

Concrete4Change

Reduce 2.5 Bn tonnes of CO₂ emissions

€172 Bn – Carbon Price today!

Let's make a concrete change together



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Transition to Net-Zero Concrete

Our concrete is 70% cheaper and 100% greener

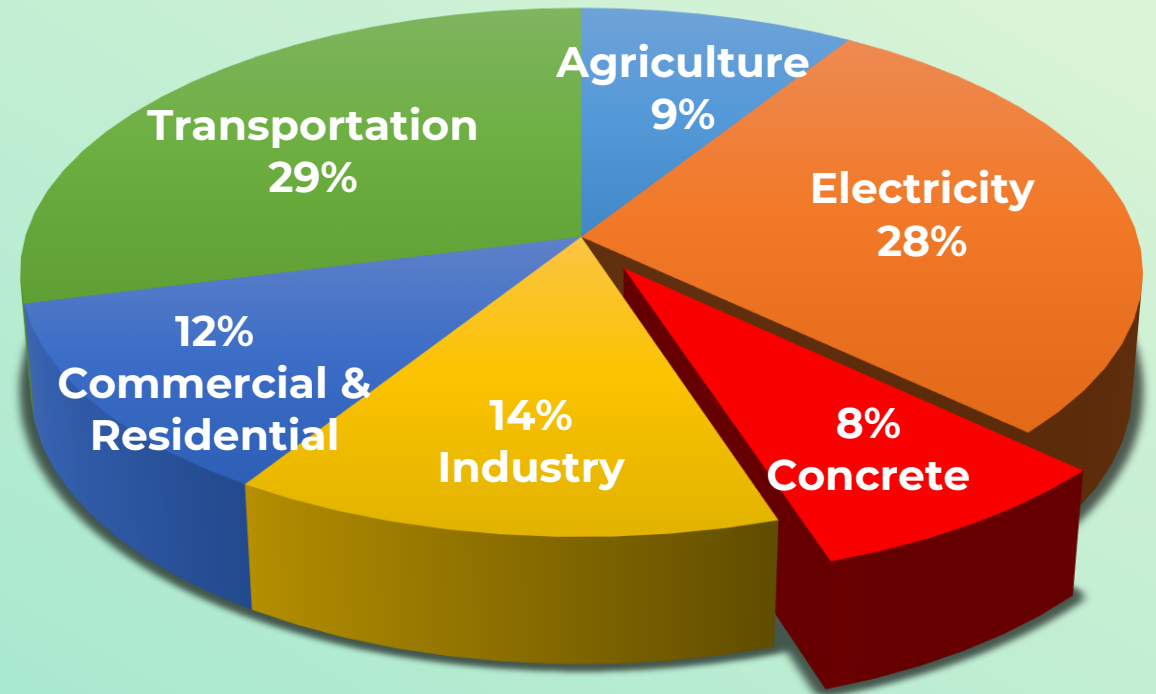
