



GreenJams

Turning **Buildings** into **Carbon Sinks**

Problem Statement



45%

Global carbon emissions come from the built environment*

70%

Builders dissatisfied with increasing material costs and poor performance



100

Million tons of crop residues are burnt annually in India alone**

1M

Premature deaths due to associated air pollution

Agrocrete®

The Solution.

Crop Residues

rice straw/ bagasse/ cotton stalks/ soybean stalks, etc.

+

Industrial By-products

ashes & slags from power and steel industries



Agrocrete®

Load & Non-Load Bearing Hollow Blocks

Dimensions (mm) : 400 x 150 x 225/ 150/ 100

Tested as per IS 2185: Part II by CSIR-CBRI, Roorkee



Strength

≥5 MPa

AAC: 3 - 4 MPa



Durability

75+ Years

AAC: <50 Years



Density

800 kg/m³

AAC: 650 kg/m³



Embodied Carbon

-0.10 kg CO₂/kg

AAC: 0.24 kgCO₂/kg



Water Absorption

10 - 12%

AAC: 15%



U - Value

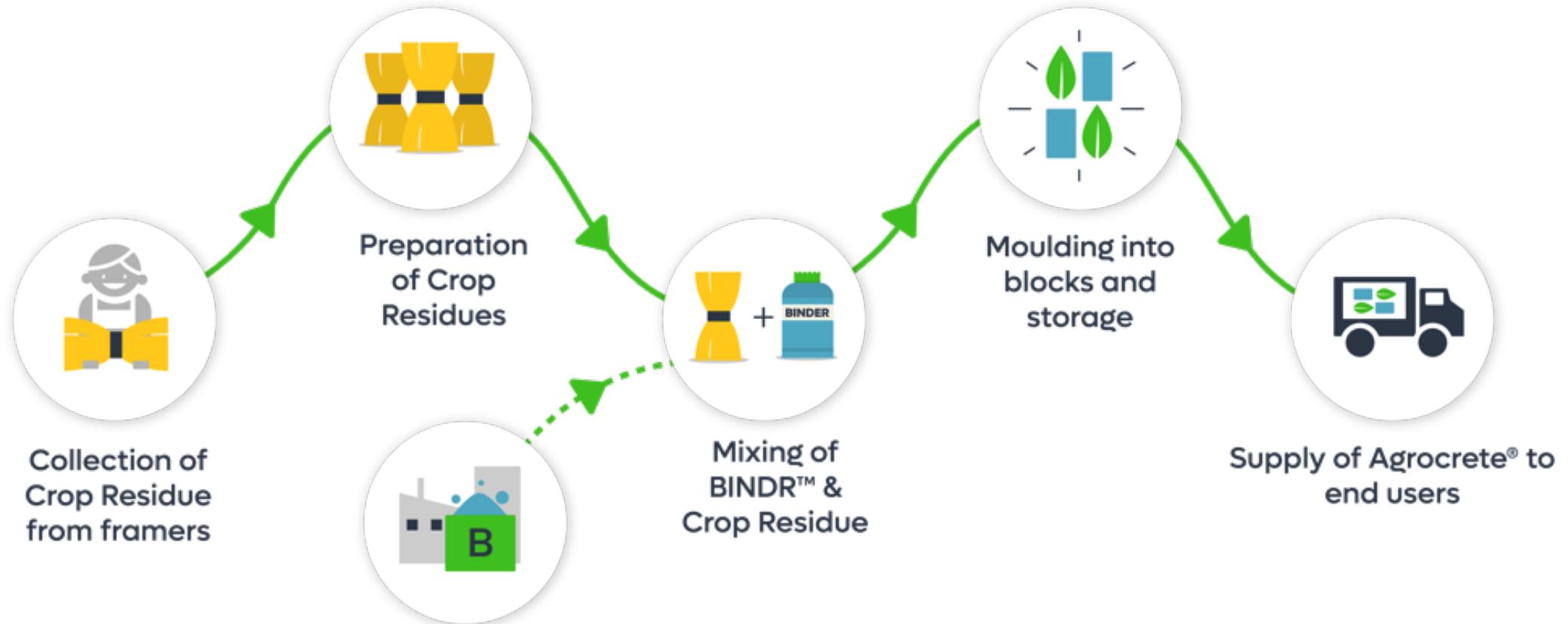
1.3 - 1.6 W/m²K

AAC: 2 W/m²K



Patented

Manufacturing Process



Preparation of BINDR™ from Industrial By-Products of Steel, Paper & Power Plants

Patented Low Energy, Low Resource
Advanced Alkali Activation Chemical Technology

Manufacturing Process



Customer Value Proposition

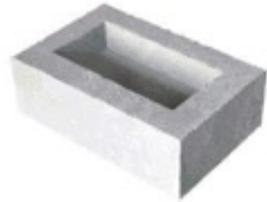
Detailed Comparison



Red Bricks

₹6 - ₹9
per unit

₹2,250/sq. m.
Construction Cost



Fly Ash Bricks

₹4.5 - ₹6
per unit

₹1,920/sq. m.
Construction Cost



AAC Blocks

₹45 - ₹60
