions in the market, such as the application of alternate materials in concrete mixing; and the disclosure of our verified Carbon Footprint were initiatives we have to reduce the climate change impacts.

**EMBODIED CARBON
IN 1 CUBIC METER
READY-MIXED CONCRETE**

249kgCO₂e

Note:

- 1. Calculation is based on the 2016 production data
- 2. "Cradle to gate" approach applied when defining system boundary; i.e. from raw material acquisition up to the concrete produced

Carbon Neutral Annual HSE Seminar



Alliance organized our first Carbon Neutral event in the Zero Carbon Building on 21th March 2016. During the Annual HSE Seminar we promoted the Global Sustainability Goals to our employees in addition to our sharing of HSE insights and presenting awards to best performing teams. The Carbon Neutral was achieved by offsetting the 1 ton of Carbon emission from the event supporting a hydropower project in Yunnan.

Environmental Protection Measures in Aggregates Supply Chain

Our “One Stop Solution” for aggregates supply involved rock extraction and crushing in our quarry sites, sea transportation by barge, to our aggregate depot in Tuen Mun and land transportation. When assessing the environmental impacts that may have from aggregate operations, we applied a holistic approach which evaluates the environmental impacts from each and every parts of the entire aggregates supply chain for necessary control measures.

Quarry Operations

At our Hui Dong Quarry, which is a joint venture project, we put in place the environmental management system to ensure the applicable environmental legislation and standards will be met at all times. The quarry restoration plan enables the landscaping and rehabilitation works to be carried out in a planned manner.

In addition to the common pollution control measures in a quarry site, such as the dust suppression measures, blasting operations control, water pollution control, and waste management; the production facilities are fully enclosed for suppressing the transmission of pollutants such as dust and noise. In this reporting period we invested to also enclose the open stock piles so that dust emission from the quarry is further minimized. Artificial trees were planted round the quarry to further reduce visual impact to adjacent highway.



We are committed to minimize the impact to environment in our aggregates supply chain.





Sea and Land logistics

We are using barges and trucks to deliver aggregates to all our customers. The covering of barges compartment, conveyors and truck hoppers to eliminate the dust emissions from the transportation process is our commitment to both customers and community.



Aggregate Depot in Tuen Mun

For aggregates supply to inland customers, aggregate depot located at Tuen Mun serves the purpose. In 2015-2016, we expanded and improved our aggregates depot, as well as its environmental measures. The automatic wheel washing facility prevents dusty materials being carried to public road by the leaving trucks. The covering of aggregate stock piles, couples with the water spraying nozzles suppressed the dust emission from the aggregates stock piles. We also use low emission mobile plants to minimize the air emission from the exhaust.



Environmental Protection Measures in a Concrete Batching Plant



The enclosed structure isolated the emissions at their sources



We endeavor to protect our neighbors from any environmental impacts as a result of our operations.



Our stakeholders told us that they have high expectations at our good neighbor practices. Therefore when building our concrete batching plants and designing our production and delivery processes, we put environmental protection as our prime objective. Continuous upgrading of the pollution control facilities in our existing plants helps us to fulfill our stakeholders' expectations.

Environmental Impact Assessment

Environmental Impact Assessment and continuous monitoring and review, are mandatory parts of our ISO14001 accredited Environmental Management System. This enables us to determine the necessary environmental protection measures that will minimize our impacts to the surrounding areas.

Enclose the emissions at their sources

The environmental emissions, mainly the dust from handling aggregates and cement, and noise from machinery operations, are enclosed in the cladding structure, minimizing the transmission of emissions to the surrounding areas.

Application of advanced technology

We used an advanced dust extraction and filtration system, which removes the suspended particulates from the exhaust stream, resulting in a 99.9% dust removal efficiency level, allowing us to reduce the pollution concentration from the exhaust to a level lower than 10mg/m³.

Facilities for waste water handling

The waste water handling system which consists of waste water collection pits, filter press machine, and water storage silos recycles waste water that is generated from the yard cleaning and truck washing activities. This has minimized our consumption of fresh water.