Concrete 4 Change

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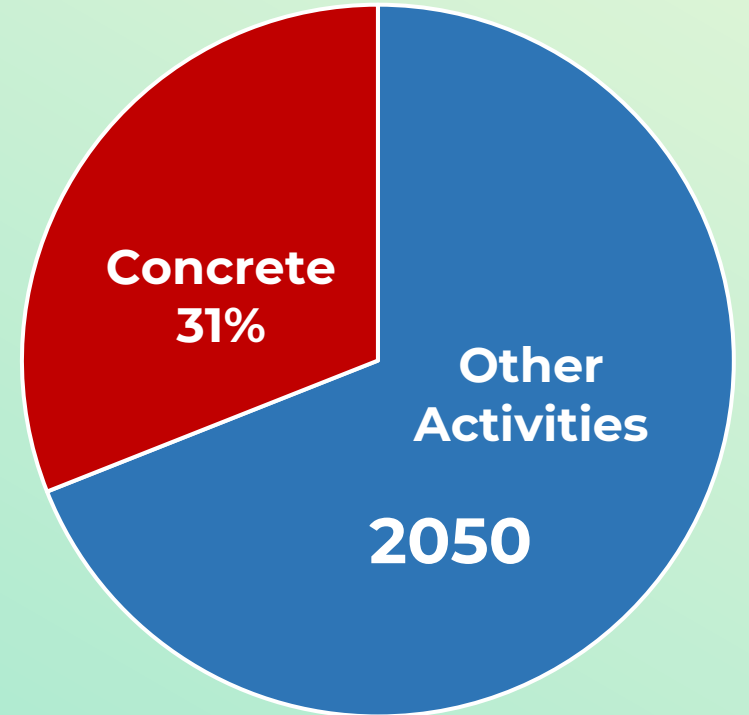
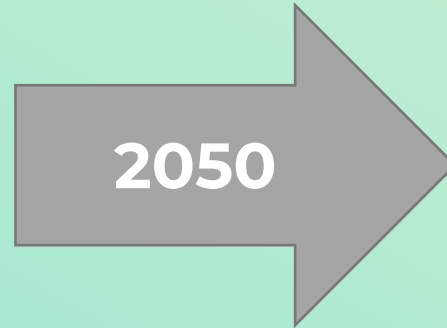
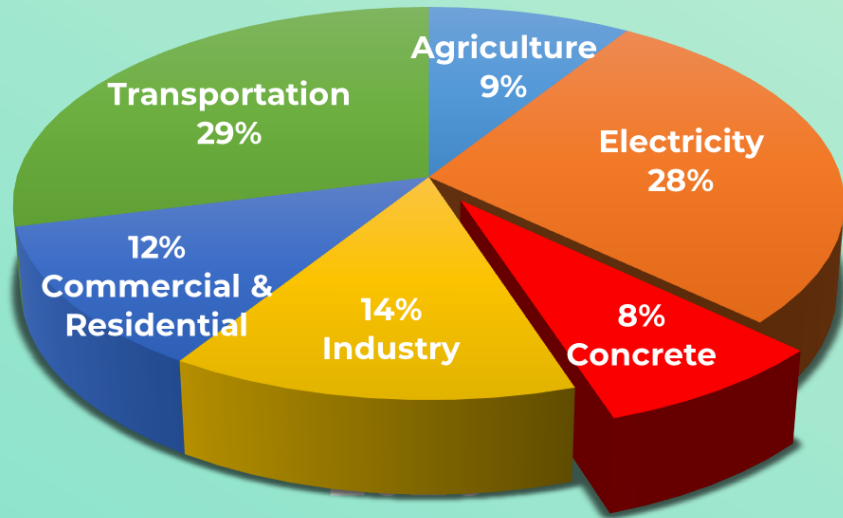


The Problem

- 8% global CO₂ emissions
- 4Bn tonnes cement : 3Bn tonnes CO₂
- 12-23% pa growth rate to 2050



