

CLAYLITE AGGREGATES LIMITED

SILEC-G PROJECT

Structural Lightweight Aggregate from Waste

Lightweight and Recyclable Aggregates Conference

SCI London 15th November 2012

CLAYLITE AGGREGATES LIMITED

PROJECT BACKGROUND

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4. Inventor: Mike Evans (patent pending)
5. Location: Midlands based

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PROJECT EVOLUTION

1. Expand bloating clay

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2. Expand non-bloating clay through the addition of wastes

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PROJECT OBJECTIVES

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- To prove performance in structural concrete.
- To prove feasibility of commercialisation including internationally.

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SUSTAINABILITY: REDUCE, RE-USE, RECYCLE

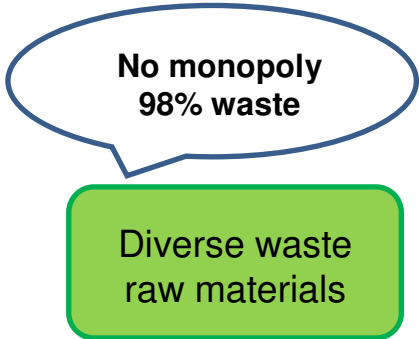
Lowering carbon footprint and environmental impact through resource and energy efficiency

Diverse waste
raw materials

CLAYLITE AGGREGATES LIMITED

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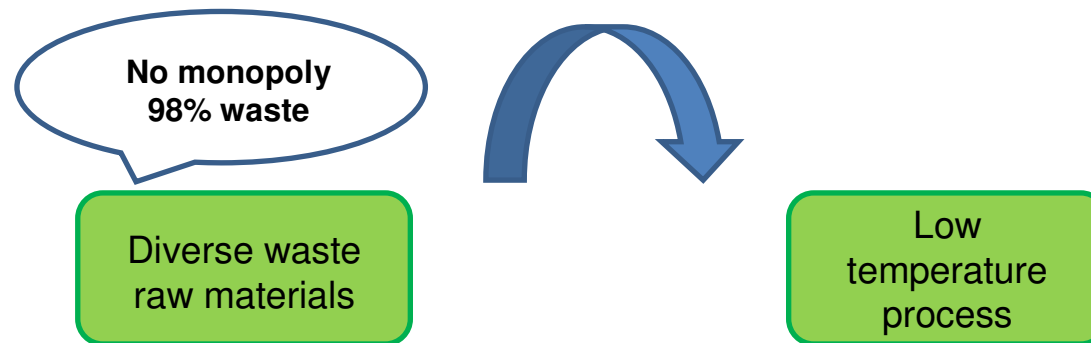
No monopoly
98% waste