The waste water treatment plant for treating the excessive waste water from, for example surface runoff during heavy rain, ensures the quality of the water discharge meets the most stringent standards.

Waste reduction

The concrete reclaimer screens out the coarse materials from the waste water as well as the reclaimed aggregates present in the waste water which is then made available for reusing in other engineering projects. The filter press machine removes a high percentage of water content in the muddy waste. These facilities reduce the volume of waste to be disposed of at landfill sites.

Other environmental measures

Maintaining a high standard of housekeeping in our concrete batching plants is important to us and we do this by keeping the mixer trucks clean and preventing muddy or other dusty materials being carried to public roads by our trucks.

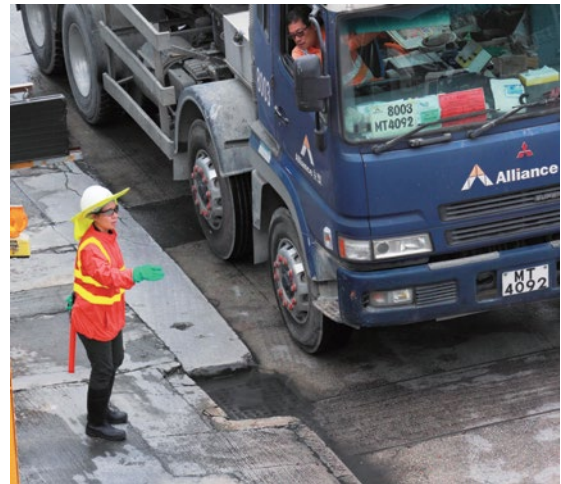
The Traffic Controller present in selected concrete batching plants; along with the regular street cleaning practices are initiatives we have implemented to minimize the environmental impacts to local communities.

Environmental monitoring programs

We installed dust monitoring stations at all our concrete batching plants in order to monitor the air quality. In addition we have noise monitoring programs that measure noise levels at sensitive receivers' location; and the water discharge quality testing and monitoring are programs we have ensuring the effectiveness of our pollution control measures.



Trucks are thoroughly cleaned before leaving the site



We arranged Traffic Controllers in selected sites to assist other road users and pedestrians



Inspection program to maintain truck cleanliness standard and to prevent muddy material and dust being carried to public roads

Noise Pollution Control in Yuen Long Concrete Batching Plant



Acoustics enclosure constructed with G.I. high performance sound insulating panels with silencer was installed at the dust collectors reduced the noise transmission to the surrounding area.

The mixing of residential blocks and industrial processes in one area is a common phenomenon in Hong Kong. This has however, challenged the industries involved with balancing the operational requirements and environmental needs.

Alliance is no exception, our Yuen Long Concrete Batching Plant which is located inside the Kiu Tau Wai industrial area in Yuen Long, and is within close proximity to residential villages. Our environmental impact assessment showed us that noise from our plant operations might cause a nuisance to our neighbors. In order to assess the magnitude of the noise impact, such as how to make the necessary mitigations, we engaged an acoustic consultant for a detailed noise assessment. This included noise monitoring at Noise Sensitive Receivers and a near field measurement to understand the nature of the major noise sources. Despite the noise level was verified to be within the legal limits, we still exercise our good neighbor practice to install noise enclosures and other improvement measures at the major noise sources that were identified in the study.

The project involved: installation of noise enclosures and silencers at the dust collectors and the mixer truck loading bay; improvement of the cement pumping system, and; installation of a noise enclosure. Other minor improvement works in various locations that were all major noise sources identified during the assessment were included.

The improvement project was completed in December 2016. Although the investment of the project was substantial, we valued it as a commitment to our neighbors while at the same time a learning opportunity for ourselves on how to mitigate the environmental impacts in a more proactive manner.



Mixer truck loading bay was enclosed with 100mm thick G.I. acoustics panel, not only reducing the noise impact to the environment site workers also benefit from the lowered noise level.



