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Malayan Cement Berhad SUSTAINABILITY REPORT 2022

BUILDING TOGETHER

Malayan Cement Berhad
Sustainability Report 2022

About this Report

This Sustainability Report ("Report") discloses Malayan Cement Berhad's and its subsidiaries' ("MCB") efforts, progress and performance in managing the Environmental, Social and Governance (ESG) aspects of their operations. Through this Report, we endeavour to report issues that are material to MCB and our stakeholders, outlined under four sustainability pillars. These pillars demonstrate how sustainability is incorporated in everything that we do. It demonstrates that throughout the production, manufacturing and trading of cement, clinker, ready-mixed concrete, and other building materials, we strive to embed best practices to advance sustainable development.

YTL Cement, which owns 78.58% (as at 30 June 2022) of MCB, is part of YTL Corporation Berhad ("YTL Group"), a publicly listed company on the Main Market of Bursa Malaysia Securities Berhad ("Bursa Malaysia") under the Industrial Products and Services sector. MCB has aligned with, and adopted, YTL Group's policies, guidelines, and practices. This includes matters relating to corporate governance, risk management, and internal control, as well as its code of conduct and business ethics.

Feedback

We welcome comments, thoughts and feedback from our esteemed stakeholders. Kindly address comments and queries to:

Communications Department
Email: communication@ytlcement.com.my

Reporting Scope
This report covers all the operations of MCB in Malaysia. This includes cement manufacturing, cement grinding, drymix and ready-mixed concrete plants, and aggregate quarries.

Reporting Cycle
Annual

Reporting Period
This Report covers the sustainability performance of MCB from 1 July 2021 to 30 June 2022, unless otherwise specified.

Reference and Guideline
This report has been prepared in accordance with Bursa Malaysia's Main Market Listing Requirements, and the Sustainability Reporting Guide, 2nd Edition. It is our long-term goal to produce reports that incorporate the recommendations of the Global Reporting Initiative (GRI) Standards, and other relevant reporting standards.

External Assurance
We have not sought external assurance for this Report and will consider doing so when our reporting matures over time.

Forward-looking statements
This Report contains forward-looking statements related to MCB's ambition, strategies, plans, and initiatives. Such forward-looking statements do not constitute forecasts regarding results or any other performance indicator.

Actual results may differ materially from the forward-looking statements as a result of a number of risks and uncertainties, including but not limited to the uncertainties related to the market conditions and the implementation of our plans.

Readers are urged to read this Report and carefully consider the risks, uncertainties, and other factors that affect our business and operations. The information contained in this report is subject to change without notice, and we are not obligated to publicly update or revise forward-looking statements after the date hereof or to reflect the occurrence of anticipated or unanticipated events or circumstances.

References
All references to 'MCB', 'the Company', 'the Group', 'we' and 'our' refer to Malayan Cement Berhad.

Managing Director's Message

The global population is expected to increase by another 600 million people by 2030. While this presents a great opportunity, good corporate citizens understand that new business models based on innovative and sustainable solutions are the only way to maintain progress.

This stand-alone sustainability report is evidence of our commitment. It reflects the importance we attach to our environment, social, and governance responsibilities, and is central to our vision for the future. At MCB, we have incorporated sustainable practices into our business model and have made them a key lever for growth.

While I will still chair the Sustainability Committee, we have appointed a new Head of Sustainability to better focus on, and accelerate, our sustainability efforts. Answerable to the Board of Directors, the Sustainability Committee oversees, reviews, and monitors the implementation of our ESG strategy.

As an industry pioneer and the market leader in the Malaysian building materials sector, we want to lead the way towards sustainable construction. Therefore, we constantly engage with both our internal and external stakeholders to determine the most suitable path to facilitate this paradigm shift.

Based on their feedback, we have developed four pillars that form the core of our sustainability strategy:

- Helping Malaysia Build Greener
- Operating Sustainably
- Operating Responsibly
- Building Capacity and the Community

This report provides updates on our initiatives, and a detailed look at our performance under each of these areas. Allow me, however, to highlight some of our achievements.

Firstly, we launched our range of low carbon products under the ECO brand name – ECOCem, ECOConcrete, and ECOSand. These products are all engineered to foster the environmentally-preferred features of green building. These include having reduced embodied carbon, embedded reuse and recycling properties, and lowering the whole life carbon of the overall structure.

Secondly, we promoted sustainable construction through our YTL Cement Seminar Series. Since the introduction of the series in 2019, we have held 44 seminars that were attended by 4,800 participants - nearly all of whom were involved in the Malaysian construction industry one way or another.

Thirdly, we increased the usage of alternative fuels and raw materials (AFR) in our product mix. In 2022, our plants cumulatively processed and used nearly 600,000 tons of industrial, commercial and agricultural waste as alternative materials. We hope to increase AFR use in the near term, and this shows that our investment in upgrading our plants to be more sustainable is paying off.

Moving forward, we expect to further develop products under the ECO range. We are looking to add more low carbon cement and concrete products to our line-up and we will be launching our ECODrymix products in the coming months. We will continue to work closely with industry stakeholders to drive the transition to sustainable construction.

In conclusion, this report is a way of clearly bringing home to all of our stakeholders the issues that we face in the context of our business. Much work is still required, but I am confident that our team – through its dedication and professionalism – will rise to the occasion to meet our 2050 aspiration of being carbon neutral.

Dato' Sri Michael Yeoh Sock Siong
Managing Director

About MCB

MCB is Malaysia's leading cement and building materials group with the widest network of operations. It has been listed on Bursa Malaysia Securities Berhad since 17 March 1961, under the Building Materials sub-sector of the Industrial Products & Services sector.

Through its subsidiaries, the MCB Group is involved in the production, manufacturing, and trading of cement, clinker, ready-mixed concrete, and other building materials. MCB has contributed to the construction of many buildings, homes, and infrastructure. It is the preferred supplier for complex and large-scale developments.

Cement Plant

1 Langkawi Plant
2 Padang Rengas Plant
3 Kanthan Plant
4 Bukit Sagu Plant
6 Rawang Plant

Grinding Station

5 West Port
8 Pasir Gudang

Cement Terminal

7 West Port & Port Klang
9 Pasir Gudang

Business Sites

Headquartered in Kuala Lumpur, MCB is the largest cement manufacturer in Malaysia. After the acquisition of YTL Cement's entire cement and ready-mixed concrete operations in Malaysia on 21 September 2021, it now has five Integrated cement plants, with four in operation in Langkawi, Kanthan, Padang Rengas and Bukit Sagu. The 71-year-old Rawang Plant temporarily ceased operations at the start of 2020 for major refurbishments.

Additionally, MCB has four grinding stations in Pasir Gudang and West Port, three cement terminal facilities located in West Port and Pasir Gudang, and two cement depots in Batu Caves and Shah Alam. Beyond its cement plants, MCB now has 72 ready-mixed concrete batching plants, three aggregate quarries throughout Peninsular Malaysia, and two drymix plants in Rawang and Pasir Gudang.

The Group's Construction Development Laboratory (CDL) spearheads its research and development in building materials to serve the future needs of the construction industry.

Business Segments

Cement

MCB is the largest homegrown cement company in Malaysia. We supply our products to the local and international markets.

Our range of cement products have been tried and tested to meet the needs of different applications from high rise buildings to underground tunnels, precast, marine structures and more.

Our vision is to continuously support Malaysia's progress towards a sustainable, advanced country. We have developed a range of sustainable cement under the brand name of ECOCem to meet the needs of green buildings and infrastructure.

Concrete and Aggregates

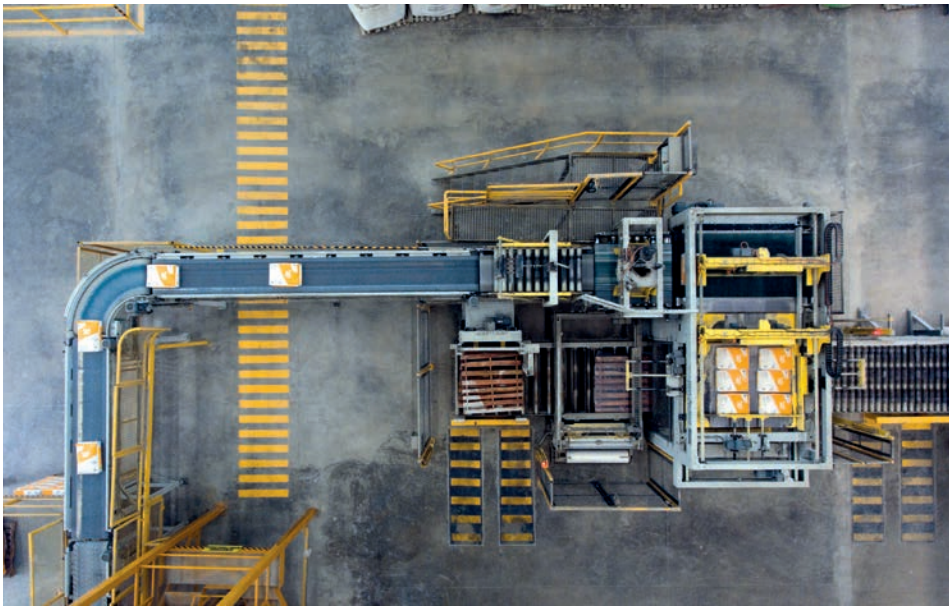
We are the largest ready-mixed concrete producer in the country. We are committed to quality, and meeting the construction needs of our customers. An integral part of our operation is technical capability. Each year, our experienced teams at plant laboratories and the CDL perform a wide range of analyses and product trials. This is to ensure that we develop concrete mixtures that meet our customers' diverse architectural demands.

We contribute to sustainable construction with ECOConcrete, our low embodied carbon concrete mixtures.

Drymix mortars

Our drymix business is led by QuickMix Solutions. For more than 20 years, QuickMix® has grown to offer a complete range of solutions. This product range now has over 25 different products to help customers achieve perfect walls and floors. We work closely with our customers to develop premium products that meet the BQUAS and QLASSIC standards.

We continuously develop products to meet customer needs for durability and low-carbon buildings.



Sustainable waste management

Through our subsidiary, Geo Alam Environmental (GAE), we provide sustainable waste management solutions to industries and businesses. We apply the proven technology of co-processing to resolve waste challenges sustainably to enable a circular economy.

GAE also leads our initiatives in the development of alternative fuels and raw materials for use in our cement plants.

Our Strategic Approach to Sustainability

Our Sustainability Priorities

At MCB, we believe that we have an obligation that goes beyond just providing returns for shareholders. We are mindful of our impact on society, the environment, and future generations. This is especially important to us. As the industry pioneer and market leader, we are expected to lead the way in operating more sustainably, and to help Malaysia build better.

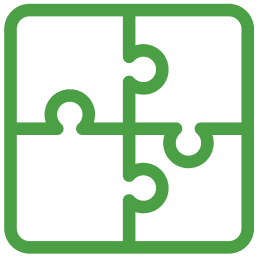
During the year, we rolled out new sustainability priorities organised under four main pillars. These reflect the areas that are important to us now, and those that will be important in the future.

MCB Sustainability Pillars

Helping Malaysia Build Greener

Operating Sustainably

Operating Responsibly



Building Capacity & The Community

Please refer to page 17 for details on MCB Sustainability Pillars.

Sustainability Governance

The MCB Group has a long-standing commitment to ensuring that its businesses are sustainable in the long term. The Board oversees governance of the MCB Group's sustainability matters which includes setting its environmental, social, and governance (ESG) strategies, priorities and targets, overseeing the progress of ESG strategy and performance, and reviewing the MCB Group's material ESG risks and opportunities.

MCB's Sustainability Committee is chaired by the Managing Director, Dato' Sri Michael Yeoh Sock Siong. He is supported by the Head of Sustainability, and senior management with responsibility in ESG matters. The Sustainability Committee, together with the Board, sets high-level ESG direction and strategic focus for the business. The Committee then oversees, reviews, and monitors MCB's implementation of ESG strategies and action plans across its operations. The Committee reports to the Board on an annual basis or more frequently, as and when needed.

The Board is ultimately responsible for MCB's sustainability matters. It ensures MCB's performance, and that long-term strategy includes consideration for ESG issues. This ensures that the Group remains resilient and is able to deliver sustainable value to its stakeholders. The Directors are kept apprised of key ESG issues relevant to the Group through periodic briefings from the Sustainability Committee and management. These issues include stakeholder expectations, the Group's action plans, and performance. The Directors stay abreast with more general developments in ESG through training programmes, which are disclosed in more detail in the Remuneration and Nomination Committee Statement in our Annual Report.

Our Sustainability Governance Structure

The Sustainability Committee work with senior management to mobilise operations teams to implement MCB's sustainability strategies.

Senior management is responsible for integrating sustainability priorities into day-to-day operations, and in ensuring its effective implementation.

MCB's sustainability strategies, priorities, and action plans are communicated to stakeholders via multiple channels including internal bulletins, intranet publications, ESG trainings, workshops, and meetings.

Stakeholder Engagement

Our key stakeholders have significant influence on our company's business decisions, direction, and growth. We engage with our stakeholders to maintain open communication and create meaningful relationships with them. The feedback we receive helps us to understand stakeholder expectations and monitor industry trends. We strive to keep them informed and updated on the latest developments in a timely manner.

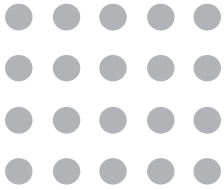
Based on their valuable feedback and insights, we can address their key concerns by making better decisions at management level. The following table lists our key stakeholders, how we engage with them, their interest in our company or key concerns, and our corresponding response.

