PERSATUAN KEBANGSAAN KONKRIT SIAP BANCUH MALAYSIA
NATIONAL READY-MIXED CONCRETE ASSOCIATION OF MALAYSIA

2012 NRMCA Concrete Convention on 20 June 2012:

Opening Address by Mr. Chee Koon Yoong. Chairman, NRMCA

Ir. Choo Kok Beng, Deputy President, IEM
Mr. Kwan Foh Kwai, President, MBAM
Ir. K Sundraraj, Council Member ACEM
Mr. Yap Soon Huat, Chairman, SQA
Mr. Zack Lim, President, ACI KL Chapter
Mr. Steven Ng, Chairman, Organising Committee of this year's Convention
Council members, representatives of Affiliate Associations,
Committee and members of NRMCA
Special Guests, Distinguished Speakers, Ladies and Gentlemen
A very good morning and welcome to the 2012 NRMCA Concrete Convention.
We are very honoured and pleased to have with us here today more than 200 participants who have from all over the country. The theme for this year's Convention is "Challenges & Opportunities towards Green Building Materials in Ready-Mixed Concrete Industry"
Ladies and Gentlemen,
Global warming is a result of human activities, in particular due to the uninhibited deforestations and industrialization in the name of development. The impacts of global warming include record high temperature, rising sea level, severe flooding, extreme droughts and other natural disasters with serious effects on the health, social and economic well-being of the people.
Some of the damage already done on the Earth is irreversible, but there is still much that we can do to save our environment from further deterioration in order to preserve the ecosystem to sustain the needs of our future generations.
The realisation of the serious threats posed by climate change and the need to have a healthy balance of development and protection of the environment has led Governments around the world to adopt urgent measures for Sustainable Development.
In 2009, Malaysia launched the 'National Green Technology Policy'. The objectives include of the Policy include:
1.) Decreasing growth of energy consumption while enhancing economic development
2.) Facilitating growth and innovation of Green Technology
3.) Ensuring sustainable development and conserving the environment for future generations
Today, Green Technology and Sustainability has become the most important issues of construction and development. The call to build and develop in a responsible manner which includes protection of our environment, use of clean energy and reduction of CO_2 emissions is growing louder by the day.

The construction industry is often blamed for destroying our environment, depleting our natural resources, and spewing tonnes of CO2 into the atmosphere. For over a century, the most commonly used construction material in the world is concrete. It is widely perceived as an environmentally damaging construction material because it uses cement, one of the key ingredients of concrete.
The production of one tonne of Ordinary Portland Cement (or OPC in short) is known to produce approximately 0.85 tonne of CO2. In Malaysia, approximately 20 million tonnes of cement are produced annually.
This means every year, approximately 17 million tonnes of are being emitted into our atmosphere from the cement plants alone.
An obvious move to reduce carbon emission would be to substitute OPC with other “greener ingredients”. Thus proponents of green and sustainable development have been advocating the use of supplementary cementitious materials such as pulverised fuel ash (or pfa) and ground granulated blast furnace slag (or ggbfs). These are by-products of the coal-fired power plant and manufacture of steel in the blast furnace respectively. There are several of such blended-cements consisting of OPC with pfa or slag or both in the market. Some are already accorded with GREEN and Eco-Label by SIRIM. The use of these blended cements have been widely discussed and accepted. Developers and designers who are vying for “Green Building Certification” for their projects can specify the use of these Green and Eco- Labelled cement to earn rating points under the Green Building Index.
However using these supplementary cementitious materials is only one of the many things that we can do to make our concrete greener and more sustainable.
Ladies and Gentlemen,
As we all know, concrete is basically made up of three key raw materials namely Cement Sand and Aggregates, of which Cement makes up the smallest percentage by mass.
The bulk of the components in concrete are made up of sand and aggregates. Currently most concrete producers used natural sand extracted from rivers and ex-mining pits. The manner in which sand is extracted and the damage it did to the environment has come under serious criticism.
The depleting sand from nearby sources within Klang Valley means that it has to be brought in from other states, hundreds of kilometres away. The transportation over long distance using heavy trucks not only makes sand more expensive but inevitably involves burning of fuel resulting in huge amount of CO2 emission. To reduce dependency on natural sand, ready-mixed producers must be prepared to look at other available alternatives.
In many countries crushed fine aggregates have been used to produce concrete for many years. Properly screened crushed fined aggregates, also known as manufactured or quarry sand have been successfully used to make high performance concrete. However the use of manufactured and quarry sand in our country although slowly gaining acceptance, is still low, partly due to lack of awareness, partly due to the lack of consistency in the quarry sand from different quarries and partly due to reluctance of consultants to change the specifications. It is our hope that quarry work together can come out with standardised grade of quarry sand to make it easier for the designers to specify.

Quarry sand produced by quarries which are normally better environmentally managed and located nearer to the ready-mixed plants will prove to be a viable and sustainable alternative to natural sand.
Ready-mixed concrete can also be “greener” by “design”.
There are available in the market a wide range of advanced chemical admixtures, ultra-fine binder materials and additives which can be used to produce high performance concrete with higher compressive strength, improved workability and durability with lesser cement content.
Ladies and gentlemen,
There are so many other ways we can contribute to the betterment of our environment.
As a responsible industry, we have to continuously innovate, adopt the best green practices for our manufacturing process and make use of the latest technology to further our advancement towards “green concrete technology”. Although there are presently no criteria in place yet for Eco-Labelling of concrete, nor there any policies or Acts to compel us to embrace green production practices, it is our hope that this convention will create the awareness and encourage us to take positive steps to meet the challenges ahead in our pursuit of green concrete technology leading to Eco-Labelling for Ready-Mixed Concrete in the very near future.
To some, they may see this as additional cost to their production, but for those ready-mixed companies, including related supporting industries like quarries, chemical admixtures and others, who are bold and proactive to make the move to embrace ‘green technology’ they will find plenty of opportunities as the country moves towards “Green Economy”.
On behalf of the NRMCA and the Organising Committee of this year’s Concrete Convention, once again I would like to express my sincere thanks for your participation and hope you have a fruitful conference.
Thank you very much.