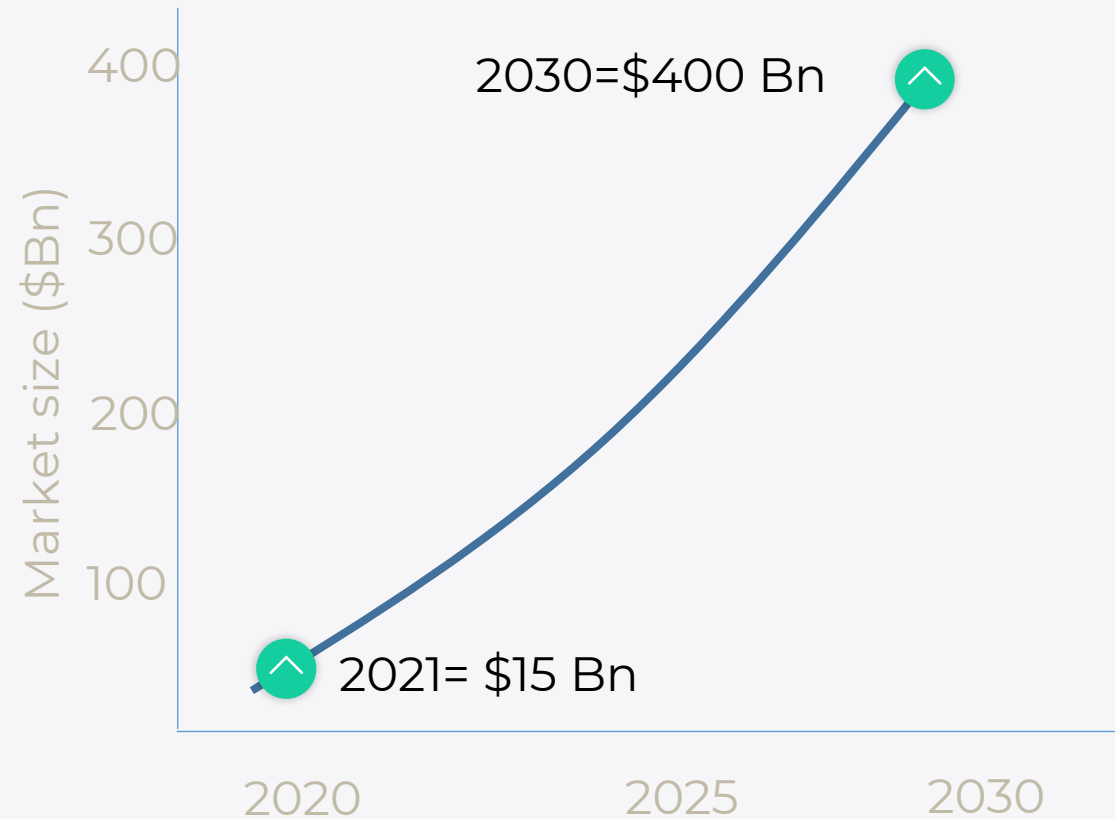
2050 Projection



Limiting warming to 1.5°C

**Industry maximum
emission reduction
(25%)**

Concrete is one of the only 2 meaningful methods of CCU



Carbon Capture and Utilisation (CCU)

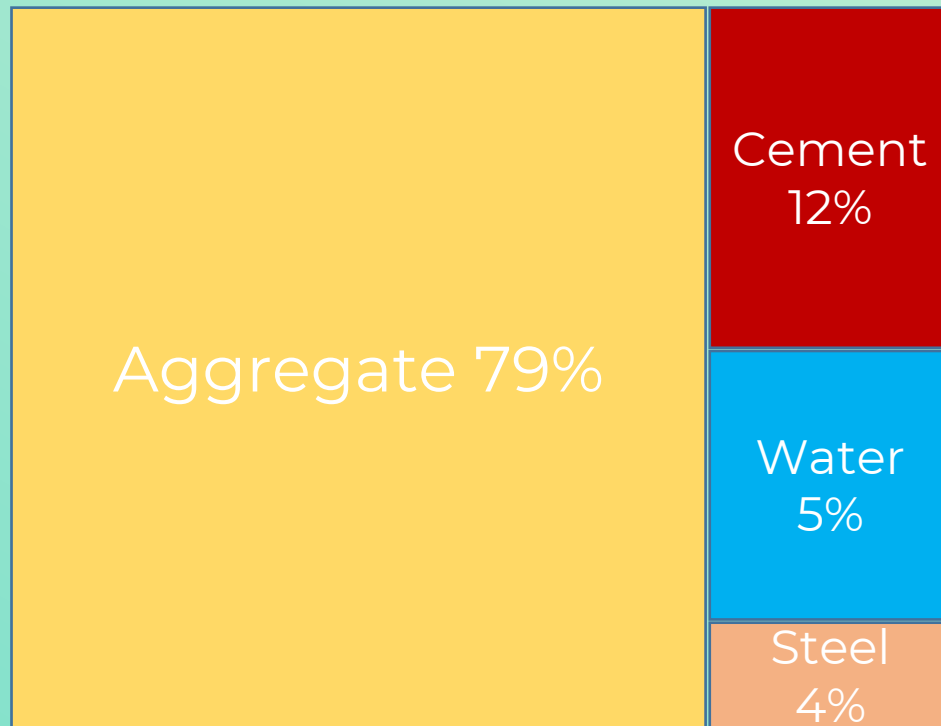
* luxresearchinc, Center for Climate and Energy Solutions, Industrial Technology Development Organization Japan