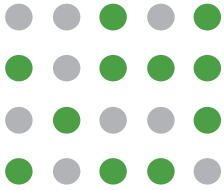
Key stakeholders	Mode of Engagement	Interest/Key Concern	Our Response
Shareholders, Investors and Banks	• Annual General Meetings • Financial result announcements • Annual Report and Sustainability Report • Engagements through emails, phone calls and other means • Digital platforms (Facebook, Instagram, LinkedIn, website)	• Financial result and sustainability • Company growth and value chain • ESG performance	• We implement strategies to enhance business and financial resilience, as described in our Annual Report and this Sustainability Report.
Customers	• Sales team • Link for public feedback on our website • Events and roadshows • Social media accounts (Facebook, Instagram, LinkedIn)	• Product quality and safety • Product innovation • Customer experience • Product impact to the environment	We have embedded these into our business strategies and operation plan, elaborated under the following Sustainability Pillars: • Helping Malaysia build greener • Operating Sustainably • Operating Responsibly
Government, Local Authorities & Regulators	• Official meetings • Site inspections • Industry dialogues • Seminars • Events and activities	• Compliance with rules and regulations • Environmental impacts • Employee health and safety • Labour practice • Support for new initiatives	• We continue to engage closely with the regulators and the Malaysian government on our initiatives in compliance, sustainability and key issues having impact on our business. • We ensure our operation and products are meeting national standards, guideline, laws, and regulations. • We collaborate and support initiatives in protecting the environment.
Employees	• Internal digital channels (Blueprint and Bulletin) • Internal workshops and training • Annual Report and Sustainability Report • BUILDS programs • Public digital platforms (Facebook, Instagram, LinkedIn, website)	• Company strategies and performance • Occupational health and safety • Training and people development • Talent management • Employee well-being and workplace culture	• We have established additional communication channels during the year (Blueprint, Bulletin, BUILDS Instagram) • We have and will continue to make progress in talent management • We will make progress in performance and engage our teams via work meetings, ESG training and workshops • We continue to build on our initiatives in health, safety and employee well-being as described in this Sustainability Report
Suppliers	• Meetings and site visits • Tender • Annual performance evaluation	• Procurement processes • Occupational health and safety • Labour practices	• We have taken actions to improve our procurement processes and will continue to improve • Our occupational health and safety management includes ensuring safe workplace for our contractors • We engage our suppliers and contractors to ensure labour practices comply to regulations
Communities, NGOs	• BUILDS programmes • Public digital platforms • Engagements through meetings, phone calls and other means	• Environment and social impacts • Community investments • Operation compliance to regulations	• Corporate social responsibility programmes through BUILDS and plant initiatives • Employee volunteering programmes • We ensure our operations are compliant to regulations

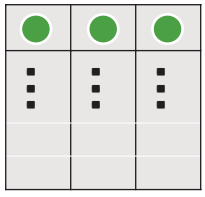
A range of sustainability matters have impact to our business and stakeholders.

We prioritise key issues to manage with the feedback from internal and external stakeholders.

We develop policies, procedures and programs for management of the key issues, while integrating ESG considerations in our day-to-day operations.







Materiality Assessment

Since the acquisition of LafargeHolcim's operations in Malaysia in 2019, our business and operating environment have seen many changes. The way we operate has seen further changes following the COVID-19 pandemic. For example, our company, customers, and industry are evolving in response to climate change and climate initiatives. With a wide range of sustainability issues impacting our business due to this evolution, the materiality assessment prioritises the challenges that we face.

This year, we conducted a new assessment. The results so far reflect known challenges, and external environmental changes. We will repeat this assessment next year to ensure that the key sustainability issues are being managed in a way that is aligned to our stakeholder priorities.

Materiality Assessment conducted in 2022

Sustainability Matters

High Materiality

1 H&S training
2 Employee health surveillance
3 Product quality and safety
4 Work related injuries and fatalities
5 Anti-competition
6 Compliance to permit conditions

Medium Materiality

7 Talent management
8 Waste management
9 Anti-corruption
10 Use of recycled and alternative materials
11 Particulate emissions
12 Product impact on environment
13 Product innovation (environment)
14 Reduction in energy use
15 Voluntary contribution to community
16 Transition to low carbon economy
17 Supplier human rights policy and practices
18 Direct CO_2 emission
19 Customer complaints management

Low Materiality

20 Ratio of foreign to local hire of low skilled workers
21 Employee human rights policy and practices
22 Climate change impact
23 Use of renewable energy
24 Sulfur oxides (SOx)
25 Nitrogen oxides (NOx)
26 Water conservation
27 Moving away from single-use packaging material
28 Biodiversity management
29 Indirect CO_2 emission (Scope 2)
30 Indirect CO_2 emission (Scope 3)

Materiality Assessment Result

In the materiality assessment conducted during the year, we observed some sustainability matters not rated as material by our stakeholders. Some of these are due to differences in priorities in different operations, or at different locations. Some emerging sustainability matters may also not be rated as high importance, possibly due to low awareness.

We have, however, observed a perceptible change in the views of our stakeholders. We eagerly await the results of the new materiality assessment in the next reporting cycle to see if this is a continuing trend.

The key sustainability matters identified are:

Area	Category	Sustainability Issues
Economic	Climate-related risks and opportunities	Transition to low carbon economy
Environment	Compliance (Environmental)	Compliance to permit conditions
	Emissions	Direct CO_2 emission Particulate emissions
	Energy	Energy efficiency
	Materials	Use of recycled and alternative materials
	Supply chain (environmental)	Product innovation (environment)
	Product responsibility	Product impact on environment
	Waste and effluent	Waste management
Social	Anti-competition	Anti-competition behaviour
	Anti-corruption	Anti-corruption
	Community investment	Voluntary contribution to community
	Human rights	Supplier human rights policy and practices
	Occupational health & safety	H&S training Employee health surveillance Work related injuries and fatalities
	Product responsibility (Social)	Product quality and safety Customer complaints management
	Talent management	Talent management

The outcome of the materiality assessment was reviewed and discussed by the Board. Having identified the key sustainability matters, the Sustainability Committee prepared a recommendation to the Managing Director detailing the areas to prioritise and included sustainability strategies to address them.

One key understanding gained from the assessment was that the management of sustainability matters must be seen to be part and parcel of the business if we are to successfully integrate sustainability in our daily operations. Therefore, following the finalisation of the 2022 assessment, the Sustainability Committee organised workshops with operations management and functional leads at Head Office to share the Group's vision and strategic approach to sustainability.

The result of the assessment, and proposal for implementation, were also discussed at senior management level. It was decided that to facilitate adoption – and ensure consistent implementation across multiple sites – the Sustainability Committee was to propose targets and KPIs. Site operations management then develops policies, procedures, and programmes for the management of material matters based on these proposed targets and KPIs.

We have translated our material sustainability matters into 4 Sustainability Pillars and aligned them with relevant UN SDGs.

Sustainability Pillar	Material Sustainability Matters	Relation to SDGs
Helping Malaysia Build Greener	• Transition to low carbon economy • Product quality and safety • Product innovation (environment) • Customer complaints management	
Operating Sustainably	• Direct CO_2 emission • Particulate emissions • Energy efficiency • Use of recycled and alternative materials • Waste management • Biodiversity management • Product impact on environment	
Operating Responsibly	• Compliance to permit conditions • Anti-competitive behaviour • Anti-corruption • Supplier human rights policy and practices	
Building Capacity & The Community	• Occupational health & safety • Talent management • Voluntary contribution to community	

The 4 Sustainability Pillars are further expanded to guide our employees in its implementation.

MCB Sustainability Pillars

Helping Malaysia Build Greener

We ensure that our products are of consistent quality and more environmentally friendly, and we promote a circular economy by giving materials a second life.

We help build greener by:

- Producing quality products that meet the standards
- Offering low carbon products and solutions
- Promoting a circular economy
- Collaborating with our customers

Operating Sustainably

We commit to operate sustainably by optimising our resources and operations. We will do this by supporting biodiversity management and reducing the carbon footprint of our operations.

We operate sustainably by:

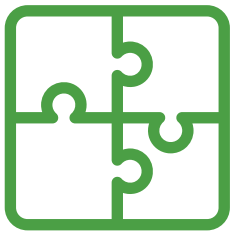
- Supporting biodiversity management
- Enabling low carbon and energy efficient production
- Promoting resource recovery
- Practicing responsible waste management

Operating Responsibly

We seek to uphold a culture of ethics and integrity that ensure we remain compliant with all applicable laws and regulatory requirements.

We fully comply with:

- Licence and permit requirements
- Anti-bribery and corruption acts
- Competition Law



Building Capacity & The Community

At its core, sustainability is about people. We have initiatives to promote a healthy and safe working environment as well as to foster talent. Through BUILDS, our CSR arm, we aim to contribute to causes that extend beyond business objectives.

We build capacity through:

- Making Health & Safety the core of our operations
- Knowledge sharing and helping our people fulfil their potential
- We contribute to causes through BUILDS, our CSR arm.

Our Aims

We aim to support and contribute to the construction industry's transition to sustainable construction.

We aspire to achieve carbon neutrality by 2050.

Zero tolerance for bribery and corruption.

We are committed to becoming an agent of change for the benefit of present and future generations.

Helping Malaysia Build Greener

The first pillar of our sustainability strategy is Helping Malaysia Build Greener. To achieve our goals, we need to use a multi-layered approach.

Firstly, we commit to producing quality and consistent products according to standards. To maintain a high standard, we have in place a stringent quality control policy and hold weekly meetings chaired by the Managing Director.

Secondly, in addition to quality, environmentally preferred building materials have direct contribution to sustainable construction. We have developed a line of low carbon products that are specifically engineered to not only lower the embodied carbon of the entire building, but to also enable other green building features such as rainwater harvesting and lower operational carbon.

Thirdly, we recognise the importance of knowledge sharing and communication in encouraging the adoption of sustainable construction practices. We have embarked on a series of initiatives to drive awareness, particularly in industry players, and more importantly, the builders of tomorrow.

Finally, a circular economy needs to be established to ensure that industrial waste is minimised as much as possible. Our subsidiary, Geo Alam Environmental (GAE), is spearheading our efforts towards this end by working closely with companies in other industries to turn their waste products into our fuel or raw materials.

Producing Quality Products that Meet the Standards

We maintain our high standards through having a stringent quality control policy. All of our cement plants are certified to ISO9001:2015 Quality Management Systems, and the plant laboratories accredited based on MS ISO/IEC 17025:2017. Furthermore, SIRIM conducts an annual audit on each of our cement plants to ensure that we are always in full compliance.

Our products are certified with SIRIM Product Certification and conform to the MS EN197-1:2014 and MS EN 413-1: 2012 standards.

To ensure that our products are of a consistent quality, we apply a multi-stage quality control procedure during production. Samples are collected at each stage of the production process and tested stringently for defects and non-conformity.

At our high volumes, our quality control procedures rely heavily on process automation. We continue to invest in new technologies to enable us to shorten reaction time, and to improve the effectiveness of mitigation actions. For example, we installed additional units of cross belt analysers in the year under review. These analysers are used to measure the chemical composition of kiln feed in real-time, allowing us to significantly reduce the time between testing and process adjustment.

Standards/Certifications	FY2022 Performance
ISO 9001:2015 Management System	100% of our operating integrated cement plants and grinding plants are certified.
ISO 14001:2015 Environment Management System	100% of our operating integrated cement plants and grinding plants are certified.
ISO 50001:2018 Energy Management System	80% of our operating integrated cement plants are certified.
ISO 45001:2018 Occupational Health and Safety Management System	100% of our operating integrated cement plants and grinding plants are certified.
MS ISO/IEC 17025:2017 Testing and calibration laboratories	100% of laboratory in our operating integrated cement plants and grinding plants are certified.
ISO 14024:2018 Environmental labels and declaration	Our range of green products include Type I certified by SIRIM Eco-Labelling and/or Singapore Green Label.

We maintain a continuous feedback and improvement loop where our plants are in constant communication with the Head Office's Operations and Process team to review the production process and make adjustments where necessary. We also encourage our plants to share their knowledge with each other for problems to be resolved in the most efficient manner possible.

Product Safety

Our integrated quality management process enables us to deliver products of consistent quality that meet the prescribed standards. Built into the same framework is our assurance of product safety.

There were no product safety incidents or product recalls due to health and safety issues during the year under review.

QuickMix® roadshow in collaboration with our distributor in Muar on 25 June 2022. The program was organised to share good practices with small and medium-sized contractors on the application of QuickMix® products for block wall and concrete wall solutions.

Product safety information

We have a Safety Data Sheet (SDS) for all of our products. In the SDS, we describe potential hazards, recommended safe work practices, and environmental protection measures.

Product safety information is printed at the back of our bagged products for easy reference.

Each year, our Sales and Marketing teams work with our distributors to conduct product application demonstrations at various locations nationwide. The goal is to reach out to contractors and their employees who work with our products and share best practices, as well as safe handling methods.

Transparent Labelling

All our products and marketing communications meet regulatory requirements. We provide information needed by our customers to use our products in a safe manner.

In FY2022, there were no incidents of non-compliance concerning product information or labelling. There were also no incidents of non-compliance in marketing communications.

