#### Cement-free Sustainable Concrete Blocks and Kerbs



#### The Cement/CO2 Problem

Cement contributes

8% of total worldwide C

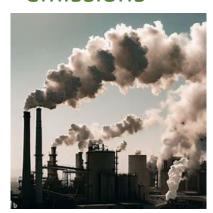
02
emissions

1ton of Cement produces ~810 kilos of CO<sub>2</sub>

Extraction for cement causes deforestation and habitat destruction

Cement
manufacture
~7% of
global
industrial
energy use

Contributes to Air pollution, Thermal pollution and waste generation



Source: World Business Council for Sustainable Development



Source: European Cement Association



Source: World Wildlife Fund



Source: International Energy Agency



Source: European Cement Association

### Our buildings leave Cement-CO<sub>2</sub> footprints in various ways

Foundations and structures



Roads and compound walls



Masonry work



.. and others



## Irrefutable evidence of Climate Change/ Global Warming



The IPCC's (a leading international body) assessments of the scientific research

Worldwide Temperature Records Proxy Data: that reconstructs past climate conditions

Melting Glaciers and Ice Sheets-Observed

Ocean Warming-Measured Rising Sea Levels-Measured Rising CO<sub>2</sub> Levels-Measured Climate Models: show green house gas emissions as major culprits



#### How will global warming affect us and our children?







- Water Scarcity
- 🛨 Ecosystem Disruptions & Consequences
- Health Impacts
- Food Security





#### What is







The UN CARBON range of sustainable concrete products by VYARA, utilize industrial wastes such as Fly Ash and GGBS, and a small percentage of special activator chemicals as the binders instead of Cement, thereby offering you a huge reduction in CO<sub>2</sub> footprint in your precast concrete consumption.



## Why is **UN CARBON** such a gamechanger?

1st

In the country using cement substitutes at such a scale

~2000 tons of CO<sub>2</sub>

Possible to save for VYARA- every month

~85%

Of the binders are industrial side-streams instead of Cement

Zero

Cement in many products

# Protecting the future



#### UN CARBON products and major standards

UnCarbon Products can be offered to meet relevant standards



IS 15658 and EN 1338 for Pavers

IS 575 and EN 1339 for Kerbs

EN 1340 for Flagstones

IS 2185 for Hollow and Solid Blocks

IS 17452 for Alkali activated precast



## UN CARBON contributes to IGBC green building points

As per IGBC Green New Building Rating system version 3.0 of Sept 2016	Possible points
Site Selection and Planning Credit 6 Heat Island Reduction, Non-roof	2
Site Selection and Planning Credit 7 Heat Island Reduction, Roof	2
Water Conservation - Rainwater Harvesting, Roof & Non-roof	4
Building Materials and Resources Credit 1 Sustainable Building Materials	8
Building Materials and Resources Credit 3 Handling of Waste Materials, During Construction	1
Building Materials and Resources Credit 4 Use of Certified Green Building Materials, Products & Equipment	5
Innovation and Development Credit 1 Innovation in Design Process	4
Innovation and Development Credit 2 Optimization in Structural Design	1
VYARA paving, Eco range and the UNCARBON range can together contribute towards 27 IGBC points for new Green Buildings	27

## UN CARBON helps Corporates in fulfilling ESG obligations

Environmental

Social

**Governance** 

Reduction in CO<sub>2</sub> footprint

Conservation of natural resources

Health and well-being

Sustainable community

Reputation and stakeholder perception















### Reduction in use of Cement is everyone's responsibility!

How can you contribute?

Ask for products for your application

Specify use of **UnCarbon** products

Contribute to a greener future

Currently Paver Blocks are available in the UnCarbon Range. Other ranges will slowly be integrated and the range of products available under the Uncarbon range will be soon expanded





You've heard from us.

# we want to hear from you.

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consumption Waste' emissions Clean manag Sustainable mitigation resources conservation DEnergy technology