Diverse waste
raw materials

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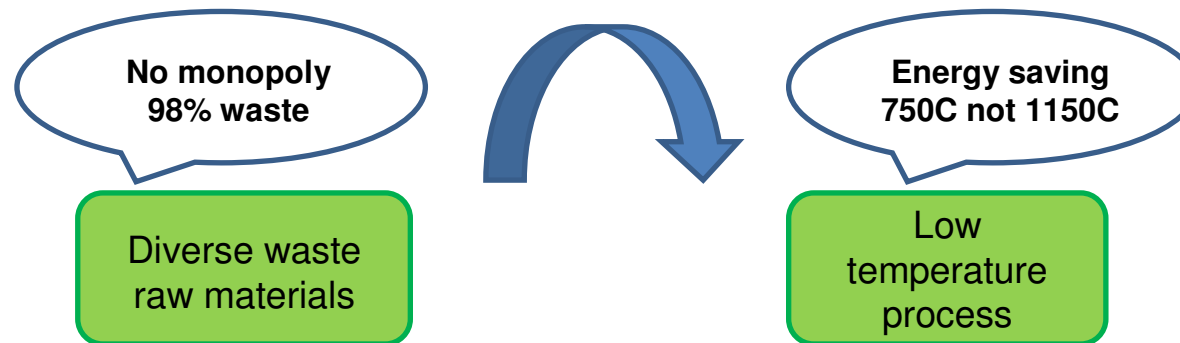
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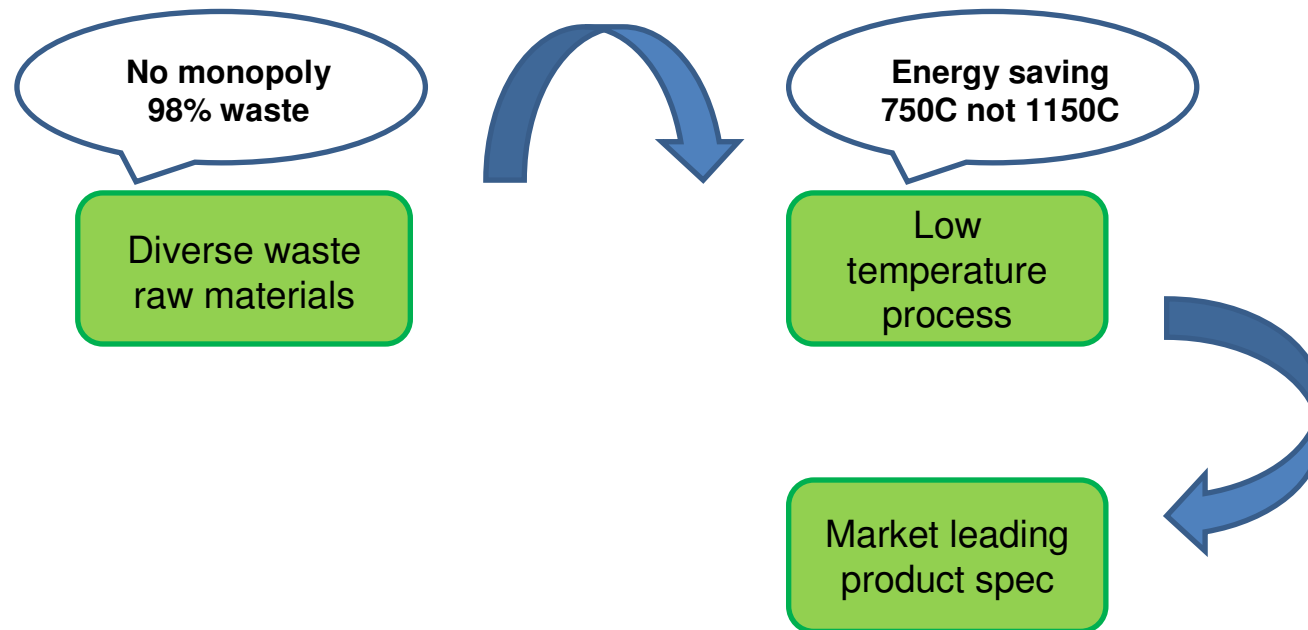