Offering Low Carbon Products and Solutions

At MCB, we recognise the importance and benefits of sustainable development and we have been developing low carbon products and solutions to promote sustainable construction. The value we create is not limited to just product quality and building durability. We work with architects and our customers in applying our specialty ECOConcrete products to achieve other green building features such as rainwater harvesting and reducing heat islands. Our product solutions and technical services support our customers in achieving their sustainable construction goals.

YTL Cement ECO Family Product Line

eco CEM | eco CONCRETE | eco SAND

To help our customers select products suitable for their green projects, we have launched the ECO Family product line. The products are grouped under the following categories: ECOCem, ECOConcrete, and ECOSand. We will be launching our ECODrymix product range in the coming months offering greener premix solutions.

Our Green Cement, ECOCem

Our range of low carbon cement, ECOCem, contains at least 25% recovered material and is made with 20-50% lower CO_2 emission compared to Ordinary Portland Cement (OPC). In this product range, we have various products that are certified green label, such as Mascrete LH (SIRIM Eco-Label) and Castle (Singapore Green Label).

eco CEM

- Sustainable alternatives to OPC
  CEM II and CEM IV Low carbon cement
- Minimum 25% low carbon material
  Lower clinker content
- Lower CO_2 emission per ton cement
  20% to 50% lower CO_2 compared to OPC
- Resource efficient production
  Lower energy consumption and reduced use of natural resources

Our Castle cement is certified as environmentally preferred and meets the eco-standards of the Singapore Green Labelling Scheme (SGLS). Castle has been independently verified by third party based on life cycle considerations set by the Singapore Environment Council.

The SGLS is Singapore's leading environmental standard and certification mark.

Our Sustainable Concrete, ECOConcrete

Concrete is the most widely used building material in the world after water. This is because its resilience and durability significantly reduce the need for maintenance or replacement. We improve on these innate qualities with ECOConcrete, which contains 20 to 60% less embodied carbon compared to CEM I concrete.

Research and product development are the foundation of our ability to support the diverse needs of our customers. Our experienced teams conduct trials in our laboratories to find the right concrete mixtures that meet our customers' performance specifications. We will continue to develop our technical support services to help our customers choose concrete mixtures that are lower in embodied carbon.

eco CONCRETE

20-60% EMBODIED CARBON

- Reduced embodied carbon vs CEM I
- Low Carbon Series: 20-30% lower embodied carbon
- Ultra Series: Ultra Low Carbon for 40-60% lower embodied carbon

30-70% RECOVERED MATERIAL

- Contribute to resource reuse and recycling
- Reduce use of virgin materials *cementitious materials

10-100% NATURAL SAND REPLACED

- Go one notch higher in sustainability performance with ECOSand

Product Innovation

Construction Development Laboratory (CDL)

The CDL, located in Petaling Jaya, Selangor, is our first research and development facility dedicated to developing customised cement and concrete solutions. It is where we work closely with architects, engineers and customers to develop innovative solutions for their projects. The CDL houses three labs – the ISO/IEC 17025 Cement Lab, the Concrete and Aggregates Lab, and the Soil Lab.

Value-Added Concrete Products

Our specialty Value-Added Products range provides specific solutions that are aesthetically pleasing and functional.

AquaBuild

In a tropical country like Malaysia, stormwater management is an important aspect of any new development. AquaBuild is a fast-draining concrete pavement solution. Its high permeability allows rapid water removal from the surface. AquaBuild can be used alone for stormwater management or combined with a rainwater harvesting system.

Photo: Taman Tasik Keramat

DecoBuild

Tropical weather conditions often lead to the need for frequent maintenance and replacement of pavements and external flooring. This inevitably leads to increasing the total embodied carbon of the building. Therefore, DecoBuild was specifically created to be extra durable in order to withstand local weather. Furthermore, its high Solar Reflectance Index (SRI) can help reduce the heat island problem in the city.

Photo: Taman Tasik Titiwangsa

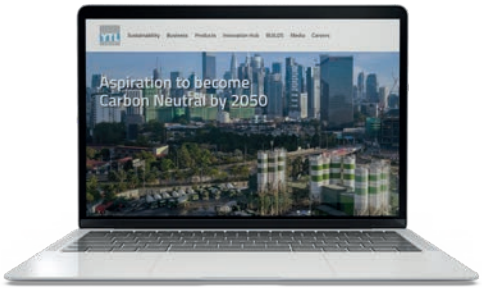
Supporting Sustainable Construction

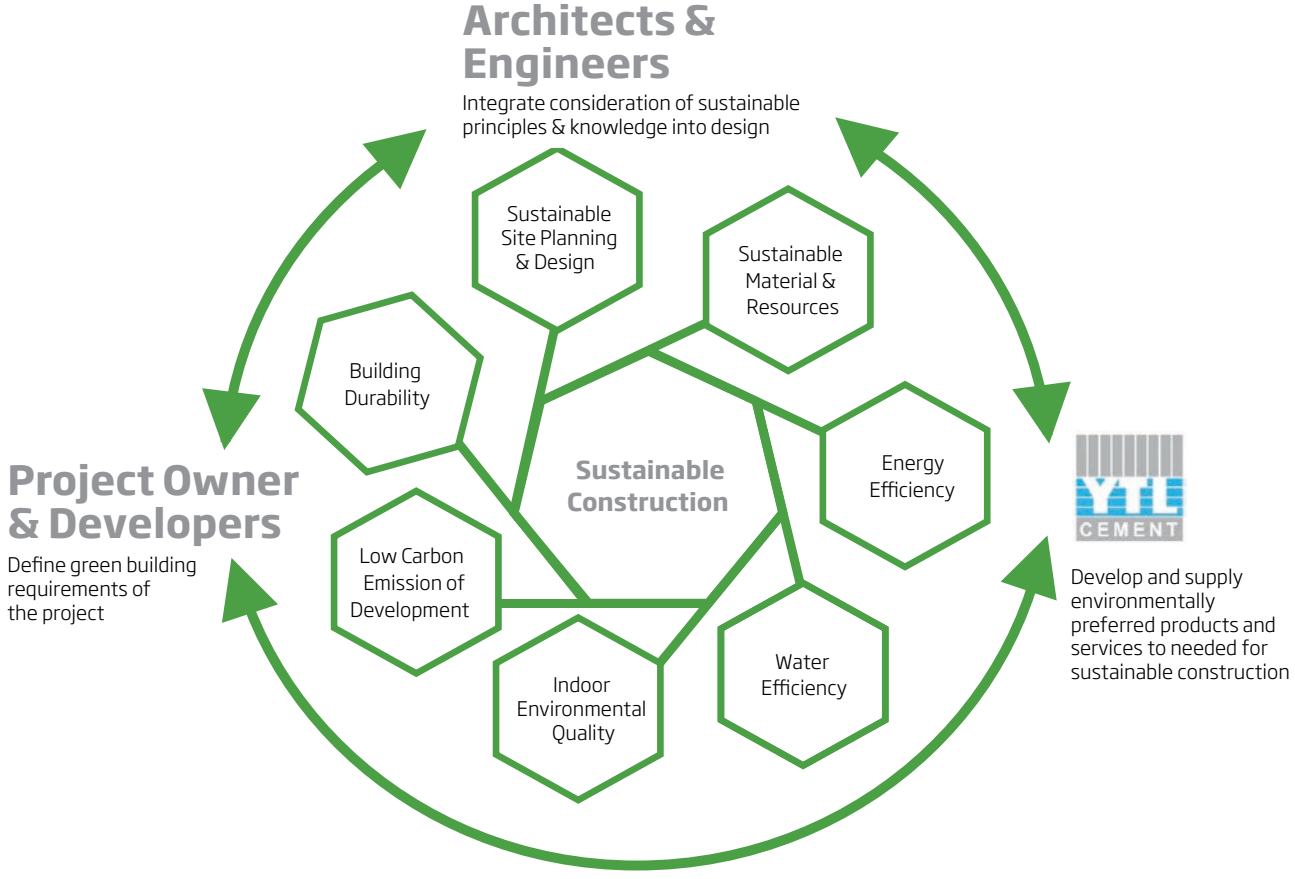
The transition to sustainable construction can only occur with a critical mass of industry players who are committed to this paradigm shift. We support this by focusing on education. We started the YTL Cement Seminar Series in 2019 to provide a platform for experts and industry practitioners to discuss and share knowledge. The seminars are organised into four categories:

- Architectural series
- Cement & Concrete series
- ESG and Waste Management series
- MasterClass series, in collaboration with universities

To-date we have organised 44 seminars attended by 4,800 participants.

Additionally, to support our customers in their journey towards sustainable construction, we have launched a new corporate website. The new layout and interactive functions help our customers to discover products and solutions matching their applications. With the construction tools on our website, customers can easily determine the right quantity of products to use and reduce wastage that is common in traditional construction.





Promoting a Circular Economy

A circular economy helps reduce pressure on our environment by giving materials a second life. Waste materials like Pulverised Fuel Ash (PFA) can be used as an alternative raw material in the cement making process.

Through this industrial symbiosis, we reduce the carbon footprint of our cement plants, and reuse the industrial waste of other organisations. Our subsidiary, GAE, works closely with customers to help them transition from the traditional take-make-waste production model to the circular cradle-to-cradle framework.

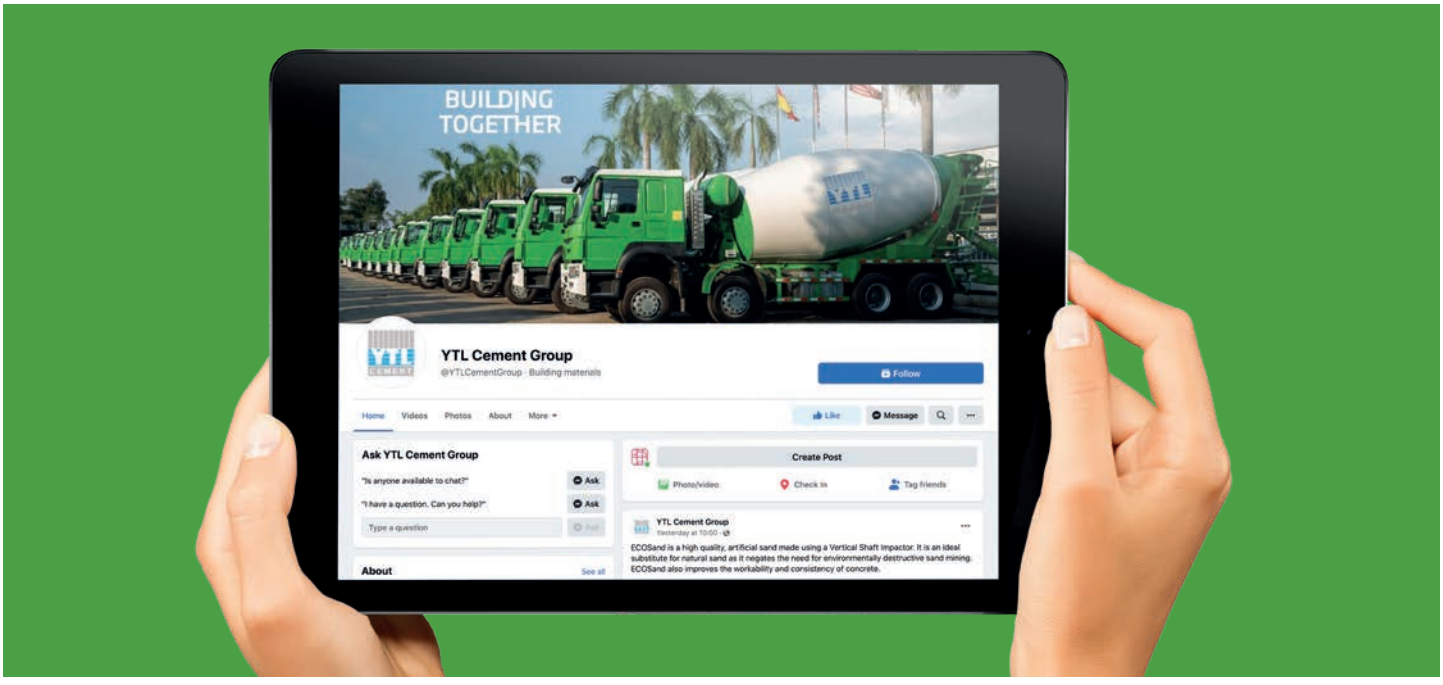
Not only is waste reduced and reused, but a circular economy also create employment, and promotes innovation.

Where in the past, industries had little choice between recycling and disposal, our solution now offer industries the option to repurpose their waste materials for reuse via co-processing.

Customer Relationship Management

In our latest materiality assessment, our stakeholders indicated that customer relationship management is important to them. While our Sales team remains the primary conduit, we have also developed a social media presence to keep our customers abreast of the latest developments at MCB. We share updates and news with them through our website, and on Facebook, Instagram, and LinkedIn.

As our goal is to deliver a positive customer experience, all complaints and feedback are discussed at a weekly production meeting chaired by our Managing Director. For the year under review, however, we did not receive any complaints on our products related to health, safety, or the environment. There were also no identified leaks, thefts, or losses of customer data, and no cases of breaches of customer privacy.



Operating Sustainably

Climate and Environmental Protection Policy

Our commitment to operating sustainably starts from the first step in cement production – the extraction of raw materials from our quarry all the way through our operations. This includes measures in biodiversity management, production mastery, resource recovery and management of our operation waste.

