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**AKMAL AHMAD ZAWAWI, NUR AZZIMAH ZAMRI**



## PRODUCT BACKGROUND

- Malaysian palm oil industry and coal industry generates huge amount of wastes causing environmental pollution.
- Oil palm shell (OPS), the solid waste from palm oil mill when disposed consumes large landfill area, pollutes the environment and requires huge cost for waste management.
- Fly ash from the coal industry when dumped at the landfill causes contamination of water, soil and underground aquifers resulting in imbalance ecosystem.
- ECO-LITECRETE is produced to solve industrial wastes problems to create a cleaner environment for healthier community.
- ECO-LITECRETE which is a green lightweight aggregate concrete is produced by using both palm oil and coal fire plant waste as mixing ingredient, consist of zero granite and low amount of river sand supports the idea of sustainable construction.
- This affordable ECO-LITECRETE exhibit higher strength and durability than plain concrete is suitable for building construction.

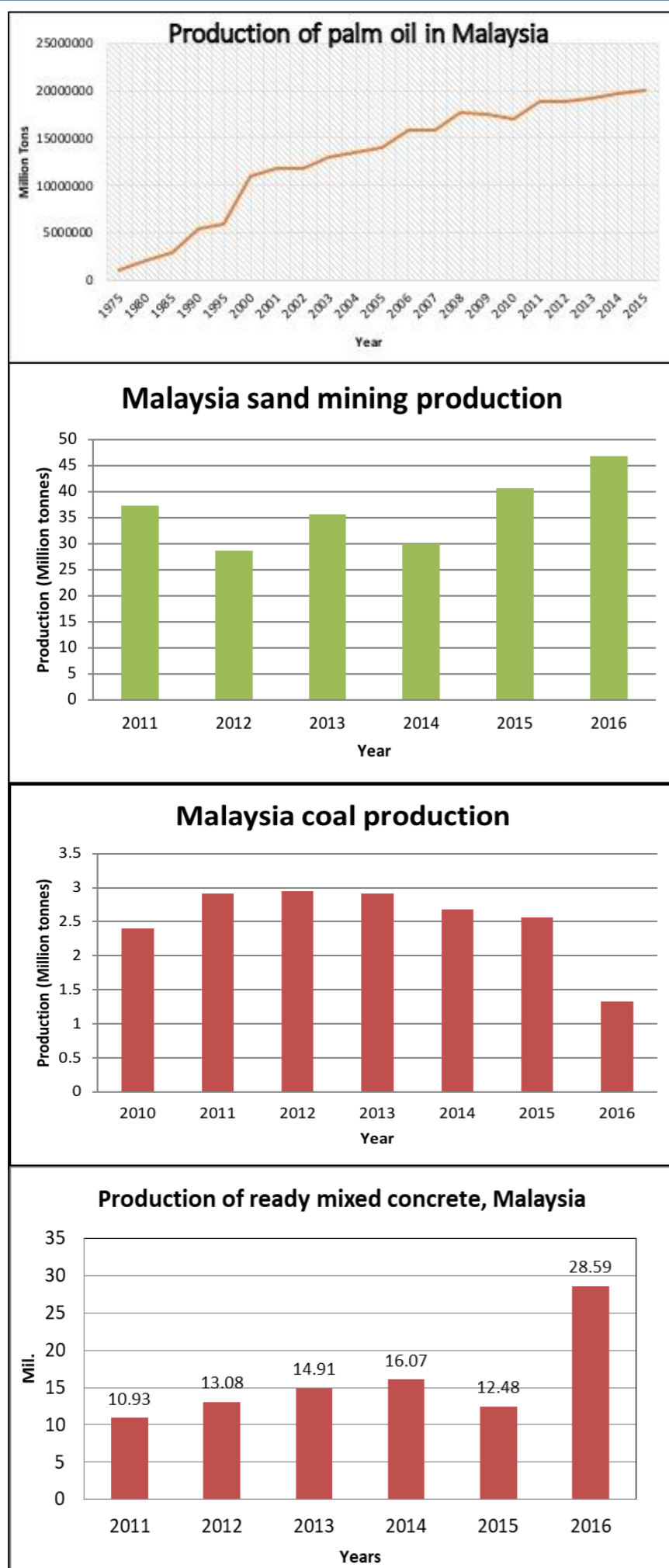


## ENVIRONMENTAL ISSUES



**“Let’s Change our Waste to Wealth By Using ECO-LITECRETE”**

## MARKET SURVEY



## AWARDS

Gold Medal Awards in CITREX' 18

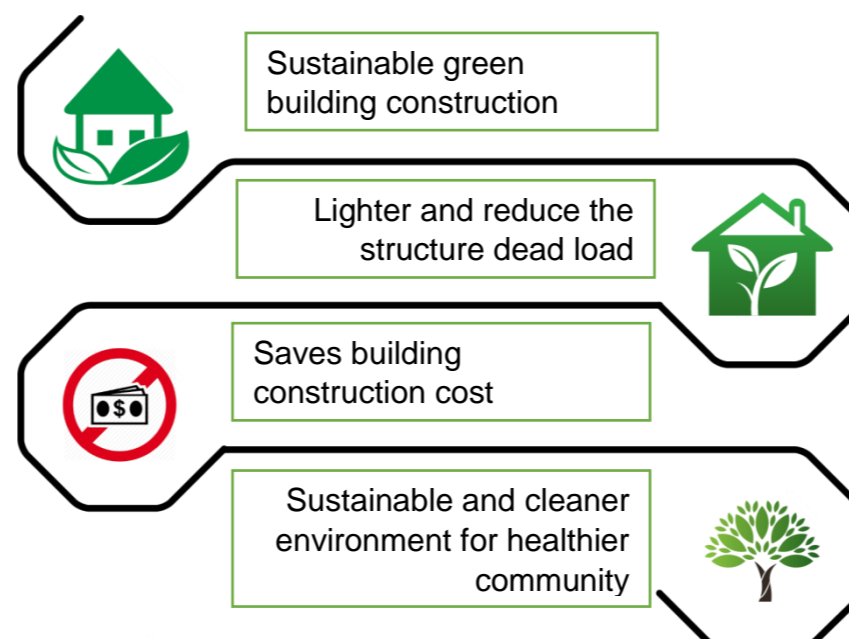
## NOVELTY

- A sustainable lightweight concrete containing waste from palm oil and coal industry as total granite aggregate replacement and partial sand replacement
- Utilization of OPS has made this product to be lighter than conventional concrete
- Use of fly ash as partial sand replacement enhances strength and durability of concrete

## PUBLICATIONS

- 2 Scopus Proceedings
- 1 Conference Paper

## BENEFITS



## PRICE

Concrete Type	Price per m <sup>3</sup>
Conventional Concrete	RM250
Eco-LiteCrete	RM200

**BEST PRICE GUARANTEE**

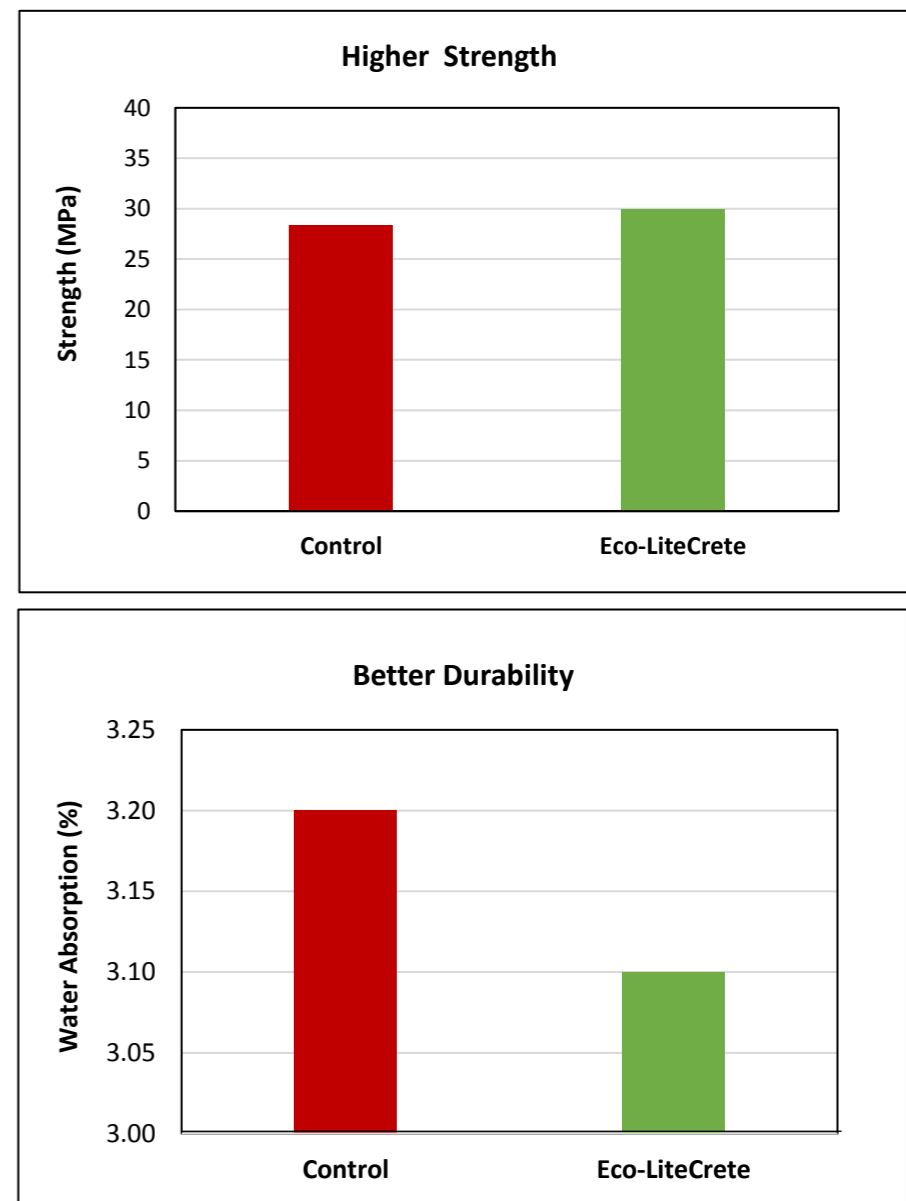
## PATENT

PI 2018400016

## COLLABORATOR

CCA Systems Sdn Bhd (506860-V)

## ECO-LITECRETE ADVANTAGES



## COMMERCIALIZATION

- Ready-mix concrete producer
- Local contractors

## MARKETABILITY