Cement pumping system was enclosed with G.I. acoustics panels and silencers for the natural ventilation

Progress towards Our Sustainability Priorities

| Sustainability Priorities 2015-2016 | Actions | Progress |
|--|--|----------|
| Processes Optimization & Product Innovation | | |
| Maintaining the highest degree of customer focus | ● Customer Focused strategy | ✓ |
| | ● Key accounts management | ✓ |
| | ● Sales is a Science training | ✓ |
| Product and services quality | ● QC Good Practices | ✓ |
| | ● Technical Training | ✓ |
| Innovation in sustainable concrete performance | ● Sustainable Concrete Solutions studies & marketing | ✓ |
| Advocacy in Product Responsibility | | |
| CSR as integral part of market positioning strategy | ● Advocate CSR & environmental good practices | ✓ |
| Product life-cycle impact assessment and minimization | ● Application of recycled material | ✓ |
| | ● Waste reduction | ⊙ |
| Driving product responsibility stewardship in the industry | ● CSR practices & verification | ✓ |
| | ● Suppliers' CSR practices | ⊙ |
| Decent Workplace | | |
| Occupational Safety & Health | ● OSH upgrade/enhancement | ✓ |
| Employee Training & Development | ● Leadership & management skills training for managers | ✓ |
| | ● Development programs for young graduates | ✓ |
| Employee Communication & Involvement | ● Employee Forum | ✓ |
| | ● Employee Opinion Survey | ✓ |
| | ● Stakeholder Engagement | ✓ |
| Work-life Balance | ● Promotion of healthy living style | ✓ |
| Reducing Environmental Footprint | | |
| Enhancing energy efficiency | ● Energy Management System | ✓ |
| | ● Energy Saving Targets | ⊙ |
| Carbon reduction | ● Carbon Footprint calculation & disclosure | ✓ |
| | ● Carbon Reduction Targets | ✓ |
| Waste reduction | ● Waste reduction in plant operations | ✓ |
| | ● Concrete waste reduction | ⊙ |
| Natural resources conservation | ● Material usage monitoring | ✓ |
| | ● Application of recycled materials | ✓ |
| | ● Promotion of 3R practices | ✓ |
| Ethical Business & Caring | | |
| Good neighbor practices | ● Traffic safety program | ✓ |
| | ● Pollution control program | ✓ |
| | ● Environmental impact monitoring | ✓ |
| Community dialogue | ● Engagement & communication program | ⊙ |
| Employee volunteering & charity support | ● Partnering with selected organizations | ✓ |
| | ● Support employees' volunteering | ✓ |
| Ethical behavior & business practices | ● Fair competition policy & training | ✓ |
| | ● Anti-corruption policy & training | ✓ |
| | ● Review Code of Conduct | ✓ |