We firmly believe that sustainability is a key driver to future business growth. Focusing on sustainable development allows us to adapt our corporate culture to meet the long-term challenges of our business. We therefore commit to the following:

- **Compliance:** Adhere to environmental laws, regulations, and standards
- **Minimise Impact on Climate Change:** Develop and promote sustainable products. Reduce greenhouse gas emissions by improving manufacturing processes, employ energy-efficient equipment, and promote the use of alternative fuels, alternative raw materials, and renewable energy
- **Sustainable Operation:** Reduce waste generation. Increase reuse, recycling, and co-processing. Minimise disposal to landfills
- **Biodiversity Management:** Implement rehabilitation plans for quarry sites, and biodiversity management plans for sites with high biodiversity value
- **Research & Development:** Explore how we can incorporate the latest innovations in cement and concrete solutions to promote green building
- **ESG Performance:** Translate our commitments into actions. We will integrate our ESG goals into day-to-day operations and set clear targets to monitor our progress
- **Continuous Improvement:** Seek to improve and develop processes, tools, and capabilities that will guide our teams to achieve sustainability targets

Supporting Biodiversity Management

The first step in the cement production process is the extraction of raw materials from our quarries. Hence, our commitment to sustainability also begins at this point.

Specifically, we ensure that all our quarries are in locations gazetted by the local government for mining and production. We also make sure that we have all required permits, and our operations are always in compliance with all applicable regulations. Furthermore, each site has a mining development plan that adheres to environmental requirements, and always emphasises the safety and health of the people working there.

In 2014, we established the Centre for Biodiversity, Conservation, and Research Efforts (BCRE). Through this initiative, we aim to develop a better understanding of the environment around our operations. We hope that a better understanding will then allow us to craft more effective conservation policies. The BCRE is currently working on two projects – at Gua Kanthan in Perak, and Gua Pinang in Langkawi. Both projects are done in cooperation with the respective state governments.

Conserving the unique flora and fauna of Gunung Kanthan

Gunung Kanthan is a unique karst ecosystem surrounded by complex microhabitats which comprise of natural and man-made landscapes.

Our conservation efforts at Gunung Kanthan began in 2014. We invited Universiti Malaya's Institute of Biological Science to work with us to catalogue the flora and fauna found in the vicinity of our plant and quarry.

Based on this research, the BCRE launched the Kanthan Biodiversity Conservation Initiative. This is a series of initiatives focused on conserving the rich diversity of flora and fauna at Gunung Kanthan. These include building an in-house nursery for the rare plants native to the area, conducting extensive microclimate and diet analysis for endangered species, and using palm oil waste to repair the soil condition to rehabilitate the surrounding environment.

In October 2018, Gua Kanthan was declared to be an integral part of the Kinta Valley Geopark.

Protecting and Conserving Gua Pinang

Our conservation efforts at Gua Pinang are still in the early stages. We worked with the Institute of Biological Science to take an inventory of the flora and fauna there. A total of 51 species belonging to 28 families of birds, and 28 species of mammals (mostly bats), were recorded from the survey areas. Of this total, 48 species are totally protected under the Wildlife Conservation Act 2010.

As part of the Langkawi UNESCO Global Geopark, we hope to work closely with the state government to develop conservation efforts for Gua Pinang based on our findings.

Projects under the Kanthan Biodiversity Conservation Initiative

Plant Recce And Translocation Project

With guidance from Tropical Rainforest Conservation and Research Centre (TRCRC), we built an in-house plant nursery. Most of the locally endangered species were identified during the plant and seed recce and germinated in the nursery to be replanted at designated rehabilitation sites.

Land Snail Translocation Project

The Elephant snail, *Pollicaria elephas* is know to have the largest living population in the northern part of Kanthan Hills. An extensive microclimate and snail diet analysis has been carried out in collaboration with University Malaysia Sabah (UMS) and RIMBA to survey and determone suitable living conditions to ensure their long-term survival following the translocation.

Liphistius Kanthan (Trapdoor Spider) Population Study

Liphistius Kanthan is currently listed by IUCN as a critically endangered species inhabiting Gua Kantham. New research will be carried out with Univerisiti Malaya (UM) to study the population of this rare cave dweller to ensure the sustenance of the spider population.

Our Aspiration to Achieve Carbon Neutrality by 2050

We have developed a roadmap to achieving our goal of carbon neutrality by 2050. The first step is to make ourselves more efficient, thereby reducing our environmental impact. We will then use the innovation of our organisation to develop low carbon products and promote sustainable construction. Finally, we hope to implement carbon capture solutions in the future.

The roadmap to our 2050 aspiration

1. Production	2. Low Carbon Products	3. Sustainable Construction	4. CCUS
Present and mid-term			
• Implement efficient production best practices • Invest in process automation • Fuel substitution with alternative fuel • Use alternative raw materials • Invest in waste heat power generation and solar for clean energy	• Substitute clinker with low carbon cementitious materials • Introduce a range of low carbon cement for different applications • Promote ECOConcrete, our range of low carbon concrete	• Promote transition to sustainable construction with capacity building programs • Promote use of low carbon cement and concrete • Introduce YTL Cement low carbon tools	• Explore use of captured CO_2 in alternative fuel production and low carbon concrete • Explore early-age carbonation curing of concrete
Mid to long-term development			
• Decarbonated raw materials to partially replace limestone • Diversify clean energy portfolio with kiln electrification and hydrogen fuel	• Clinker replacement • Alternative cementitious materials production	• Continue to support transition to low carbon construction with product development and capacity building	• Explore CCUS technologies
Foundation			
• People development • Regulatory framework promoting and supporting transition to low carbon economy			

1. Production process

Production efficiency

The cement making process begins with the production of clinker. This is a solid material produced by heating limestone and other raw materials in a rotary kiln. During this thermal process, which reaches temperatures up to 1,450°C, carbon dioxide is released as a result of limestone decomposition and fuel combustion.

It is the carbon dioxide released from this limestone decomposition that accounts for over 60% of emissions from cement production. Although there are alternative materials to substitute limestone in clinker production, these have not been used at scale due to constraints in raw material availability, compliance to standards, and in some cases, the suitability of the cement produced.

Carbon dioxide is also released during the combustion of fuel. Therefore, management of thermal energy use in clinker production is an important lever in reducing the carbon footprint of a cement plant. To minimise the amount of carbon dioxide released, we carefully optimise our pyroprocessing equipment and control systems to produce clinker with the least amount of fuel possible.

Production efficiency is an important first step in reducing emissions in cement production. At MCB, our priority is to produce more with less. We put in place various measures and implement operational best practices to minimise wastage in our production process. We strive to use only what we need, and we benchmark our plants against one another, and also against the best in the industry. Our plants are supported by a centralised technical team comprising trained and experienced engineers.

We recognise the importance of continuous investment in our production facilities. Equipment that is no longer efficient is retired and replaced with newer technologies. In addition, we ensure that leakages and issues identified in our preventive maintenance programmes are rectified immediately. We continue to improve our preventive maintenance programmes to enable our plants to operate uninterrupted for as long as possible. We work with experienced contractors and utilise the best available technologies in our maintenance programmes and CAPEX projects.

Fuel substitution

The use of alternative fuels as a substitute for fossil fuels is an important method to reduce CO_2 emissions from the clinker production process. Alternative fuels have been increasingly adopted, and now represent a third of all fuels in the European cement industry. Apart from the direct benefits of substituting fossil fuels with lower carbon-intensity alternatives, there are often other indirect benefits. Alternative fuels are predominantly materials prepared from commercial, industrial, and agricultural wastes. By using these materials in our cement plants, we help reduce the amount of waste sent for disposal, thereby avoiding decomposition-related greenhouse gas emissions at landfills. There may also be transport-related benefits when locally sourced alternative fuels replace imported fossil fuels.

A successful alternative fuel strategy requires a combination of technical solutions, sourcing strategies, and supportive regulatory framework. At MCB, we have a dedicated team at Geo Alam Environmental that focuses on developing solutions for alternative fuels and raw materials.

We are committed to environmental protection while we make progress towards low carbon production.

Our plants are equipped with upgraded air pollution control system meeting the tighter Clean Air Regulation 2014.

Initiatives to reduce Scope 2 indirect emissions

We are committed to reducing the environmental footprint of our operations. We will continue to reduce our Scope 2 indirect emissions from purchased electricity with the following initiatives:

- We will install more waste heat recovery systems in our integrated cement plants to contribute to the indirect reduction in coal usage, and the increase in share of clean electricity generation in Malaysia
- Motivated by the success of the cement industry in other countries, we want to further expand our renewable energy portfolio with solar energy. To this end, we will work with power producers, regulatory bodies, and the government to enable industries to invest in solar
- At MCB, our approach to environmental protection is to first prioritise reducing our environmental footprint. We will continue to reduce power consumption by investing in energy-efficient equipment and promoting best practices in manufacturing efficiency. Our goal is to achieve the lowest possible power consumption per ton of cement
- For the remaining electricity that we have to purchase externally, we will rely on the progressive decarbonisation of the grid

Generating clean electrical energy from waste heat

MCB is the pioneer in converting residual heat from the production process to generate clean, decarbonised electricity.

In the clinker production process, a portion of heat is lost via flue gas and the air stream used for clinker cooling. Although we have a combination of process and equipment efficiency measures to reduce the amount of heat loss, there is still waste heat. A waste heat power generation system recovers this waste heat for power generation in the plant, substituting external purchased electricity. This indirectly reduces the use of coal, and carbon dioxide emission.

2. Low carbon products

Ordinary Portland Cement contains up to 95% clinker. As clinker is responsible for the majority of carbon emissions in cement production, a key method to reduce emissions is by producing cement with lower clinker content.

This is achieved by:

- Replacing clinker with suitable alternative material
- By optimising mix design

Some natural materials and by-products generated by other industries are known to exhibit pozzolanic or hydraulic properties, making these suitable as clinker replacement. These include pulverised fuel ash from coal-fired power plants, granulated blast furnace slag from the steel industry, and volcanic ash.

Low clinker cement such as CEM II Portland Composite Cement, which contains up to 35% of approved alternative constituents, can contribute to significant reduction in CO_2 emissions. As part of our low carbon strategy, we offer a range of green label certified low carbon cement under our ECOCem product line. We are the first in Malaysia to use repurposed materials from other industries as a component in cement.

Although the introduction of alternative constituents in cement also contributes to favourable cement characteristics, the local market still prefers OPC. We continue to engage our customers, regulatory bodies, the Malaysia Green Building Council, and relevant trade associations to promote low clinker cement and sustainable construction.

3. Sustainable construction

Promote transition to sustainable construction with capacity building programmes

Cement and concrete have been used for centuries as the preferred building materials due to their exceptional combination of durability, safety, availability, and affordability. In the initial period, cement was synonymous with Ordinary Portland Cement. However, the last two decades have seen significant advancements in cement and concrete innovation. Today, there are tried and tested cement and concrete products that perform better than other building materials in terms of embodied carbon.

As market leader, we recognise the need to lead the way and drive awareness to accelerate the transition towards sustainable construction. Among actions taken are:

- Involving architects and project specifiers in discussions on how products are used and embedding sustainability into project designs
- Working with associations and regulatory bodies, such as the Construction Industry Development Board, and the Ministry of Environment and Water to promote sustainable construction, driving awareness, and initiating conversations, on sustainable construction through webinars and seminars like the YTL Cement Seminar Series

The YTL Cement Seminar Series provides a platform for experts and industry practitioners to discuss, share, and gather insights to collectively elevate the construction industry across the region, and advance towards sustainable construction. With the theme of Building Better Together, the series features seminars under these main topics:

- Architectural series
- Cement & Concrete series
- Masterclass series, in collaboration with universities
- ESG and Waste Management series

As part of our ongoing efforts to increase the adoption of greener materials and construction methods, we have worked with the Malaysia Green Building Council (MGBC) and the Institute of Landscape Architects Malaysia (ILAM) to organise seminars inviting award-winning architects, renowned contractors, and accomplished industry practitioners to share their expertise and experience.

