

SoBrick Business Proposition

By Arya Banthia, Zuzanna Topolska, Arthur Hermann, Dominika Wilczok, Nityant Rathi, and Tesfa Madhin,

Key Partners

- Government of India
- Logistic Company like Indian Railways and Truck Transporters
- Customers like Larsen & Toubro
- Suppliers providing required equipments etc.
- Banks
- Environment Agencies
- Multinational companies who may want to contribute from their CSR funds for this noble cause
- Plastic manufacturers who may generate waste products in their manufacturing process
- Plastic waste collection agencies
- Venture Capitalists, Pvt Equity Funds

Key Suppliers

- Suppliers providing required equipments etc.
- Plastic manufacturers who may generate waste products in their manufacturing process
- Plastic waste collection agencies
- Electricity and other utility providers

Value Propositions

- Make cheaper and stronger bricks for the customers out of plastic waste and battery waste to monetize the same and also address the environmental issue

Customer Segments

- Construction Companies like Larsen & Toubro
- Builders
- Large Green field manufacturing plants

Distribution Channels

- Truck transporters, and Indian Railways

Costs structure

- Employee cost

- Freight cost
- Electricity cost
- Travel cost
- Telephone cost
- Sand and Clay costs
- Repair & Maintenance cost

Capital Expenditure

- Land and Building
- Plant and Machinery
- Vehicles

Revenue stream

- Both B2B and B2C opportunities are there
- Supply to builders and construction companies

Projected sales

- Its is targeted to achieve a sales target of ~US\$ 1 million in the 1st year of operation and take it to ~US\$ 10 million in 5 years time
- We intend to increase the volume to get the benefit of economies of scale

Projections

	Unit	Year 1	Year 2	Year 3	Year 4	Year 5
No. of bricks	Nos	1,850,000,000	3,700,000,000	7,400,000,000	11,100,000,000	16,650,000,000
Cost per brick	Cents/brick	0.045	0.043	0.041	0.039	0.037
Revenue per brick	Cents/brick	0.052	0.054	0.055	0.057	0.059
Profits per brick	Cents/brick	0.007	0.011	0.015	0.018	0.022
Revenue	US\$	963,542	1,984,896	4,088,885	6,317,328	9,760,272
Costs	US\$	835,069	1,586,632	3,014,601	4,295,806	6,121,524
Profit	US\$	128,472	398,264	1,074,285	2,021,522	3,638,748
Capex		- 400,000	- 200,000	- 300,000	- 350,000	- 300,000
Salvage value						400,000
Free cashflow		- 271,528	198,264	774,285	1,671,522	3,738,748
IRR (Internal Rate of Return)		195%				

SWOT Analysis

- **Strength**
 - More durable
 - Cheaper

- Reusable
- Sustainable

- **Weakness**
 - New technology – lack of trust in consumer segment
 - Funding issues

- **Opportunities**
 - Address Environment problem – Plastic waste management and reduce Carbon emissions
 - Provide cheaper and better quality product
 - Green initiative
 - Opportunity to attract investors who intend to cut down carbon emission.
 - Possibility of requesting Govt to provide incentives
 - Best use of CSR budgets of various corporates

- **Threat**
 - Competitors will get into this business once they see the profitability
 - Players with large funds may takeover small businesses or make them unviable

Pest Analysis

- **Political**
 - Advantages
 - Govt will encourage investments and promote such business
 - Disadvantages
 - Brick manufacturing is quite profitable. Political enterprises that have taken funds from clay brick manufacturers may create unforeseen hurdles for our venture to prevent our success to support the political enterprises' donators.

- **Economic**
 - Advantages
 - This will promote investment into India and allow India's economy to rise, for this technology can be used to export bricks to other countries under the banner of cutting carbon emissions and being environmentally sustainable as well as being cheaper.
 - Since our raw materials are majorly waste material we have access to free raw material- substantially cutting our costs
 - Disadvantages
 - It could temporarily destabilize India's economy as promoters, distributors, and construction companies will want cheaper bricks. And, especially, with bricks being produced and purchased in such massive quantities, slight differences in prices will cascade and result in grand differences. Our technology will disrupt

the clay kiln brick manufacturers who hold an oligopoly on the brick manufacturing industry.

- **Social**
 - Advantages
 - Cheaper infrastructure (created through sustainable means) will enrich the underprivileged as more construction projects can be erected in the same costs to CSR or government initiatives.
 - Our bricks, due to their greater durability, will last longer than clay bricks allowing the life period of buildings to increase. People don't have to find a new home every few years, they can stay in the same home for greater lengths of time- allowing them to invest their savings in education and other necessities.
- **Technological**
 - Advantages
 - One mason can lay around 300 to 500 bricks a day; with use of technology, we can enhance the productivity 10 times.