✓ On Track ⊙ More efforts required

Workplace Performance Indicators

| GRI Code | Description | Item | 2015 | 2016 |
|---------------------------------------|---|--|---|---|
| MARKET PRESENCE | | | | |
| 202-1 | Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation | % of employee receiving wages higher than minimum wage | 100% | 100% |
| | | Comparison of entry wage to minimum wage | 112% | 112% |
| 202-2 | Proportion of senior management hired from the local community at significant locations of operation | % of local hired employees ¹ | 100% | 91% |
| EMPLOYMENT | | | | |
| 401-1 | Total number and rates of new employee hires and employee turnover by age group, gender and region | Total number of employee as at 31/12 | 270 (93.7% permanent employees, 6.3% contract employees)* | 263 (94.3% permanent employees, 5.7% contract employees)* |
| | | New employees hired (by age group) | 19 (<30), 43 (30-50), 31 (>50) | 17 (<30), 42 (30-50), 30 (>50) |
| | | New employees hired (by gender) | 6 (female), 87 (male) | 12 (female), 77 (male) |
| | | Employee turnover rate (by age group) (%) ² | 5.42 (<30), 10.49 (30-50), 4.34 (>50) | 3.56 (<30), 11.26 (30-50), 8.26 (>50) |
| | | Employee turnover rate (by gender) (%) ² | 2.17 (female), 18.08 (male) | 2.44 (female), 20.64 (male) |
| 401-3 | Return to work and retention rates after parental leave, by gender | % of employees entitled to maternity leave / paternity leave | 100% | 100% |
| | | Number of employee taken parental leave / paternity leave | 1 (male) | 6 (1 female & 5 males) |
| | | Retention rate after parental leave | 100% | 100% |
| OCCUPATIONAL HEALTH AND SAFETY | | | | |
| 403-2 | Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender | Number of work related fatalities | 0 | 0 |
| | | Number of reportable injuries ³ | 2 | 1 |
| | | Number of lost days | 21 | 291 |
| | | Reportable injuries frequency rate (no. of incident per 1000 employees) | 7.41 | 3.8 |
| | | Reportable injuries frequency rate (no. of incident per 100,000 man-hours) | 0.29 | 0.15 |
| | | Incident severity rate (no. of lost days per 100,000 man-hours) | 3 | 43.05 |
| 403-4 | Health and safety training and medical supports to employees | Total number of man-hour trained in health and topics ⁴ | 4,017.95 | 5,094.95 |
| | | Number of employees taken free medical exam | 117 | 92 |
| | | Number of employees taken free flu vaccination | 84 | 69 |

| GRI Code | Description | Item | 2015 | 2016 |
|--|--|---|--------|--------|
| TRAINING AND EDUCATION | | | | |
| 404-1 | Average hours of training per year per employee by gender, and by employee category | Training hours per year per employee (internal training) | 12.62 | 17.56 |
| | | Training hours per year per employee (external training) | 18.35 | 8.79 |
| 404-2 | Programs for upgrading employee skills and transition assistance programs | Assistance on transitioning to a non-working life retiree offered temporary | 16 | 16 |
| 404-3 | Percentage of employees receiving regular performance and career development reviews, by gender and by employee category | % of employees receiving annual appraisal | 100% | 100% |
| DIVERSITY AND EQUAL OPPORTUNITIES | | | | |
| 405-1 | Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity | % of male employees | 83.70% | 81.75% |
| | | % of female employees | 16.30% | 18.25% |
| | | % of employees by age: <30 | 12.22% | 12.17% |
| | | % of employees by age: 30-50 | 41.11% | 42.21% |
| | | % of employees by age: >50 | 46.67% | 45.63% |
| | | % of employees (minority group) | 0.74% | 0.76% |
| HUMAN RIGHT | | | | |
| 406-1 | Total number of incidents and discrimination and corrective actions taken | Number of incident of discrimination | 0 | 0 |
| 406-1 | Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms | Number of cases | 0 | 0 |
| 205-2 | Communication and training on anti-corruption policies and procedures | % of employees trained | 100% | 100% |
| 205-3 | Confirmed incidents of corruption and actions taken | Number of cases reported | 0 | 0 |

Note:

- 1 Senior management is defined according to the company's payroll system
- 2 Measured against average number of employees
- 3 Defined according to Employee Compensation Ordinance of Hong Kong
- 4 Health and safety training topics were defined in annual training plan and reviewed by Corporate HSE Committee