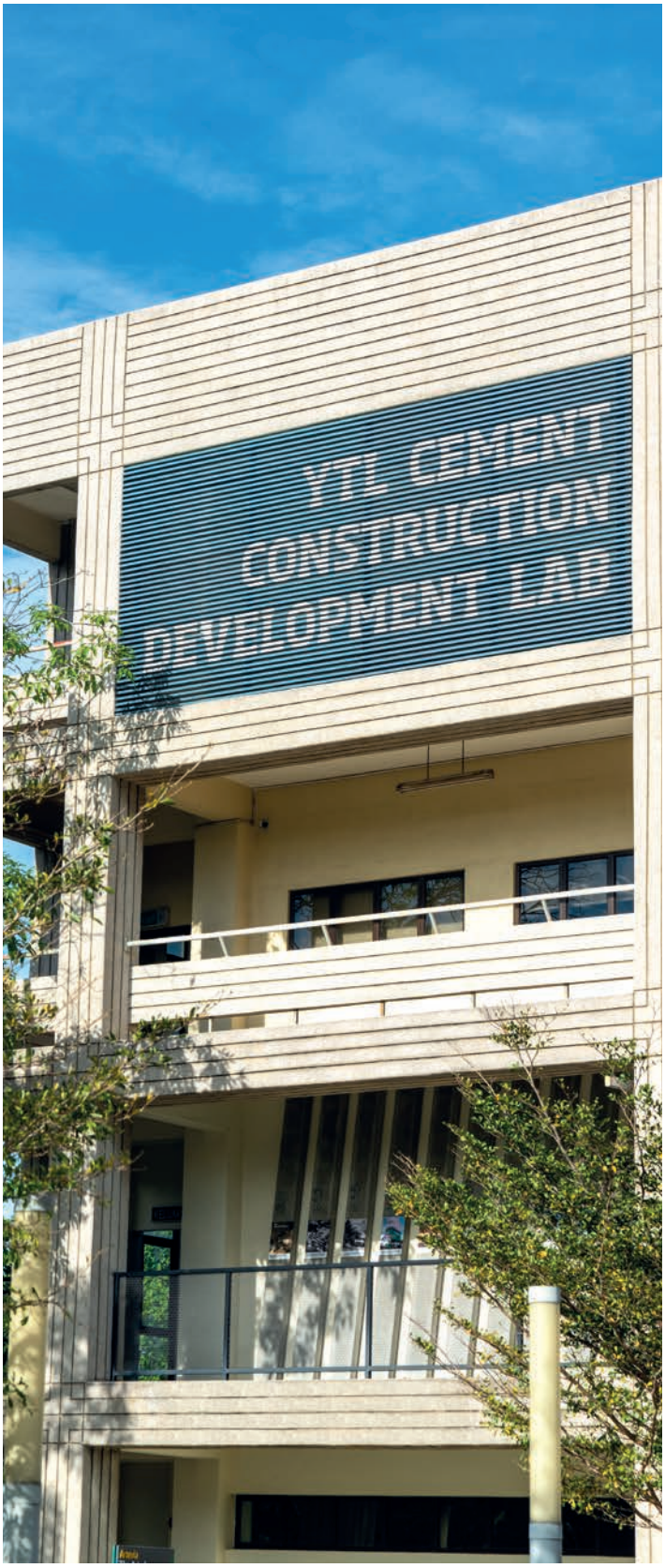
Low carbon products and tools

As a building materials supplier, we support sustainable construction by developing environmentally responsible products and solutions that contribute to other sustainable features of green building.

This is not limited to just building durability.

At our Construction Development Lab (CDL), we work closely with customers to adapt innovative solutions to their construction needs. To meet the needs of different applications, we have a range of products under our ECOCem and ECOConcrete product lines.

- ECOCem products contain a minimum of 25% recovered materials. These products are made with 20-50% lower CO_2 intensity compared to conventional OPC
- ECOConcrete products are formulated to achieve 3 potential environmental benefits:
    1. Lower embodied carbon, up to 60% compared to CEM I concrete
    2. Use of recovered materials to replace up to 70% cementitious materials



3. Replacement of natural sand with ECOSand, for up to a 100% substitution

- ECOConcrete Value Added Products (VAP) are developed to support carbon footprint reduction and other environmental features of a project

We will promote the transition to low carbon products by furthering our efforts to educate the construction industry. By early 2023, we will launch the YTL ECOConcrete Embodied Carbon Calculator to help our customers choose the lowest carbon footprint concrete mixtures for their projects.

4. CCUS and new technologies in cement and concrete production

While we continue to improve the efficiency of our cement plants, it is also evident that we won't be able to make significant emissions reductions with current technology.

We are therefore continually monitoring the development of new technologies. These include, but are not limited to, renewable energy, low carbon fuels, and carbon capture, storage, and utilisation (CCUS).

There are advancements in bridging the technological gap to use solar power instead of coal in clinker production. We continue to read about new breakthroughs in hydrogen technology. However, there are technical constraints that need to be resolved before these technologies can be applied in cement plant operations.

CCUS has gained wide coverage and is thought to be the possible solution for hard-to-abate sectors, such as cement. This is because even with the most efficient processes, it is not possible to avoid CO_2 emissions completely. During the year, we have explored options for carbon capture. While carbon capture is not entirely new, capturing CO_2 from clinker production is still a subject for research and development. In addition, innovation in this area needs to be complemented with solutions to utilise the captured CO_2.

Decarbonisation will require the expansive roll-out of some emerging technologies which are not yet technically fully developed, or economically feasible in the short- to mid-term. Successful implementation of decarbonisation projects will require coordinated support from various regulatory bodies, the financial sector, and industries. We will continue to explore new technologies and invite our stakeholders to create a supportive ecosystem for the advancement towards carbon neutrality.

Our Environmental Performance in FY2022

CO_2 Emissions

FY2022 Performance
699 kg CO_2 per ton cementitious product

We implemented numerous operation improvement projects targeting energy efficiency. Since the acquisition of ex-Lafarge plants, we invested in debottlenecking initiatives, equipment upgrading, and process improvement, to reduce heat consumption in clinker production. During the MCO period, technical training was conducted to re-train and upskill our technical, operations, and maintenance teams.

Our result is impacted by lower demand for low carbon cement, and higher specific heat consumption due to lower coal quality, as a result of supply constraint. These headwinds negated the improvements we continue to make in operational efficiency, and substitution of fossil fuels.

Methodology: We report cement net CO_2 emissions following the Global Cement & Concrete Association (GCCA) Sustainability Guidelines for the monitoring and reporting of CO_2 emissions from cement manufacturing *(previously WBCSD-CSI Cement CO_2 and Energy Protocol version 3.1)*. Default CO_2 emissions factors for fuels are taken from the GCCA Sustainability Guidelines.

Clinker Substitution

FY2022 Performance
80.2% clinker-to-cement ratio

Clinker-to-cement ratio in FY2022 was 80.2%. Although there was improvement compared to the previous year, we have yet to achieve the full potential of this carbon reduction lever.

Market acceptance, and a regulatory framework that supports the use of low carbon cement, are crucial in enabling the cement industry to reduce CO_2 emissions. We can only be successful in moving away from OPC to low carbon cement when there is a shift in demand. This shift needs coordinated effort from all parties.

To mobilise market change, we will introduce new product packaging for our bagged cement, and new e-brochures for our products. CO_2 reduction and environmental benefits of the products will be displayed on the packaging and brochures to create awareness, and help our customers select greener products.

Substitution of Fossil Fuels

FY2022 Performance
5.2% fossil fuel substitution

During the year, we increased the use of alternative fuels at all of our cement plants. We replaced diesel for non-vehicle uses with processed waste oil. At our integrated cement plants, we have increased the substitution of coal with alternative fuels prepared from processed commercial and industrial wastes, as well as end-of-life vehicle tyres.

Traditional alternative fuels, such as paddy husks and wood chips, are no longer available for use at cement plants due to the attractive export market. They are also replacements for higher cost fossil fuels in other industrial applications. Moving forward, we will develop our capacity to process and use a wider range of alternative fuels, while we continue to explore the potential of biomass

We will continue to make progress in this area by debottlenecking technical constraints with process improvement, CAPEX investment, and capacity building.

Reduction in Use of Purchased Electricity

FY2022 Performance
29,000 ton of CO_2eq emission avoided with clean energy generated with WHR

At MCB, energy management is an important part of our operations. The majority of our integrated cement plants and grinding plants are ISO 50001:2018 certified. This certification, which is based on the management system model of continual improvement, requires integration of energy management into the overall efforts to improve quality and environmental performance.

In addition to energy efficiency, we generate clean energy from waste heat. In FY2022, we have replaced 52,584 MWh of external purchased electricity with power generated from waste heat. This translates into a saving of almost 29,000 tons of carbon dioxide emissions.

Although not often discussed, the advantages of a waste heat recovery (WHR) system is not limited to only clean energy generation. After installation of the WHR, we have reduced water consumption at the clinker cooler and gas conditioning tower. In addition, this installation has created job opportunities for the local community, and demand for local supply and services.

Resource Recovery

FY2022 Performance
596,617 tons waste materials processed and used as alternative materials.

As a pioneer in co-processing in the country, we continue to promote resource recovery. Waste generated from industrial and commercial activities that are destined for disposal at landfills may contain minerals or energy that is suitable for use in clinker production.

We analyse the waste materials and divert suitable materials for processing into alternative fuel and raw materials (AFR) for use in our plants. As a result, the traditional industrial materials utilisation model of cradle-to-grave is converted into the sustainable model of cradle-to-cradle.

In FY2022, we have processed 596,617 tons of waste materials as AFR and secondary cementitious material.

We had the pleasure of hosting the Department of Environment (DOE) for a visit to our plant in Pahang on 16 March 2022. The visit was part of a course organised by its training arm – the Environment Institute of Malaysia (EiMAS). The visit allowed DOE officers to gain a deeper understanding of best management practices for scheduled wastes within the manufacturing industry.

Training participants went on a tour of our plant operations to understand the co-processing activities and were given an overview of co-processing. We also showed them the types of wastes commonly accepted for co-processing, and the measures taken to ensure quality control when co-processing at our plant.

Since the 1970s, cement plants have developed an innovative circular economy solution to waste management. A wide range of waste materials generated by industries and society are processed into materials suitable for use in clinker production. This process, named "co-processing", helps industries and municipalities avoid landfilling, foster industrial symbiosis, and increases resource efficiency.

Responsible Waste Management

FY2022 Performance

Waste generated	
Scheduled waste	**105**
Other waste	**739**
Total	**844**
Waste disposed	
Scheduled waste	**65**
Other waste	**739**
Total	**804**
Waste reused/co-processed	
Scheduled waste	**282,108**
Other waste	**314,509**
Total	**596,617**

We reduce, reuse, and recycle waste materials where possible to limit the impact on natural resources and land use. Waste generated from our operations are managed via co-processing if the materials meet our safety and quality criteria.

During the year, we had reused and co-processed 596,617 tons of waste materials. Materials that do not meet the criteria for co-processing are managed via licensed contractors to ensure that these are properly managed at designated sites.

Promote Sustainable Construction

FY2022 Performance

23 seminars attended by 2,105 participants

During the reporting period, we conducted 23 seminars. They were attended by 2,105 participants, comprising of our customers, contractors, regulatory bodies, architects, industry practitioners, universities, and the public. This is in addition to our direct engagement with our stakeholders during the year.

Please refer to page 72 for the list of seminar and details.

Managing Climate-Related Risks and Opportunities

We recognise that climate change has operational, economic, and financial implications that can significantly affect our company and business. In the year under review, a number of significant events took place that highlighted the importance of building resilience, and future-proofing our organisation. These events include the unprecedented floods in December 2021 and early 2022, the announcement on the implementation of the Domestic Emissions Trading Scheme, and the European Commission's proposal on the Carbon Border Adjustment Mechanism.

In this section, we share how climate change impacts our business, and discuss our strategy to meet these challenges.

Governance of climate-related risks and opportunities

MCB's board has the overall responsibility and accountability to safeguard the group's long-term resilience against the adverse impacts of climate change. The board evaluates the risks and opportunities arising from climate change and considers these risks and opportunities in approving the group's strategies and business plan.

The Board and Managing Director provide guidance and set clear expectations on climate-related risk management and ESG performance. Managing Director is briefed monthly by Head of Sustainability at Sustainability Committee meeting on climate-related matters and progress of mitigation actions.

The Sustainability Committee drives MCB's sustainability programme. The Committee has responsibility for the development of the Group's sustainability roadmap and implements systems to ensure achievement of sustainability goals. The Committee identifies action items for managing climate-related risks and assigns these responsibilities to relevant teams across the organisation. In addition, the Sustainability Committee closely monitors external developments concerning climate-related issues and leads engagement with external stakeholders.

Operational management has the responsibility for identifying, assessing, and mitigating risks. Climate risk mitigation is incorporated into operational planning. Its progress is reviewed regularly at Sustainability Committee and operational meetings, which are chaired by the Managing Director.

The marketplace and business environment are constantly evolving with the transition towards a low carbon economy. In response, two working groups were formed during the year under review to focus on the management of these transitional risks and leverage emerging opportunities. The working groups were comprised of the Head of Sustainability, selected Sustainability Committee members, senior management, and subject matter experts.

Future improvement

This is our first report on climate-related issues. Our focus this year is to thus lay the foundation on which we will build on, and continuously improve. In future reporting cycles, we hope to adopt the framework of the Task Force on Climate-related Financial Disclosures (TCFD) for more comprehensive climate risk management and reporting.

Assessing climate-related risks

In 2022, we conducted several internal workshops on climate-related risks and opportunities. These workshops were organised with three main objectives in mind: to raise awareness on the impact of climate change on our Group, to conduct climate change risk assessments at operational level, and to discuss risk mitigation actions and opportunities. These sessions were attended by leadership teams from operational sites, heads of functional units, and managers from the Head Office.

The output was then incorporated into the Group business strategy, and site operational plans. Moving forward, we will continue to refine our climate risk management strategies and methodologies.

Time horizon

We grouped our risks into 3 categories according to time frame;

Immediate: 1 – 2 years
Mid-term: 2-10 years and
Long-term: more than 10 years.

Although some of the risks may not have a significant impact in short term, we recognise the need to start planning the transition, and to take appropriate action.

Climate-related risks management

Physical risks

These are environmental events that result in economic costs and financial losses. Physical risks can be broadly categorised as:

- **Acute risks:** For example, floods, heatwaves and wildfires
- **Chronic risks:** These are gradual shifts in climate over a longer term. For example, a shift in the timing of seasonal change and duration, rising average temperatures, rising sea levels, and ocean acidification
- **Indirect effects:** Acute and chronic physical risks will eventually impact the environment. Examples include the expansion of tropical pests and diseases into temperate zones, an accelerated loss of biodiversity, degradation of soil quality, water shortage, and desertification

Physical risk 1 – Lower productivity and efficiency due to heavy rainfall

Due to the outdoor nature of many portions of our production process, heavy rainfall lowers the productivity and efficiency our operations. For example, during heavy downpours, there is low visibility, and roads become slippery. Our H&S procedure mandates that our quarry activities be temporarily suspended until such inclement weather passes.

