ECOSMART™

a non-profit organisation dedicated to innovation and sustainability

ECOSMART™ CONCRETE
A Concrete Contribution to the Environment

Top six reasons to use EcoSmart Concrete in the UAE

6 reduced costs
5 higher long term strength
4 easier to place pump and finish
3 more durable and resistant to salt & sulfates
2 less water and cooling required
1 green material: less energy, resources and CO_2 emissions

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Concrete is the most consumed substance in the world after water

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Portland Cement is a key component of concrete

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Cement Plant

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Cement making is an energy intensive process and a major source of greenhouse gas emissions

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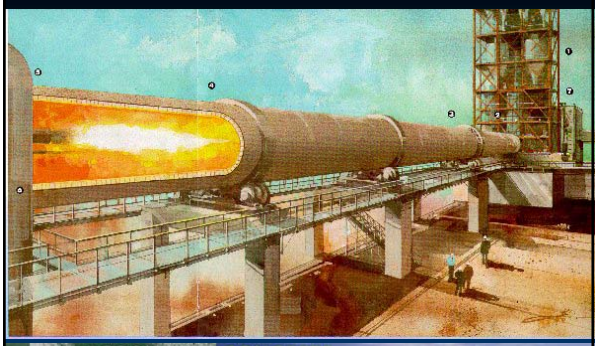
The Cement Kiln: 1 tonne cement = 1 tonne CO_2



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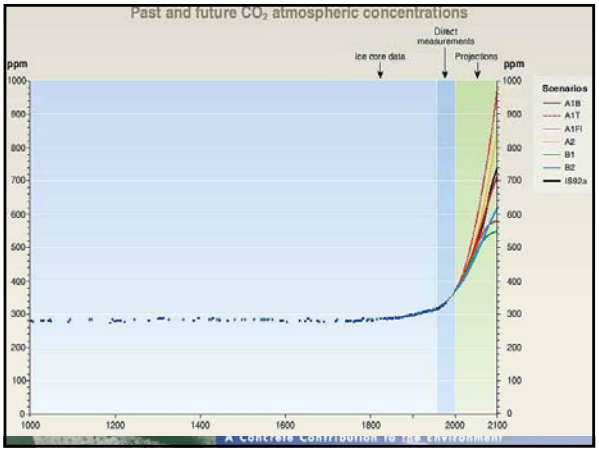

Supplementary Cementing Materials such as fly ash can replace cement in concrete producing similar or better results

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Liu Centre

50% Fly Ash

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Metro Station

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Metro Station

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High volume of fly ash in concrete is a proven technology demonstrated in numerous buildings in Canada

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Apartment Building

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Apartment Building

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University Building Toronto

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Underground Garage

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Fly ash improves concrete durability and resistance to sea salt and sulfate.

It also makes concrete more impervious.

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Fly ash is the by-product of coal-fired power plant

It is a low cost material that will be otherwise wasted

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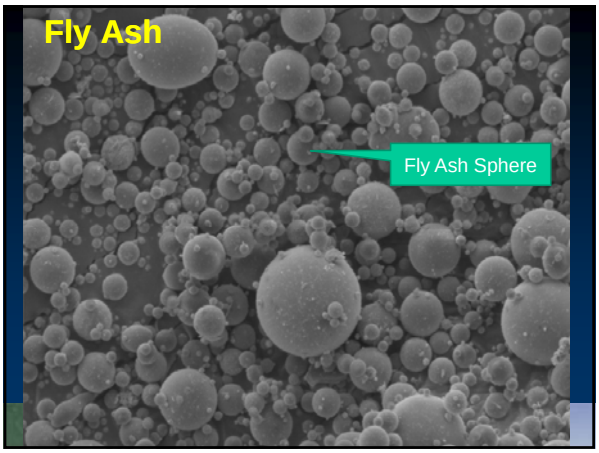
Fly Ash
Fly Ash Sphere


Coal Fired Power Plant
Source of Fly Ash
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Coal Mine & Power Plant
Source of Fly Ash
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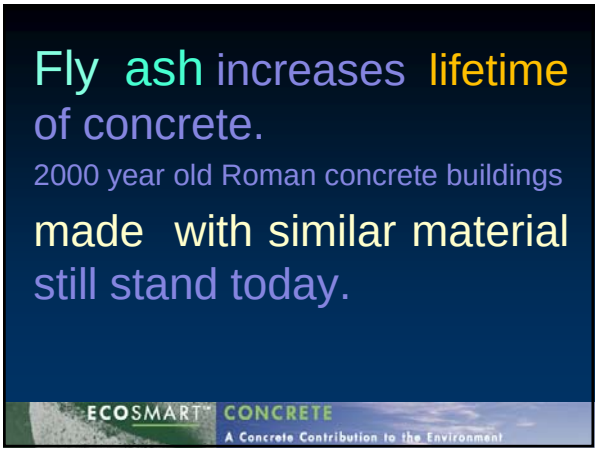
Fly ash increases lifetime of concrete.
2000 year old Roman concrete buildings
made with similar material
still stand today.
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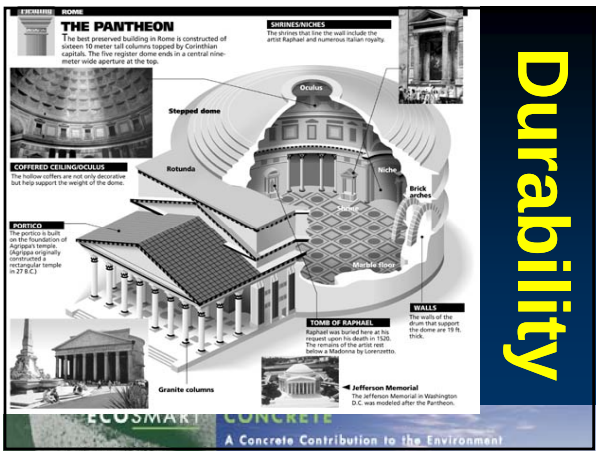
THE PANTHEON
Durability
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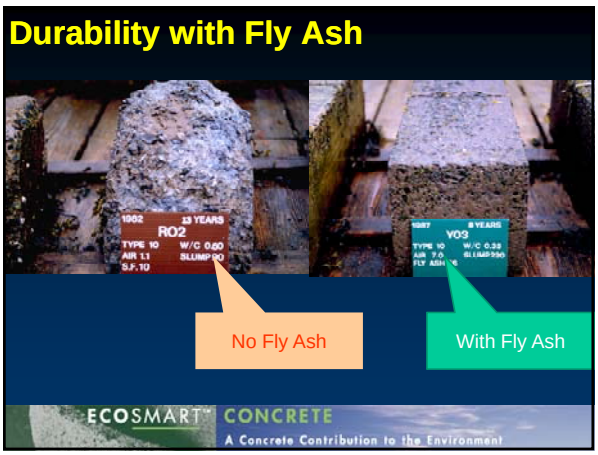
Durability with Fly Ash
No Fly Ash
With Fly Ash
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Fly ash makes concrete easier to pump and place and reduces the heat of hydration

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Constructability

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Fly ash concrete is an ecologically and economically smart material, and a Climate Change Solution

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Climate Change Solution

Fly ash concrete produces durable green buildings compatible with LEED

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Free technical reports and data available at

ecosmartconcrete.com

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