per unit

₹1,550/sq. m.
Construction Cost



Agrocrete® Blocks

₹35
per unit

₹1,250/sq. m.
Construction Cost

50%

Lower Construction Cost

25%

Lower Operations Cost

-ve

Embodied Carbon

Our Impact

From 9,00,000 blocks per year = approx. 3,00,000 sq. ft.

Net Impact: -4644 tons of CO₂



Driving on Earth's circumference 463 times!



- 1** NO POVERTY
- 8** DECENT WORK AND ECONOMIC GROWTH
- 9** INDUSTRY, INNOVATION AND INFRASTRUCTURE
- 10** REDUCED INEQUALITIES
- 11** SUSTAINABLE CITIES AND COMMUNITIES
- 12** RESPONSIBLE CONSUMPTION AND PRODUCTION
- 13** CLIMATE ACTION
- 15** LIFE ON LAND
- 17** PARTNERSHIPS FOR THE GOALS

Competition

Parameter	Burnt Clay Bricks	Cured Bricks (Fly Ash, CSEB, CMU)	Cured Blocks (AAC, CLC, Plastic)	Agrocrete® Blocks
Carbon Negative	✗	✗	✗	✓
Faster construction	✗	✗	✓	✓
Heavy Anchorages	✓	✓	✗	✓
Lightweight	✗	✗	✓	✓
Thermal Insulation	☆☆	☆☆	☆☆☆☆	☆☆☆☆☆
Suppliers Type	Unorganised	Majorly Unorganised	<100 industries	Organised

Completed Projects



Structure:

28,000 Agrocure® blocks –
1.8 km Boundary Wall

Type:

Industrial Building

Efficiency:

Construction speed
improved by 50%

Carbon Sequestered:

31 tons of CO₂

Completed Projects



Agrocrite® used for project at a Shell Petrol Pump, constructed by CBRE, India at Chennai, Tamil Nadu



CBRE

Structure:

1,100 Agrocrite® blocks -
load bearing structure

Type:

Industrial Building

Efficiency:

Reduced cost of
construction by 50%

Carbon Sequestered:

7.9 tons of CO₂

Customers

Traction

1 Factory at Meerut, Uttar Pradesh

Capacity : 2000 blocks per day

Orders : Booked for next 180 days



CBRE

4+ Projects Completed

Volume : 30,000+ blocks

Type : Residential & Industrial Building



KHANIJO

2 Factories Coming

Capacity : 3,000 blocks per day each

Location : Visakhapatnam and Hyderabad

≥₹64Cr.+ Enquiries

Volume : >2 Cr blocks

Location : Tier 1 & Tier 2 Cities

Ongoing Evaluations by

Mahindra
Lifespaces

CUSHMAN &
WAKEFIELD

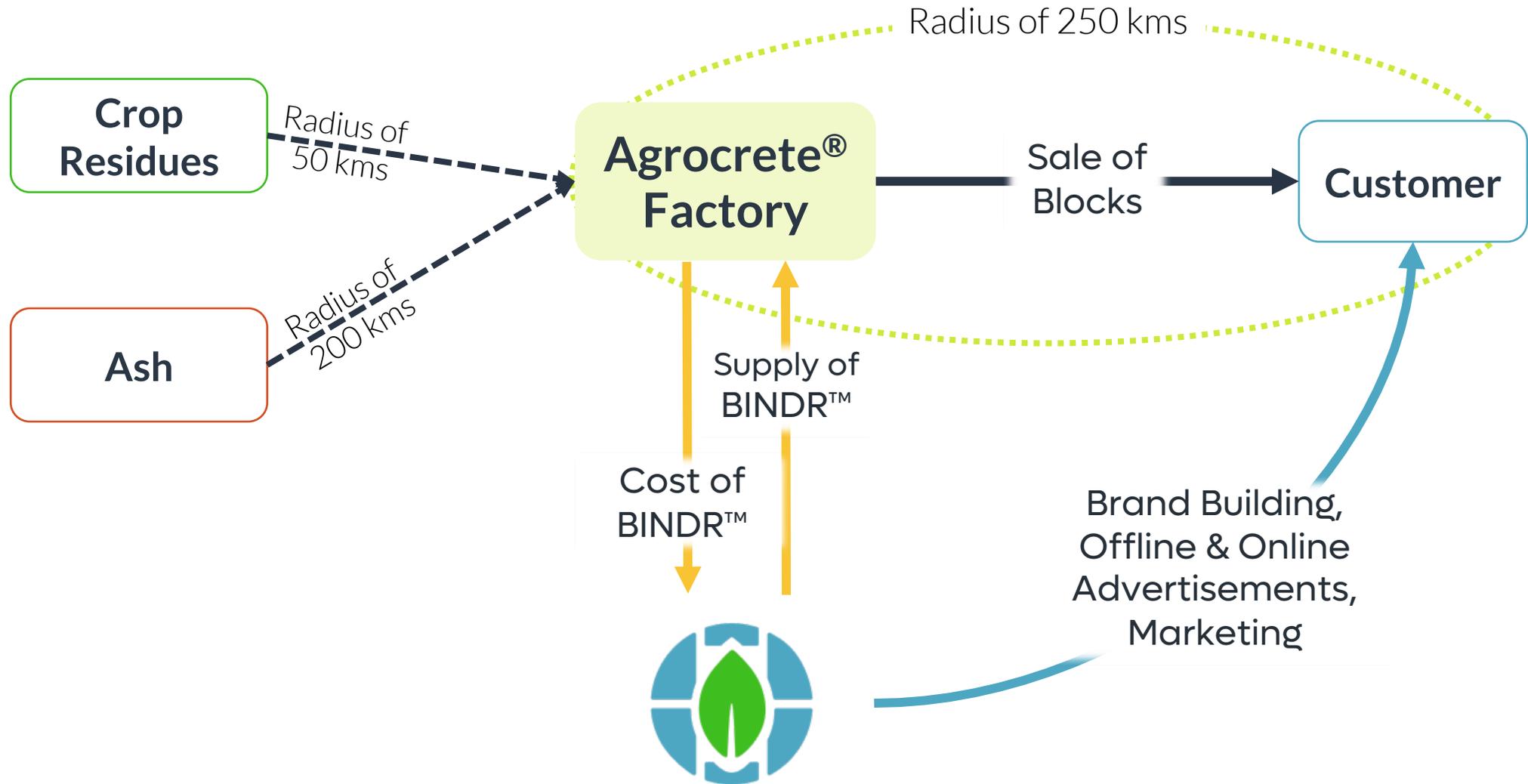


LODHA

amazon

MEINHARDT

Operation Model



Supported By



Ministry of Housing
and Urban Affairs
Government of India



Ministry of Agriculture
& Farmers Welfare
Government of India

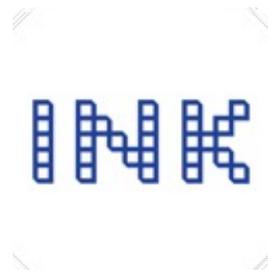


विज्ञान एवं प्रौद्योगिकी विभाग
DEPARTMENT OF
SCIENCE & TECHNOLOGY



Shri Prime Minister Narendra Modi with Agrocete®
Blocks at Azadi ka Mahotsav, Lucknow, U.P.

Recognised By



Contact



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