Environmental Performance Indicators

| GRI Code | Description | Item | 2015 | 2016 |
|--|--|---|--------------|--------------|
| MATERIALS | | | | |
| 301-2 | Percentage of materials used that are recycled input materials | % of PFA in total cementitious materials used | 21.97% | 22.13% |
| EMPLOYMENT | | | | |
| 302-1 | Energy consumption within the organization | Diesel consumption (L) | 3,892,004.00 | 4,090,186.00 |
| | | Petroleum consumption (L) | 94,033.00 | 88,254.00 |
| | | Electricity consumption (kWh) | 5,704,913.00 | 5,708,104.70 |
| 302-4 | Reduction of energy consumption | % of electricity consumption per 1M ³ concrete reduced (yearly comparison) | 4.63% | -20.00% |
| | | % of electricity consumption per 1M ³ concrete reduced (compare with 2014) | 4.63% | -15.00% |
| | | % of electricity consumption per M ² floor area of Head Office reduced (yearly comparison) | 38.57% | -10.00% |
| | | % of electricity consumption per M ² floor area of Head Office reduced (compare with 2014) | 38.57% | 33.00% |
| | | % of fuel consumption per KM travelled by concrete mixer trucks reduced (yearly comparison) | 8.02% | 5.26% |
| | | % of fuel consumption per KM travelled by concrete mixer trucks reduced (compare with 2014) | 8.02% | 12.86% |
| | | % of fuel consumption per KM travelled by cement tankers reduced (yearly comparison) | -3.67% | -11.71% |
| | | % of fuel consumption per KM travelled by cement tankers reduced (compare with 2014) | -3.67% | -15.81% |
| | | % of fuel consumption per KM travelled by service vans reduced (yearly comparison) | 38.60% | 5.17% |
| % of fuel consumption per KM travelled by service vans reduced (compare with 2014) | 38.60% | 41.77% | | |

| GRI Code | Description | Item | 2015 | 2016 |
|--|--|---|------------|------------|
| WATER | | | | |
| 303-1 | Total water withdrawal by source | Total water consumption per year (M ³) ¹ | 356,905.81 | 344,577.00 |
| 303-3 | Percentage and total volume of water recycled and reused | Estimated rainwater/waste water collected and reused (M ³) ² | 111,380 | 84,000 |
| EMISSIONS, EFFLUENTS, AND WASTE | | | | |
| 305-1 | Direct greenhouse gas (GHG) emissions (Scope 1) | Total scope 1 carbon emissions (tonnes CO ₂ -e) ³ | 10,536.49 | 11,042.83 |
| 305-2 | Energy indirect greenhouse gas (GHG) emissions (Scope 2) | Total scope 2 carbon emissions (tonnes CO ₂ -e) ³ | 3,212.47 | 3,250.52 |
| 305-3 | Other relevant indirect greenhouse gas (GHG) emissions (Scope 3) | Total scope 3 carbon emissions (tonnes CO ₂ -e) ³ | 170.53 | 152.53 |
| | | Total carbon emissions (tonnes CO ₂ -e) ³ | 13,919.49 | 14,445.87 |
| 305-4 | Greenhouse gas (GHG) Emissions intensity | Carbon intensity - concrete (tonnes CO ₂ -e per M ³ concrete) | 0.00699 | 0.00818 |
| 305-5 | Reduction of greenhouse gas (GHG) Emissions | Carbon reduction as compare with 2007 - concrete intensity | 32.15% | 19.80% |
| | | Carbon reduction as compare with 2007 - overall emissions | 23.48% | 20.64% |
| 306-1 | Water discharge by quality and destination | Volume of water discharged (M ³) ⁴ | 2,416 | 11,598 |
| 306-2 | Total weight of waste by type and disposal method | Construction waste/special waste to landfills (Tonnes) ⁵ | 90,868 | 133,657 |
| | | Chemical waste handled by licensed collectors (L) ⁶ | 9,000 | 5,500 |
| | | Paper waste recycled (kg) | 870 | 1,400 |
| 306-3 | Total number and volume of significant spills | No. of significant chemical / cement spilt cases | 0 | 0 |

Note:

- 1 All water obtained from municipal source
- 2 Estimated from the capacity and operation pattern of the waste water treatment system that described in p54
- 3 Calculation method & principle for application of conversion factors referred to GHG Protocol and Guidelines to Account for & Report on GHG Emissions & Removals for Buildings in Hong Kong; Carbon Footprint data had been verified independent according to ISO14064
- 4 Quality, volume and discharge points for water discharge are controlled by Water Discharge License issued by EPD
- 5 Data captured from the construction waste chits and special waste tickets that issued and controlled by EPD
- 6 Data captured from the chemical waste trip tickets