Trucks bringing raw materials to and from stockpiles will also need to seek shelter in extreme weather conditions. The rainwater may lead to excessive material moisture, which can cause blockages in our handling systems, thereby reducing throughput.

To mitigate these risks, we include weather patterns in operations and inventory planning. During the reporting period, our sites have conducted operation reviews on stockpile management, and the need for additional covered storage.

Physical risk 2 - Disruption and damage caused by flood

Floods have the potential to disrupt our supply chain and customer activities. Our people and their homes may also be impacted, as witnessed in December 2021.

Our sites conducted building inspections to check for structural damage and took steps to protect our equipment from future flooding. Other mitigation actions taken include studying the water flow, improving the drainage system, ensuring silt traps are inspected and cleared regularly, and maintaining alternative access roads to the plant. Sites that are prone to flooding have also updated their Emergency Response Plans to include appropriate procedures and conducted briefing for our employees and contractors.

Transition risks

These arise from shifts toward a more climate-friendly, low carbon economy. Transition risks include changes in government policies, legislation and regulation, updates in technology, and the evolution of market and customer sentiments.

Transition risk 1 – Implementation of carbon pricing

In our assessment, we view policy and regulatory changes as a critical transition risk. Our government announced in September 2021 that a Domestic Emissions Trading Scheme will be implemented as early as 2022.

We recognise the importance of climate protection and contribute with our emissions reduction programme. To support our government, we engage relevant authorities in discussions via The Cement and Concrete Association of Malaysia.

Transition risk 2 - Competition for materials suitable as alternative fuels

Between 2010 and 2017, biomass – such as wood chips and paddy husks – were widely available and used as alternative fuels in cement plants. However, in recent years, these materials have become scarce in the local market. The implementation of carbon pricing, and the incentive to use biomass in neighbouring countries, have grown the export market for biomass. Malaysia is the second-largest wood pellet and palm kernel shell supplier in the Asia-Pacific, exporting a combined volume of 1.3 million tons in 2019. This impacts the availability, and price, of biomass on the local market.

We recognise the need to develop a longer-term strategy to ensure the continuous availability and affordability of alternative fuels. Our dedicated team at Geo Alam Environmental is tasked with securing suitable materials for use as alternative fuels, and to develop a long-term alternative fuel strategy for the Group. At our operations, we will continue to equip plants with the requisite technical skills, and materials handling facilities.

Transition risk 3 - Transition to low carbon economy

The transition to a low carbon economy requires changes in the way we operate and conduct our business. One of the key methods to reduce CO_2 emissions in our operations is by improving resource efficiency. For some plants, this means retrofitting existing installations with new equipment. For other plants, this may involve upgrades and early retirement of existing equipment. These will have impact on capital expenditure of the Group. These expenditures will inevitably impact the bottom line. We are conducting scenario analysis on the different capex levels to forecast their effects on the finances of the Group.

We also understand the role of technology in this transition. We have performed a gap analysis to determine where we lack the required expertise and are working with external organisations to shorten the learning curve.

Transition risk 4 - Timber and other materials replacing cement and concrete

Cement has been linked with climate change due to the CO_2 emissions emitted during clinker production. As a result, reduced use of concrete in construction is generally regarded as a means for achieving sustainable construction. If left unaddressed, this will impact customer product acceptance, and the Group's revenue in the mid to long-term.

In managing this risk, dissemination of correct product information to our stakeholders plays an important role. We regularly engage with our direct and indirect customers to share our ESG initiatives, and the environmental benefits of our products. We will continue to work with universities and professional bodies, such as the Malaysia Green Building Council.

Physical Risks

These are environmental events and can be either

- Acute risks: Heavy rainfall, floods and wildfires
- Chronic risks: Rising temperatures, expansion of tropical pests and diseases into temperate zones, and desertification

Transition Risks

Arise from shifts toward a more climate-friendly future.
Transition risks can include:

- Policy and regulatory risks
- Technological risks
- Market risks
- Reputational risks

Climate-related opportunities

Demand for products supporting sustainable construction

As the population continues to grow and urbanisation increases in Malaysia, we project the demand for cement and concrete will continue to increase. We want to meet this demand with sustainable building materials. We will continue to develop our range of low carbon products and innovative solutions for green buildings, while we improve our environmental performance.

AquaBuild is a fast-draining concrete pavement solution. Its high permeability allows rapid water removal from the surface. AquaBuild's function in stormwater management can be combined with rainwater harvesting.

Renewable energy

Climate actions have accelerated innovation in energy. Recent advancements in power storage technology have the potential to extend the use of solar beyond electricity substitution. In Europe, trials are being conducted to find solutions to substitute coal with solar as the fuel for clinker production.

Meanwhile in neighbouring countries such as Thailand and Indonesia, large industries including cement have started to invest in solar farms for captive use.

We see an opportunity for investment in solar for use at our plants in the short- to mid-term. At the same time, the decarbonisation of the grid will enable us to further reduce our Scope 2 emissions.

We will continue to engage stakeholders for approval to invest in captive solar farm.

Energy efficient technologies

The transition risks faced by cement plants globally have spurred the demand for energy efficient technologies. Traditional equipment suppliers have seized this opportunity to innovate and promote new generation technologies that are energy efficient. In addition, new technology companies are entering the market with improved technologies as well as new ways of doing things.

Our Technical and Project teams are monitoring this space for technologies that can be applied at our operation. We have a pipeline of CAPEX projects to upgrade our plants and equipment to be more energy efficient.

Diversification of our business

With the advent of climate change, businesses will need to adapt the ways they operate to a new reality. As with all change, this can be seen as both a danger, and an opportunity. Our team of dedicated professionals – ably led by our experienced management – is constantly evaluating and assessing these opportunities.

Operating Responsibly

Risk Management and Ethics

As market leader and industry pioneer, we take our responsibility to foster a harmonious working environment for all of our stakeholders seriously. We have therefore instituted policies that remind each member of MCB that high standards of personal conduct are expected, and to be practiced every day.

The YTL Group has implemented a Code of Conduct and Business Ethics ("the Code") and launched an Anti-Bribery and Corruption (ABC) policy. Together, they form a governance framework that helps ensure that risks arising out of misconduct are identified and managed accordingly. As a member of the YTL Group, MCB follows this framework.

Employees and the public can access the Code at YTL Group's corporate website.

Anti-Bribery & Corruption (ABC) Policy

As stated in the Code, all employees of the YTL Group are required to adhere to the Anti-Bribery & Corruption (ABC) Policy which reaffirms the need for all to comply with the principles of honesty and transparency. In MCB, we strictly abide by the Malaysian Anti-Corruption Commission Act 2009. We have a zero-tolerance stance on fraud, bribery, and corruption within the organisation.

The ABC Policy outlines our strategies in identifying, preventing, and managing bribery and corruption matters. It applies to all directors, managers, and employees in dealing with external parties. The policy will be reviewed at least once every three years to ensure that it continues to remain relevant, appropriate, and effective to enforce the principles highlighted. All directors and employees are required to read and understand the ABC Policy and the Code of Conduct and Business Ethics, successfully complete online training modules, and sign in acknowledgement of their obligations and responsibilities. The compulsory online Anti-bribery and Corruption training was launched in 2020. Other than existing employees, the training is mandatory for new employees.

The Anti-bribery and Corruption training consists of three modules

- YTL Anti-bribery & Corruption
- Module II - YTL Anti-bribery & Corruption (Gifts, Hospitality and Entertainment)
- Module III - YTL Anti-bribery & Corruption (Whistleblowing and Code of Conduct & Business Ethics)

A breach of the ABC policy is considered serious misconduct. Employees found violating the policy will be subject to disciplinary action, including dismissal. Furthermore, they will not be given any employment opportunities at members of the YTL Group.

More importantly, the Code provides channels for employees to raise concerns about misconduct in confidence. Module III of the ABC online training course explains the concept of whistleblowing, and introduces appropriate channels to report unlawful, unethical, or questionable behaviour. These channels guarantee that whistleblowers need not worry about reprisal and can also be used by external parties.

During the reporting period, we did not have any lawsuits or confirmed incidents in relation to corruption or bribery.

Preventing Anti-Competitive Behaviour

Anti-competitive behaviour among competitors potentially distorts the market and reduce motivation to produce better products and services. As a leading building materials company, we seek to promote healthy competition to deliver better products and innovation to the market.

At MCB, we recognise preventing anti-competitive behaviour as a material matter. As industry leader, we take careful measure not to be involved in anti-competitive behaviour and abusing our position in the market. We must ensure that our behaviour and conduct towards our stakeholders, in particular our customers, suppliers and competitors are proper and in adherence with competition law. To achieve this, we organise refresher training where we revisit provisions of the Act and discuss red flags, do's and don'ts with our employees.

During the year under review, no breaches of this law were reported against YTL Cement, or any of its employees.

Compliance

We ensure that all of our plants and operations adhere to local laws and regulations. We recognise that non-compliance leads to costly penalties and more importantly, they will have a damaging impact on the environment and society. At MCB, we adopt best practices and align our operation with international standards.

During the reporting year, there were no significant incidents of non-compliance in locations where we operate.

The director and 16 officers from the Department of Environment, Kedah visited Langkawi Plant on 30 November 2021 for an exchange session on cement manufacturing, and co-processing of alternative fuels and raw materials.

Emissions

The Environmental Quality (Clean Air) Regulations 1978 was replaced by the Environmental Quality (Clean Air) Regulations 2014. CAR 2014, as it is better known, has more stringent emissions standards. These include, but are not limited to, the following:

- Particulate emissions of cement kilns are reduced to 50mg/m^3
- NOx emissions are limited to not more than 800 mg/m^3
- Mercury emissions are limited to 0.05 mg/m^3
- PCDD/PCDF emissions are limited to 0.1 ng TEQ/m^3

In order to comply with the new law, we invested over RM60 million to upgrade the emissions control and monitoring systems at all of our plants.

CAR 2014 stipulates that the emissions control systems at our cement plants must be operated by individuals who have the Certified Environmental Professional in Bag Filter Operation (CePBFO) certification from the Environmental Institute of Malaysia (EiMAS). We are in compliance with this regulation, and our plants regularly perform preventive maintenance to ensure that the control systems run optimally.

Our cement plants are also equipped with emissions monitoring systems that have electronic data interfaces (EDI). These EDIs continuously feed our emissions data to the Department of Environment (DOE). In this way, the public can rest assured that our plants are always in compliance with CAR 2014. As is also required by this act, we submit both quarterly and annual emissions performance reports to the DOE.

The emissions monitoring systems at our plants are also subject to annual audits conducted by DOE-accredited contractors. They are responsible for determining if our systems are calibrated within regulatory limits, and their reports must be submitted to the DOE as proof of compliance.

In FY2022 we did not have any penalty or fines related to non-compliance in emissions.

Noise

Our cement plants manage two forms of noise pollution. The first form, ambient noise, is the noise that emanates from our plants and escapes into the wider community. Ambient noise is regulated by local zoning laws, and we constantly monitor our levels to ensure that we are in full compliance at all times.

The second form is operator exposure to noise, and is regulated by occupational safety and health regulations. As stipulated by the relevant H&S guidelines, all employees and contractors are required to use hearing protection in areas where there is equipment that exceed acceptable noise levels. Additionally, we provide free audiometric testing to employees who have been exposed to high levels of noise.

During the year under review, we did not register any non-compliance with noise regulations.

Water discharge

The water that is discharged from our plants is tested regularly by DOE-approved third-party contractors. They make sure that we are in compliance with all relevant DOE regulations, and that no oil or chemical spillage occurs.

During the year under review, we did not have any significant incidents of non-compliance related to water discharge.

Scheduled waste

Good management of waste materials is important to prevent negative impact to the environment. The management of scheduled waste at our sites is supervised by trained personnel who are certified by the Environment Institute of Malaysia (EiMAS) as Certified Environmental Professional In Scheduled Waste Management (CePSWaM).

During the year under review, we did not have any significant incidents of non-compliance related to failures in scheduled waste management.

Supplier Human Rights Policy

At MCB we are committed to ensure sustainable work practices for all in our operations and supply chain. Our suppliers and contractors are required to sign an ethics declaration that their employees and subcontractors are employed on their own free will, and without any form of exploitation or coercion whatsoever. Any supplier or contractor implicated in human rights violations will be expected to take appropriate remedial actions, and may have their contracts re-evaluated or terminated, depending on circumstances.

We have implemented this at the cement business and are in the process of implementing the same at our concrete and aggregates businesses.

We are reviewing the risks in our supply chain and will implement improvement with suppliers and other stakeholders.

Building Capacity & the Community

Making Health and Safety the Core of our Operations

Health and Safety is a top priority and a critical success factor for our operational performance. MCB prioritises the well-being, health, and safety of all employees and contractors in its operation. We have a robust health and safety (H&S) policy and management system to promote best practices with the ultimate goal of creating a zero-accident working environment. During the reporting period, MCB continued its efforts to promote a safety culture and improve its safety performance.

Governance

Workplace Safety and Health Committees (SHC)

Safety and Health Committees (SHC) have been established in all of our cement plants, in accordance with Department of Occupational Safety and Health (JKKP) regulations. The SHC is a platform for management and employees to work together with the goal of improving workplace H&S.

Committee members comprise equal numbers of plant management and employees. Its primary tasks are to develop and review H&S policies, monitor performance to ensure full compliance of SOPs, and participate in incident investigation. Additionally, the SHCs are also responsible for promoting effective training and disseminating information regarding H&S best practices.