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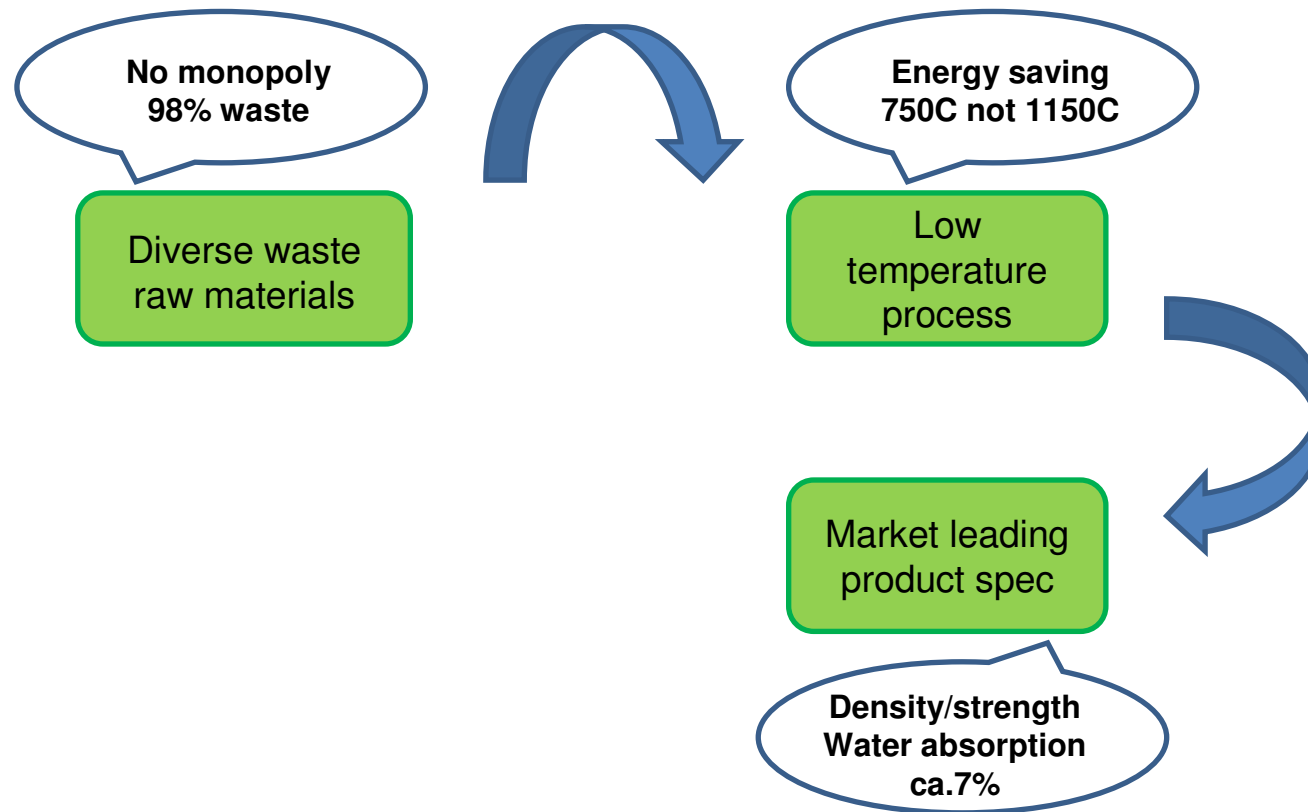
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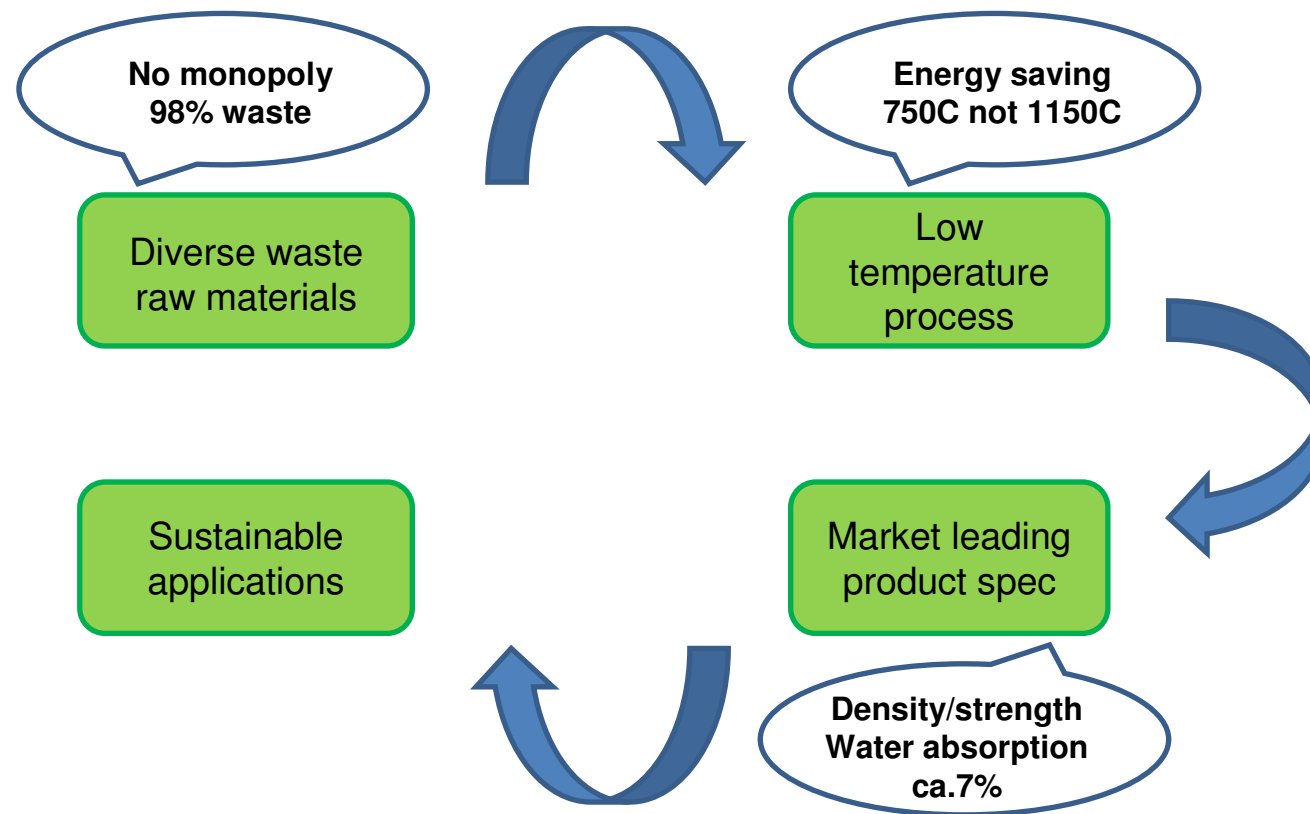
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