GRI Table

General Disclosures

This report was prepared in accordance with the CORE requirements of Global Reporting Initiative (GRI) Standards.

| GRI Ref. | Description | External Assurance | Cross-reference / Direct answer | Page |
|----------|--|--------------------|---|-------|
| 102-1 | Name of the organization | ✓ | About Alliance | 4 |
| 102-2 | Activities, brands, products, and services | ✓ | About Alliance | 4 |
| 102-3 | Location of headquarters | ✓ | About Alliance | 4 |
| 102-4 | Location of operations | ✓ | About Alliance | 4-6 |
| 102-5 | Ownership and legal form | ✓ | About Alliance | 4 |
| 102-6 | Markets served | ✓ | About Alliance | 4 |
| 102-7 | Scale of the organization | ✓ | About Alliance | 4 |
| 102-8 | Information on employees and other workers | ✓ | About Alliance | 4 |
| | | | Our People | 9-10 |
| | | | Workplace Performance Indicators | 57-58 |
| 102-9 | Supply chain | ✓ | We, Our Suppliers | 41-42 |
| 102-10 | Significant changes to the organization and its supply chain | ✓ | We, Our Suppliers | 41-42 |
| 102-11 | Precautionary principle or approach | ✓ | We, Market | 34 |
| 102-12 | External initiatives | ✓ | Alliance obtained HKQAA's CSR Index Advocate Mark since 2011 and upgraded to CSR Index Plus in 2014. The annual audit by HKQAA according to ISO26000 in this reporting period confirmed our CSR performance which enabled us to maintain the CSR Index Plus Mark in 2016. | |
| 102-13 | Membership of associations | ✓ | Alliance is holding membership in HKCMA, BEC, HKGBC and HKCA. | |
| 102-14 | Statement from senior decision-maker | ✓ | Message from CEO | 3 |
| 102-16 | Values, principles, standards, and norms of behavior | ✓ | About Alliance | 7-8 |
| 102-18 | Governance structure | ✓ | Corporate Governance | 11-12 |

| GRI Ref. | Description | External Assurance | Cross-reference / Direct answer | Page |
|----------|--|--------------------|---|-------|
| 102-40 | List of stakeholder groups | ✓ | On-going stakeholder engagement | 13-14 |
| 102-41 | Collective bargaining agreements | ✓ | We do not have such agreements in place. | |
| 102-42 | Identifying and selecting stakeholders | ✓ | On-going stakeholder engagement | 13-14 |
| 102-43 | Approach to stakeholder engagement | ✓ | On-going stakeholder engagement | 13-14 |
| 102-44 | Key topics and concerns raised | ✓ | On-going stakeholder engagement | 13-14 |
| 102-45 | Entities included in the consolidated financial statements | ✓ | About the report | 4 |
| | | | About Alliance | 4 |
| 102-46 | Defining report content and topic boundaries | ✓ | About the report | 2 |
| 102-47 | List of material topics | ✓ | Materiality Process | 15-16 |
| 102-48 | Restatements of information | ✓ | GRI Table / performance data in various parts | 61-64 |
| 102-49 | Changes in reporting | ✓ | About this Report | 2 |
| 102-50 | Reporting period | ✓ | About this Report | 2 |
| 102-51 | Date of most recent report | ✓ | About this Report | 2 |
| 102-52 | Reporting cycle | ✓ | About this Report | 2 |
| 102-53 | Contact point for questions regarding the report | ✓ | About this Report | 2 |
| 102-54 | Claims of reporting in accordance with the GRI Standards | ✓ | GRI Table | 61-64 |
| 102-55 | GRI content index | ✓ | GRI Table | 61-64 |
| 102-56 | External assurance | ✓ | External Assurance Statement | 65-66 |

Note:

- 1 Proprietary information such as financial data which is not legally required for a privately owned company are excluded
- 2 No significant variations in the reporting period

Specific Disclosures

This report was prepared in accordance with the CORE requirements of Global Reporting Initiatives (GRI) Standards.