The committee is also a platform for employees to raise any concerns they have for the plant management's attention. These meetings are conducted regularly with active participation from employees' representatives and regular contractors in the plant.

ISO45001:2018 Certification

All our cement plants are ISO45001 (Occupational Health and Safety) certified. We align our H&S management policies to international best practices while fulfilling legal requirements.

FY2022 PERFORMANCE

Leading Indicators

Indicators	FY2022
Health & Safety Training	**18,663 man hours**
Employee Health Surveillance	**996 employees**
Workplace Inspections	**981**
Near-miss Reports Received	**17**
Standard Operating Procedure (SOP) Reviews	**448**

Lagging Indicators

Indicators	FY2022
Lost Time Injuries	**31**
Lost Time Injuries Frequency Rate (LTIFR)	**3.11**
Total Injuries Frequency Rate (TIFR)	**4.42**
Fatality	**1**

Note:

1. *TIFR and LTIFR include both employees and contractors.*
2. *LITFR: LTI/million hours worked.*
3. *TIFR: Total number of injuries/million hours.*

The LTIFR and TIFR recorded for this reporting period are the first sets of data available for the enlarged MCB group of companies, following its acquisition of YTL Cement's entire cement and ready-mixed concrete operations in Malaysia. The reported incidents were investigated to determine root causes that resulted in the incidents. Corrective and improvement actions to address the root causes have been implemented.

H&S Initiatives

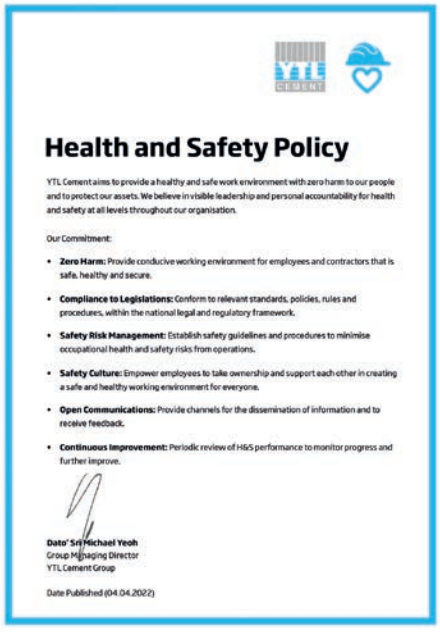
Launch of new Group Health & Safety Policy

2022 saw the launch of YTL Cement's new Health and Safety Policy. The new policy commits us to visible leadership and personal accountability around the following core principles:

- **Zero Harm**: Provide conducive working environment that is safe, healthy and secure for our employees and contractors
- **Compliance to Legislations**: Conform to relevant standards, policies, rules and procedures, within the national legal and regulatory framework
- **Safety Culture**: Empower employees take ownership and support each other in creating a safe and healthy working environment for everyone
- **Open Communication**: Provide channels for the dissemination of information and to receive feedback
- **Continuous Improvement**: Periodic review of H&S performance to monitor progress and further improve

How we will achieve these:

Guidelines	• Develop and implement safety guidelines and procedures to minimise occupational health and safety risks
Implementation	• Empower SHCs to take the lead in promotion of health and safety practices at the workplace • Promote good H&S practices on site • Use a variety of communications channels and methods to ensure effective dissemination of information to employees and contractors • Periodic training to build on competency and enhance hazards awareness • Site engagement by operations management
Reporting	• Centralised system to report all workplace accidents and 'near-misses' • Encouraging more near miss reporting
Review and improve	• Sharing of lessons learned from workplace incidents. • H&S audit program to enhance compliance • Periodic reviews with site management and the Managing Director for continuous improvement



Health and Safety Policy

YTL Cement aims to provide a healthy and safe work environment with zero harm to our people and to protect our assets. We believe in visible leadership and personal accountability for health and safety at all levels throughout our organisation.

Our Commitment:

- **Zero Harm:** Provide conducive working environment for employees and contractors that is safe, healthy and secure.
- **Compliance to Legislations:** Conform to relevant standards, policies, rules and procedures, within the national legal and regulatory framework.
- **Safety Risk Management:** Establish safety guidelines and procedures to minimise occupational health and safety risks from operations.
- **Safety Culture:** Empower employees to take ownership and support each other in creating a safe and healthy working environment for everyone.
- **Open Communications:** Provide channels for the dissemination of information and to receive feedback.
- **Continuous Improvement:** Periodic review of H&S performance to monitor progress and further improve.

Dato' Sri Michael Yeoh
Group Managing Director
YTL Cement Group

Date Published (04.04.2022)

The YTL Cement Health and Safety Policy is intended to set the direction for health and safety management in the Group. Achieving zero harm is our goal, so that our employees and contractors return home safely to their families.

Training

Everyone working at one of our sites must attend a mandatory H&S induction prior to the start of work, whether employee or contractor. The induction covers an introduction to site operations, the materials managed, equipment safety, traffic rules, general H&S procedures, and emergency response routines.

The goals of H&S training are to guide employees how to recognise workplace hazards, and then equip them with the knowledge required to safely manage these hazards. Hazards awareness and knowledge on control measures are important to influence safe behaviour. Regular H&S training is conducted across all operations and involve all working personnel. The H&S training sessions conducted during the year under review include:

- Safety Induction for contractor workers and new employees
- Job Risk Assessment & Permit to Work methodologies
- First Aid
- Emergency Response Procedures
- Safe Handling of Chemicals
- Safe Handing of Scheduled Waste
- Hearing Conservation Training
- Ambulance Training
- Safe Handling of Forklifts
- Authorised Entrant and Standby Person for Confined Space

Site engagement by Operations Management

Our experience is that the active involvement of site management in H&S has a positive influence in promoting a safe working environment. We have therefore instituted a programme of monthly site visits with operations management where unsafe conditions and practices are identified, and the effectiveness of existing work procedures are checked. Employees and contractors at the particular site are then encouraged to exchange views and bring up issues during the informal discussion session at the end of the visits. We hope to expand this programme to all of our sites in the near future.

Concrete management team engagement with operation team and sharing on H&S topics.

Promoting good H&S practices on site

Personal Protective Equipment

All people involved in the operations and maintenance of our plants are issued personal protective equipment (PPE), such as safety helmets, safety boots, protective clothing, and goggles. Specialised PPE is also assigned to those working on tasks that have additional hazards. For example, workers will be assigned hearing protection gear and different protective gloves for environment and tasks that require additional protection. During worksite inspections, compliance checks on the use of the required PPE are carried out jointly by the H&S team and site management.

Task risk assessment

Our H&S procedures mandate that a job risk assessment is performed at the start of the first shift, and whenever a change in process or environment is identified. Permit to Work (PTW) is required for all non-routine jobs, jobs that require isolation of equipment and jobs involving high risk tasks. This allows site management to identify, and – more importantly – implement, suitable hazard control measures before commencement of the shift or job.

We have instituted the Electronic H&S Incident Reporting system. This allows our SHCs to effectively collect information on incidents that occur during operations in an easy and quick manner. This data is then analysed to develop action items to improve H&S at the workplace. Employees can access this system by scanning the QR code using their mobile phones.

An important facet of this reporting system is that it allows employees to more easily report near misses in full confidence so that corrective actions can be taken in a timely manner. Employees and contractors are encouraged to report all workplace H&S incidents as this will help us proactively address any gaps and prevent recurrence.

Launch of Electronic H&S Incident Reporting Form

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Sharing of lessons learned from H&S incidents and good practices

Our H&S protocol requires SHCs to investigate all incidents that result in injuries, and near misses. Once the root cause of an incident is determined, any lessons learned are shared with the other plants in order to prevent similar occurrences in the future. The focus is on making sure that the lessons learned from incident investigations are implemented, and lead to improvement in safety.

Safety boots cleaning station

Implementation of Vehicle Circulation Plan in ready-mixed concrete plant to safely segregate man and machine

Coal plant safety audit

During the year under review, coal plant safety audits were conducted at the four integrated cement plants. The audit team consisted of personnel from the H&S, Technical, and Operations departments. The teams audited the coal plants based on checklists developed using industry best practices, and fire safety standards.

The audit team inspected the plant design aspects, the implementation of safe operating procedures, and the measures taken to improve the competency of workers with regards to the operations of a coal mill. The team also highlighted areas of improvement, and any corrective actions required.

Coal mill audit

Inspection by DOSH officers

Workplace inspections and improvement

Regular workplace inspections are carried out by plant H&S team on a regular basis. The findings are shared with site management, and corrective actions are assigned to the relevant departments. Additionally, our sites are periodically inspected by officers from the Department of Occupational Safety and Health (JKKP).

COVID-19 preventive measures

During the multiple Movement Control Orders (MCO) to curb the spread of COVID-19, we introduced the following measures to ensure the health and safety of our employees and contractors:

- Guidelines on COVID-19 Preventive Measures – this document identified preventive measures that each premises should implement
- Checklist on Safety Resuming Operations
- Employees Handbook for COVID-19
- Guidelines on COVID-19 Preventive Measures for Contractors and Transporter – this guideline addressed the need for preventive measures taking into consideration the mobility of this group of workers across various locations/regions – hence being more at risk; including the risk of infection among foreign workers who stay in shared accommodation
- Classification of COVID-19 positive and close contact cases – to proactively identify close contacts and to self-quarantine them to prevent workplace infections
- Procedures for COVID-19 case reporting, together with internal hotline for this purpose
- Fortnightly screening for COVID-19 at all workplaces
- RT-PCR testing at private lab for suspected cases

During the current reporting period, most of the H&S efforts were focused on ensuring minimum impact to our people and operations from COVID-19.

Health Surveillance

We provide employees periodic health surveillance to ensure that our sites are safe, healthy, and secure working environments. Examples include audiometry testing, and chemical exposure monitoring. In addition to reassuring our employees, the surveillance result is applied into the continuous improvement of our health and safety programme.

Our People

Our employees are our most valuable asset. The experience, dedication, and efforts of our employees are the keys to our success. We make substantial investments to find, develop, and retain talented individuals to help us implement our strategy and grow our business.

Talent development

Our approach to talent development focuses on helping our employees acquire technical knowledge, improve soft skills, and cultivate management ability. We do this by providing a combination of formal training, and on-the-job learning. Our employees are also rotated across sites and matched with experienced seniors. This not only expands their horizons, but also allows them to learn by example.

In the reporting period, our employees have attended a total of 26,088 hours of training. The average training for each employee was 12 hours.

Employee training hours in FY2022	
Soft Skills	3,991
Technical Skills	2,748
Seminars and Conferences	686
Health & Safety	18,663
Total training hours	**26,088**

Employee Engagement Programme

In early 2022, we started the Brown Bag Luncheon programme aimed at encouraging lifelong learning among our employees, and to bring together employees from different departments.

Session 1: Coffee and Latte Art Workshop

We kicked off our Brown Bag Luncheon session with a Coffee and Latte Art Workshop. A total of 40 employees attended the workshop at Menara YTL.

Speakers from Malaysia Barista walked our employees through the coffee making process, while explaining the differences between the various types of coffees.

Participants had the opportunity to try their hand at latte art using frothed milk.

Session 2: Free health talk "Goodbye Lethargy, Hello Healthier You!"

Our second session of the Brown Bag Luncheon series focused on a healthy lifestyle. In conjunction with World Health Day (April 13), a Microsoft Teams event was held, titled "Goodbye Lethargy, Hello Healthier You!".

The talk was attended by 40 employees from our operations nationwide. During the session, our employees learned how to improve their nutrition plan, exercise, and develop good sleep habits to lead a healthier lifestyle.

The session began with an overview of simple, yet effective tips for employees to overcome lethargy and drowsiness. Our employees also learned about the importance of consuming the right amount of nutrients to benefit their health, and ways to keep active in the office.

Session 3: Mobile photography workshop "Say Cheese!"

Our third session was titled "Say Cheese". It was a mobile photography workshop held on 23 June 2022. A total of 30 employees attended the session hosted at Wisma YTL Cement. Our speaker shared with participants how to take picture-perfect shots with their smartphones. Participants learned composition techniques and lighting tips to enhance the quality of photos taken.

Participants had the opportunity to put their newfound skills to the test in an instant photography competition. Three employees won the best pictures of the day and walked away with photography accessories.

A diverse, equal and inclusive workplace

In MCB, we build and strengthen our capacity by promoting diversity, inclusion, and equal opportunity in the workplace. In line with the Code, MCB maintains a policy of non-discrimination and expects all employees to cultivate a work environment that is indiscriminate of gender, ethnicity, age, disabilities, or religion across all levels of our workforce.

Employees are evaluated based on their merits and capabilities only. All employees are given equal opportunities to prove themselves and fulfil their potentials.

We respect freedom of association and collective bargaining. Our employees are allowed to participate in unions and external bodies of their choice, given that they abide by local laws and regulations, do not jeopardise the company's reputation, or hinder their work performance.

During the year under review, there were no non-compliance incidents involving breaching labour standards on child labour, forced labour, or discrimination.

Our Angels

In line with the spirit of our Code, we do not discriminate in providing employment opportunities. In 2011, we collaborated with the Malaysian Federation of the Deaf (MFD) to recruit a number of employees with hearing and speech impairments to work at our office. At MCB, they are affectionately known as "Angels".

To help our Angels adapt and grow in their roles, we designed their jobs to allow progressive learning and upskilling. Support is provided to both Angels and their managers. To improve communication, Angels have taken proactive action to teach colleagues in their departments sign language.