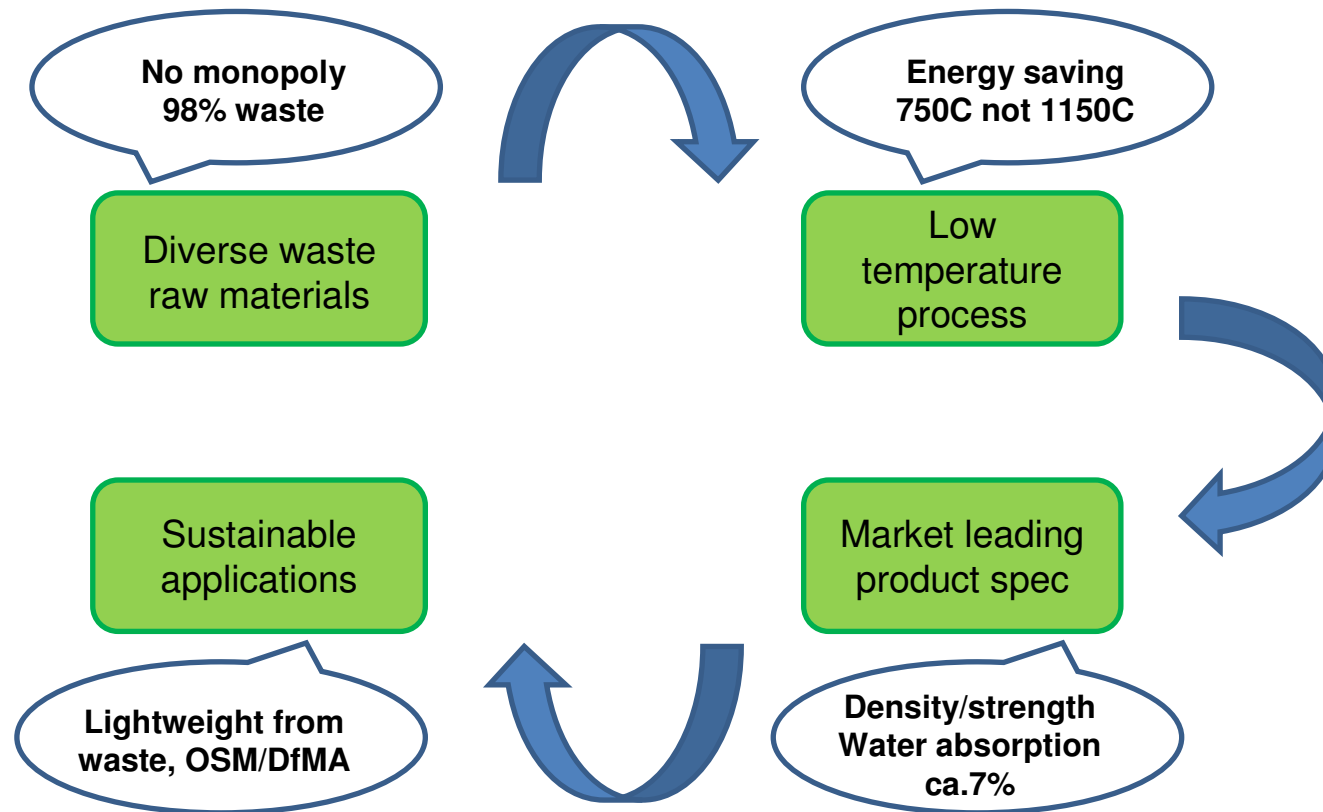
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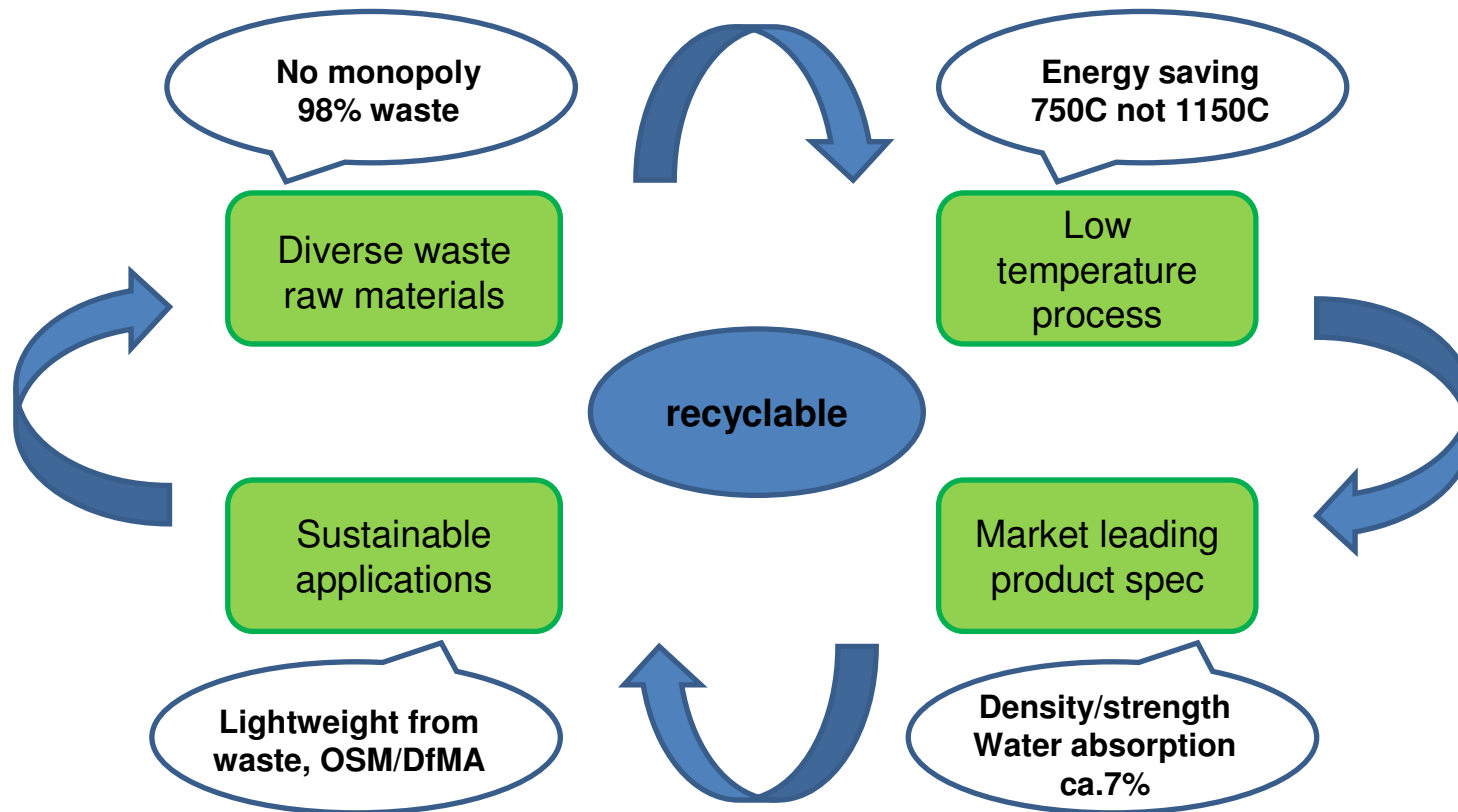
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PROCESS: PILOT PLANT