| Material Aspects | GRI Ref. | Description | External Assurance | Cross-reference / Direct answer | Page |
|---|----------|--|--------------------|--------------------------------------|-------|
| Leading Market Position; Low Carbon Economic Trend | 103 | Management Approach Disclosure | ✓ | We, Market | 34 |
| | 201-2 | financial implication and other risks and opportunities due to climate change | ✓ | We, Industry | 43-44 |
| | 201-3 | Defined benefit plan obligations and other retirement plan | ✓ | Workplace Performance Indicators | 57-58 |
| | 202-1 | Ratio of standard entry level wage by gender compare to local minimum wage | ✓ | Workplace Performance Indicators | 57-58 |
| | 204-1 | Proportion of spending on local suppliers | ✓ | We, Suppliers | 41-42 |
| Business Integrity | 103 | Management Approach Disclosure | ✓ | Corporate Governance | 11-12 |
| | 205-2 | Communication and training about anti-corruption policy and procedures | ✓ | Corporate Governance | 11-12 |
| | 205-3 | Confirmed incident of corruption and actions taken | ✓ | None | |
| | 206-1 | Legal actions for anti-competitive behavior, anti-trust and monopoly practices | ✓ | None | |
| Natural Resources Conservation | 103 | Management Approach Disclosure | ✓ | Our Home Hong Kong, Environment | 49-50 |
| | 301-2 | Recycled input materials used | ✓ | Environmental Performance Indicators | 59-60 |
| | 302-1 | Energy consumption within the organization | ✓ | Environmental Performance Indicators | 59-60 |
| | 302-2 | Energy consumption outside of the organization | ✓ | Environmental Performance Indicators | 59-60 |
| | 302-3 | Energy intensity | ✓ | Environmental Performance Indicators | 59-60 |
| | 302-4 | Reduction of energy consumption | ✓ | Environmental Performance Indicators | 59-60 |
| | 303-1 | Water withdrawal by source | ✓ | Environmental Performance Indicators | 59-60 |
| | 303-3 | Water recycled and reused | ✓ | Environmental Performance Indicators | 59-60 |
| Emissions | 103 | Management Approach Disclosure | ✓ | Our Home Hong Kong, Environment | 49-50 |
| | 305-1 | Direct (Scope 1) GHG emission | ✓ | Environmental Performance Indicators | 59-60 |
| | 305-2 | Energy indirect (Scope 2) GHG emission | ✓ | Environmental Performance Indicators | 59-60 |
| | 305-3 | Other indirect (Scope 3) GHG emission | ✓ | Environmental Performance Indicators | 59-60 |
| | 305-4 | GHG emission intensity | ✓ | Environmental Performance Indicators | 59-60 |
| | 305-5 | Reduction of GHG emission | ✓ | Environmental Performance Indicators | 59-60 |