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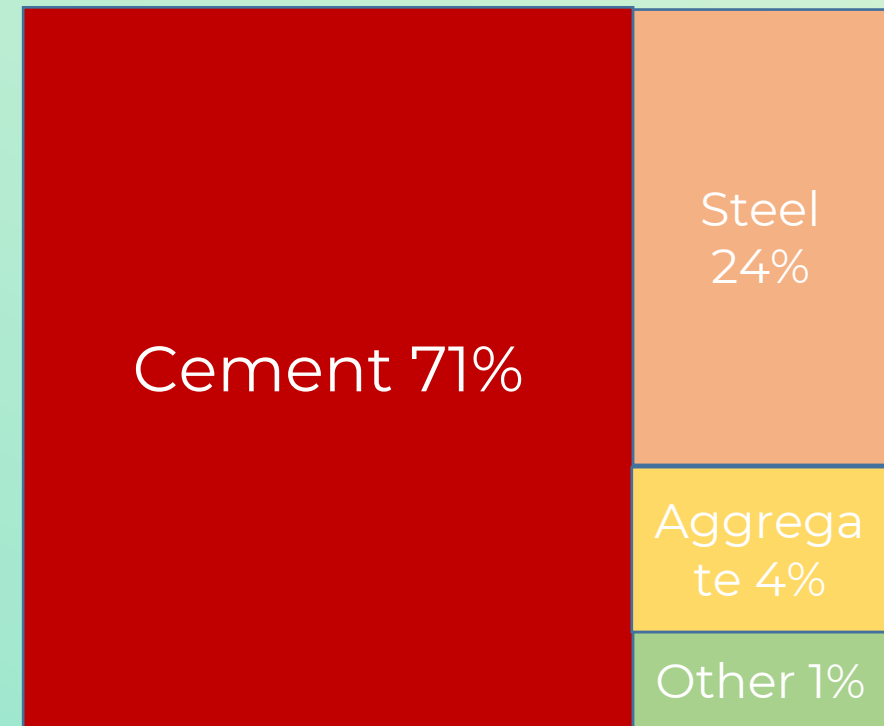