Although the recruitment was initially part of a corporate responsibility programme, the dedication and passion of our Angels to their work have transcended the original programme objective. Today we have eight Angels working in various functions within the Group.

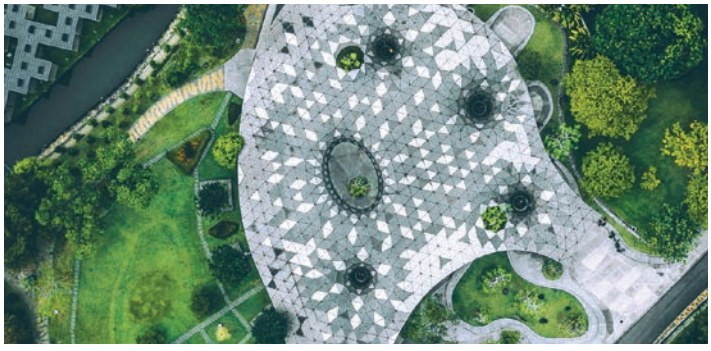
Building Capacity through Knowledge Sharing

We started the YTL Cement Seminar Series in 2019 to provide a platform for experts and industry practitioners to discuss, share, and gather insights to collectively elevate the construction industry across the region. In FY2022, we featured a mix of physical and virtual seminars, focusing on 4 themes:

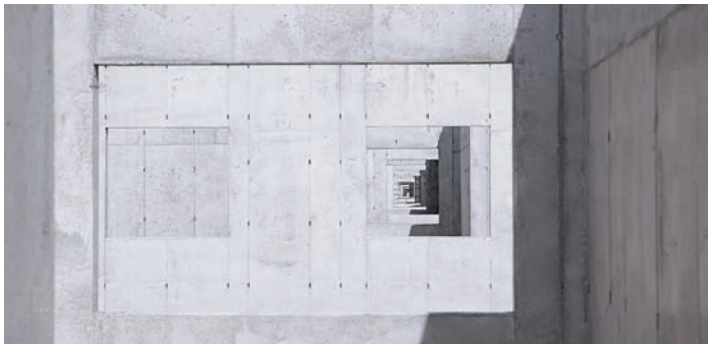
- Architectural series
- Cement & Concrete series
- ESG and Waste Management series
- Masterclass series, in collaboration with universities

Highlights of our Seminar Series

Theme: Architectural and Engineering series
Title: Public Realm Landscape Design using Sustainable Concrete Solution in KL (30 July 2021)
Description: In this session, we explored the application of pervious concrete in public realm landscape projects with local landscape architects. Our pervious concrete is a unique and effective solution to improve sustainability in the built environment.



Theme: Cement & Concrete series
Title: Green Concrete for Sustainable Construction (13 May 2022)
Description: In this session, Dr. Jegathish Kanadasan from MCB shared the benefits of eco-friendly concrete and talked about various applications of these products to promote sustainable construction.



Theme: ESG and Waste Management series
Title: Webinar on ESG in Construction (25 August 2021)
Description: In this session, we discussed construction sector common ESG risks and how cement fare as a sustainable building material as ESG metrics are shaping the development and operation of business around the world.

Our Masterclass seminars are geared towards university students, and those in the early stages of their careers.

Masterclass Series

Taylor's University

On 5 April 2022, in collaboration with Taylor's University, a total of 60 architecture students attended the "Introduction to Cement and Concrete" Session at the School of Architecture, Building, and Design at Taylor's University.

We shared how cement and concrete is used in the precast industry and real-world Industrial Building System (IBS) construction techniques.

To promote the adoption of sustainable building methods, we launched a competition among the students, where the challenge for them was to build miniature IBS precast models using our QuickMix DIY Craft Cement.

Universiti Teknologi PETRONAS (UTP)

In FY2022, we kicked off the first and second of the five-session Concrete Road series with Universiti Teknologi PETRONAS (UTP).

In the first session on 22 June 2022, titled Methodology of Flexible & Rigid Pavement, we shared the basic properties and design criteria of pavements to meet JKR specifications and references. This first Masterclass was attended by 50 Civil Engineering students.

In the second session on 29 June 2022, titled Method of Road Construction, we introduced the students to the various materials and equipment used in the construction of roads in Malaysia.

The remaining sessions will be held in the next reporting year.

Community Investment

BUILDS, our commitment to CSR

BUILDS is our dedicated Corporate Social Responsibility (CSR) arm. It is dedicated to supporting causes which extend beyond business objectives, contributing to the communities we live and work in.

BUILDS is anchored by three pillars: community, sustainability and education.

For the year under review, we contributed a total of **RM217,536** to BUILDS initiatives and clocked in **610 volunteer hours**.

Community

BUILDS work alongside community members and various stakeholders to enrich lives and improve livelihoods.

Sustainability

BUILDS is proactive in our effort to protect wildlife and conserve the environment around us.

Potential

BUILDS aims to inspire and encourage creative curiosity across all levels of education, skillsets, and talent.

Community

MCB takes its role as a good corporate citizen seriously. We have therefore launched several initiatives to contribute to the community.

Philanthropy

BUILDS frequently contributes to philanthropic causes that are important to local communities, such as making annual donations to mosques and temples near our plants. We also make contributions during important festive celebrations.

Acara Kutip Sampah Sambil Riadah (KUDAH) programme with Jabatan Alam Sekitar (JAS)

BUILDS organised a park clean-up in collaboration with JAS at Chongkak Park & Resort, Selangor. This event was held in conjunction with World Environment Day 2022, and involved 60 volunteers comprising employees of MCB and JAS. We successfully collected more than 200kg of waste.

In addition to the clean-up, BUILDS also donated some rubbish bins to Tourism Selangor to be placed at the park. The event gave MCB and JAS employees a chance to spend a day out with nature, while doing good for the environment.

Flood relief

In the aftermath of the severe floods that affected the Klang Valley at the end of 2021, BUILDS worked with The Lost Food Project to distribute RM102,000 worth of hygiene items and medication to 1,500 flood victims in Klang, Sri Muda, and Batu Tiga. Financial aid was also provided to MCB employees in the Klang Valley who were impacted by these floods.

Our Bukit Sagu plant supported the Pahang Fire Rescue Department's evacuation efforts by lending them its busses to transport flood victims to surrounding temporary relief centres. The plant also contributed essential items, such as food, mattresses, and diapers to these victims.

Sustainability

BUILDS is proactive in our efforts to conserve biodiversity and the environment around us.

The Centre for Biodiversity, Conservation, and Research Efforts (BCRE)

The BCRE is a research centre established under the auspices of BUILDS. Its goal is to gain an improved understanding of the environments around our operations in the hopes of developing more effective conservation plans.

Active initiatives under the BCRE are the Kanthan Biodiversity Conservation Initiative (KBCI), and the Langkawi Biodiversity Conservation Initiative (LBCI).

Kanthan Biodiversity Conservation Initiative (KBCI)
Since 2014, we have undertaken the following initiatives:

- Conservation of Gua Kanthan
  MCB has made a commitment to conserve Gua Kanthan, which hosts a number of high-value species of flora and fauna. Measured at approximately 270m in length, the cave is made of two chambers, with the general floor level at 79m above mean sea level, and its highest ceiling measuring 109m from the stream level. A window at the height of 32m from the floor allows sunrays to illuminate one portion of the cave.

- Developing a foundation of biodiversity inventory
  We worked with the Institute of Biological Science, Universiti Malaya (UM) to inventory the flora and fauna of Gunung Kanthan. Over 380 species were found.

- Plant Recce and Translocation Project with support from Tropical Rainforest Conservation and Research Centre
  We built a plant nursery accommodating up to 10,000 saplings. Currently, 14 endemic species in Kanthan are being nurtured and preserved.

- Land Snail Translocation Project in collaboration with University Malaysia Sabah (UMS) and RIMBA
  Extensive microclimate and snail diet analysis were carried out to survey and eventually, create living conditions that mimic original micro-habitat conditions suitable for translocation.

Langkawi Biodiversity Conservation Initiative (LBCI)
Since 2016, we have undertaken the following initiatives:

- Gua Pinang and Kubang Badak Geotrail
  MCB has committed to conserving Gua Pinang, one of the largest caves on the island of Langkawi, which has high geological and biological value. The cave, located in the buffer zone of its quarry, is a popular roosting ground for limestone cave bats.

Recycled plastics and coaster project

In October 2021, BUILDS embarked on a mission to prevent plastics from ending up in landfills. BUILDS successfully collected 10kg of plastics from staff and the local community. All unrecyclable plastics donated were used to create coasters and Christmas ornaments in the spirit of the festive season.

With the support of 27 staff volunteers and single mothers from Persatuan Seni Jahitan Kreatif Malaysia (PSJKM), a total of 180 coasters and 56 ornaments were made to be sold during the recent RIUH event held at Sentul Depot.

Education

BUILDS aims to inspire and encourage creative curiosity across all levels of education, skillsets, and talent.

YTL Cement Scholarship
This scholarship scheme was launched in 2007 to provide financial aid to students pursuing a degree in local universities.

The YTL Cement Scholarship has provided Malaysia with a talent pipeline. To date, 75 scholarships have been awarded – with more than half of the recipients choosing to work with MCB upon graduation.

Others & Appendix

Memberships

Cement and Concrete Association of Malaysia

Global Cement and Concrete Association

Malaysia Green Building Council

Federation of Malaysian Manufacturers

Waste Management Association of Malaysia

National Ready-Mix Concrete Association of Malaysia

YTL Cement Seminar Series Conducted During the Reporting Period

	Title	Date	Collaboration	Speakers
ARCHITECTURAL SERIES				
1	Sustainable Concrete Solution for Landscape Design	2-Jul-21	Institute of Landscape Architects Malaysia (ILAM)	LAr. Tang Pe Yang, En. Ridza'uddin Bin Mohd Radzi (Ipoh Municipal Council)
2	Public Realm Landscape Design using Sustainable Concrete Solution in KL	30-Jul-21	YTL Cement	LAr. Khairul Amin Bin Mirsa Hussain (DBKL)
3	Sustainability: ReThinking Conventional Construction	18-Nov-21	MGBC	Ms. Juliet Jang (Broad Group China), Ir. Thoo Hoi Hian (Gamuda IBS).
4	Inside the Box	28-May-22	MGBC	Ar. Fabian Tan
ESG SERIES				
5	Webinar on ESG in Construction	25-Aug-21	MBAM	Ms. Clarisse Loh (YTL Cement), Ms. Chin Foong Ling (Deloitte)
6	LEAD Conference - YTL's Path to Decarbonisation	9-Dec-21	YTL Group	Ms. Clarisse Loh

CEMENT & CONCRETE SERIES				
7	Structural Engineering Design and Construction of the Tallest Building in Europe, Lakhta Center, St Petersburg	12-Jul-21	IEM	Mr. Ahmad Abdelrazaq' (Samsung C&T)
8	VAP Training on DecoBuild	6-Aug-21	YTL Cement	Dr. Jegathish Kanadasan (YTL Cement)
9	LEAD Conference	10-Dec-21	YTL Cement	Mr. Joshua Yeoh, Mr. Patrick Pereira, Mr. Eric Tan (YTL Cement)
10	Green Concrete for Sustainable Construction	13-May-22	YTL Cement	Dr. Jegathish Kanadasan
11	Solusi Dinding QuickMix (Session 1)	25-Jun-22	Sin Lee Siang Hardware, Muar, Johor	Mr. Gavin Chen, Mr. Sam Yap (YTL Cement)
12	Solusi Dinding QuickMix (Session 2)	25-Jun-22	Sin Lee Siang Hardware, Muar, Johor	Mr. Gavin Chen, Ms. Siti Syuhadah (YTL Cement)
MASTERCLASS SERIES				
13	Road series: Methodology of Flexible & Rigid Pavement	27-Oct-21	University Malaya	Mr. Sahruzi Sahari, Mr. Steven Tan (YTL Cement)
14	Road series: Methods of Road Construction	3-Nov-21	University Malaya	Mr. Sahruzi Sahari, Ms. Syuhadah Shaharudin (YTL Cement)
15	Road series: Technology of Rigid/ Concrete Pavement Road	10-Nov-21	University Malaya	Mr. Sahruzi Sahari, Mr. Steven Tan (YTL Cement)
16	Road series: Stabilization Technology in Road Pavement	17-Nov-21	University Malaya	Mr. Sahruzi Sahari, Ms. Syuhadah Shaharudin (YTL Cement)
17	Road series: About Road Maintenance	24-Nov-21	University Malaya	Mr. Sahruzi Sahari, Mr. Marzuki Bakar (YTL Cement)
18	Concrete: Sustainability in building materials	3-Dec-21	University Teknologi Malaysia	Mr. Lim Tze Liang (YTL Cement)
19	DIY Like a Pro	5-Apr-22	Taylors University	Mr. Hafiz Ismail (YTL Cement)
20	DIY Like a Pro	10-May-22	Taylors University	Mr. Hafiz Ismail (YTL Cement)
21	Craft Cement Product Training	17-Jun-22	Kumpulan Ikatan Perusahaan, Sg Buloh.	Mr. Hafiz Ismail (YTL Cement)
22	Road Series: Methodology of Flexible & Rigid Pavement	22-Jun-22	University Technology Petronas	Mr. Sahruzi Sahari (YTL Cement)
23	Road Series: Methods of Road Construction	29-Jun-22	University Technology Petronas	Mr. Sahruzi Sahari, Ms. Syuhadah Shaharudin (YTL Cement)

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