| Material Aspects | GRI Ref. | Description | External Assurance | Cross-reference / Direct answer | Page |
|--|----------|---|--------------------|---|-------|
| Waste Reduction | 103 | Management Approach Disclosure | ✓ | | 49-50 |
| | 306-1 | Water discharge by quality and destination | ✓ | Environmental Performance Indicators | 59-60 |
| | 306-2 | Waste by type and disposal method | ✓ | Environmental Performance Indicators | 59-60 |
| | 306-3 | Significant spill | ✓ | None | |
| | 306-4 | Transport of hazardous waste | ✓ | Licensed service providers were engaged for the transportation of chemical waste as according to legislation. | |
| Compliance to Environmental Law & Standard | 103 | Management Approach Disclosure | ✓ | Our Home Hong Kong, Environment | 49-50 |
| | 307-1 | Non-compliance with environmental law and regulations | ✓ | None | |
| | 308-1 | New suppliers that were screened using environmental criteria | ✓ | We, Suppliers | 41-42 |
| Safety & Health | 103 | Management Approach Disclosure | ✓ | Me, Health & Safety | 19-20 |
| | 403-1 | Workers representation in formal joint management-worker health and safety committee | ✓ | We have the Corporate HSE Committee formed as according to the COP for Safety Management published by Labour Department in which 50% of the committee members are employees representatives nominated from different functional teams, covered 100% of our employees. | |
| | 403-2 | Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work related fatalities | ✓ | Workplace Performance Indicators | 57-58 |
| Employment Practices | 103 | Management Approach Disclosure | ✓ | Me, Our Behavior, Our People | 17-18 |
| | 401-1 | New employees hired and employee turnover | ✓ | Workplace Performance Indicators | 57-58 |
| | 401-3 | Parental leave | ✓ | Workplace Performance Indicators | 57-58 |
| | 404-1 | Average hours of training per year per employee | ✓ | Workplace Performance Indicators | 57-58 |
| | 404-2 | Programs for upgrading employees skills and transition assistance programs | ✓ | Me, Training and Development | 25-26 |
| | 404-3 | Percentage of employees receiving regular performance and career development review | ✓ | Workplace Performance Indicators | 57-58 |
| | 405-1 | Diversity of governance bodies and employees | ✓ | Workplace Performance Indicators | 57-58 |
| | 406-1 | Incident of discrimination and corrective actions taken | ✓ | None | |

This report is prepared in accordance with the CORE requirements of Global Reporting Initiatives (GRI) Standards in which most relevant Specific Disclosures for the material aspects are disclosed. For those Specific Disclosures that excluded, the reasons for omission are 1) Confidentiality Constraint for proprietary information such as the financial or other commercially sensitive data; or 2) Not Applicable; or 3) Information Unavailable such as the suggested grouping/analysis of data not relevant/suitable to the nature/scale/location of our business and operations.

VERIFICATION STATEMENT

Scope of Verification

Hong Kong Quality Assurance Agency (HKQAA) has been engaged by Alliance Construction Materials Limited (ACML) to undertake an independent verification for its Sustainability Report 2015-2016 (Refer to as "The Report"). The scope of HKQAA's verification covers the data and information associating to ACML's sustainability performance for the period 1st January 2015 to 31st December 2016. This is the 4th Report that ACML published to communicate its commitments, efforts and progress of performance towards sustainability.

Level of Assurance and Methodology

The process applied in this verification was based on the International Standard on Assurance Engagement 3000 (Revised) – "Assurance Engagement Other Than Audits or Reviews of Historical Financial Information" issued by the International Auditing and Assurance Standards Board (ISAE 3000). Our evidence gathering process was designed to obtain a reasonable level of assurance as set out in ISAE 3000 for the purpose of devising the verification conclusion and the extent of this verification process undertaken was provided for the core aspects of the GRI Standard.

In order to understand the process that ACML adopted to ascertain the key sustainability issues and impacts, the Report compilation process was discussed including stakeholder engagement and materiality assessment processes. Also, system and process for collecting, collating and reporting sustainability performance data were verified. Our verification procedure performed covered reviewing of relevant documentation, interviewing responsible personnel with accountability for preparing the reporting contents and verifying the selected representative sample of data and information. Raw data and supporting evidence of the selected samples were also thoroughly examined during the verification process.

Independence

ACML is responsible for the collection and presentation of the information presented. HKQAA does not involve in calculating, compiling, or in the development of the Report. Our verification activities are independent from ACML.

Conclusion

On the basis of our verification results and in accordance with the verification procedures undertaken, it is the opinion of the HKQAA's verification team that:

- The Report illustrates ACML's sustainability performance on the significant aspects in a balance, comparable, clear and timely manner;
- The data and information states in the Report are reliable and complete.

ACML has been engaging with its stakeholders continuously and being very responsive to the feedbacks gathered from the stakeholder engagement process by improving its disclosure regarding the material issues that are of importance to the company and high level of interest by stakeholders. The Report reflects appropriately ACML's sustainability context and materiality.

Signed on behalf of Hong Kong Quality Assurance Agency



Ronnie Ng
General Manager
May 2017