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SUMMARY PRODUCT CHARACTERISTICS

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PRODUCT COMPARATIVES - ASPIRATIONS

	<u>Expanded Clay</u>	>>> SILEC-G	<<< <u>Expanded Glass</u>
1. Dry density (kg/m3)	Low	Low	Ultra-low
2. Structural strength	High	High	Weak
3. Pore Structure	Open	Closed	Closed
4. Vitrified surface	No	Yes	Yes
5. Moisture ad/absorption	H	Low	Low
6. Thermal insulation	M	H	H
7. Acoustic insulation	M	M/H	H
8. Fire resistance	Y	Y	Y
9. Impact resistance	M	H	Low
10. Flood resistance	Yes	Yes	Yes
11. Frost resistance	Yes	Yes	Yes
12. Versatile	Yes	Yes	No
13. Inert & recyclable	Yes	Yes	Yes
14. Sustainable	Yes	Yes	Yes

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STRUCTURAL & NON-STRUCTURAL APPLICATIONS

Pre-cast
concrete

Pre-mix
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Block-
making

Screeds

Geotechnical
Fill

Drainage

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DRIVERS FOR CHANGE

- Global warming and the green agenda

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- Corporate Social Responsibility
- Economics of 'shared benefit'

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STRATEGIC ALLIANCES

TECHNICAL & SCIENTIFIC

SUPPLIERS

PROCESS
TECHNOLOGY

CUSTOMERS

COMPETITOR / COLLABORATORS

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- Project success

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- Unique commercial opportunity

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Please contact us.

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THANK YOU

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