Cement, source of emission in concrete

Mix proportion of concrete



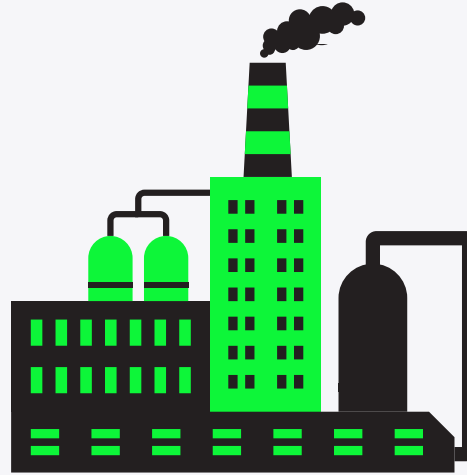
Embodied Carbon 350 kg CO₂/m³



The Solution



CO2 from any
industry



C4C Technology +
concrete



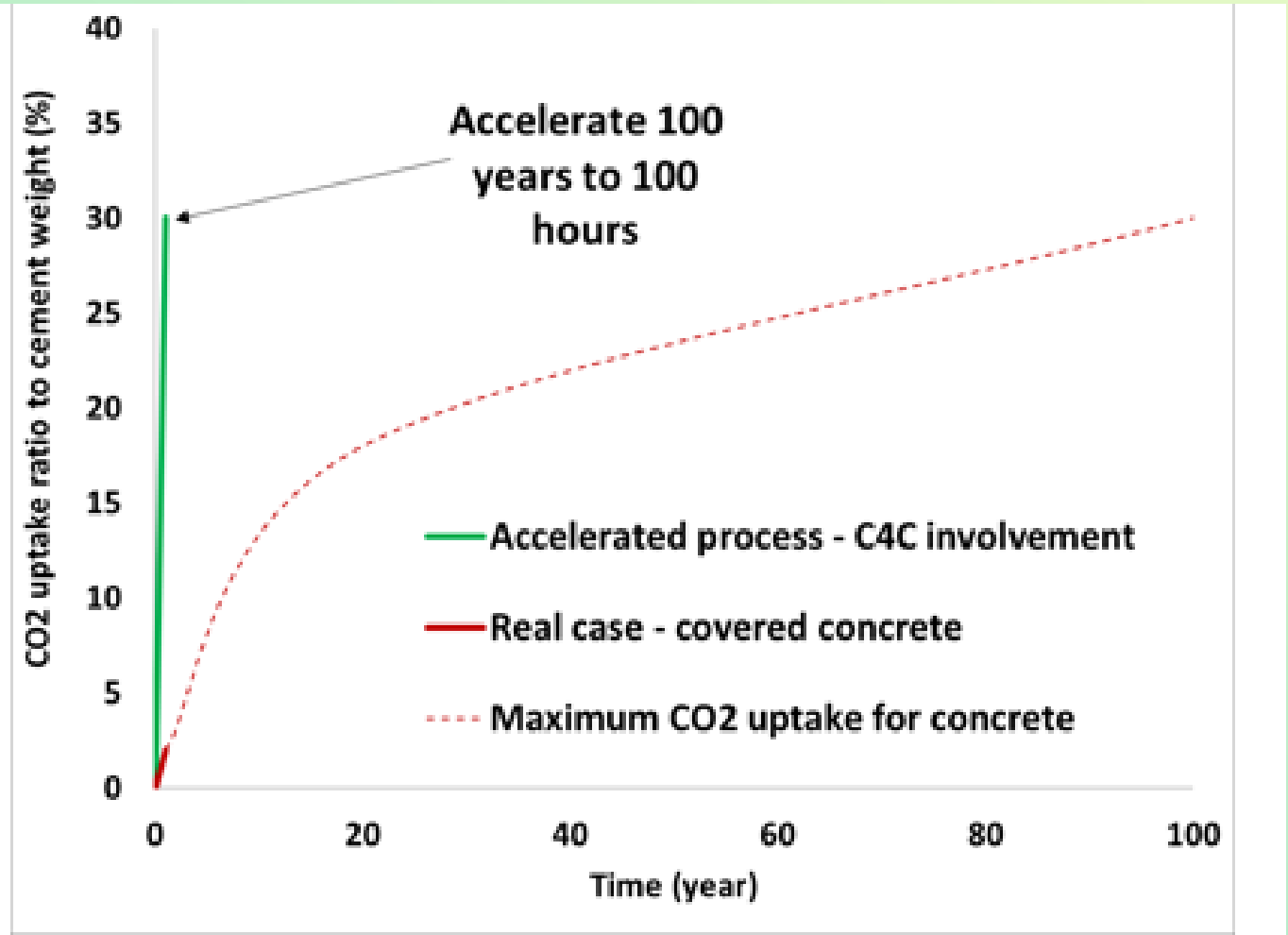
- 1- Sequestration** Permanent Mineralization
- 2- Cement reduction** Less embodied carbon

Solution

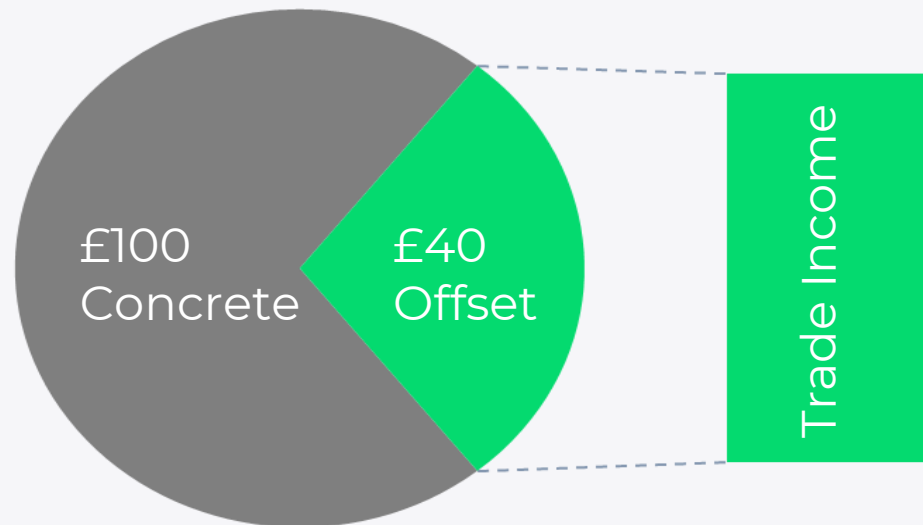
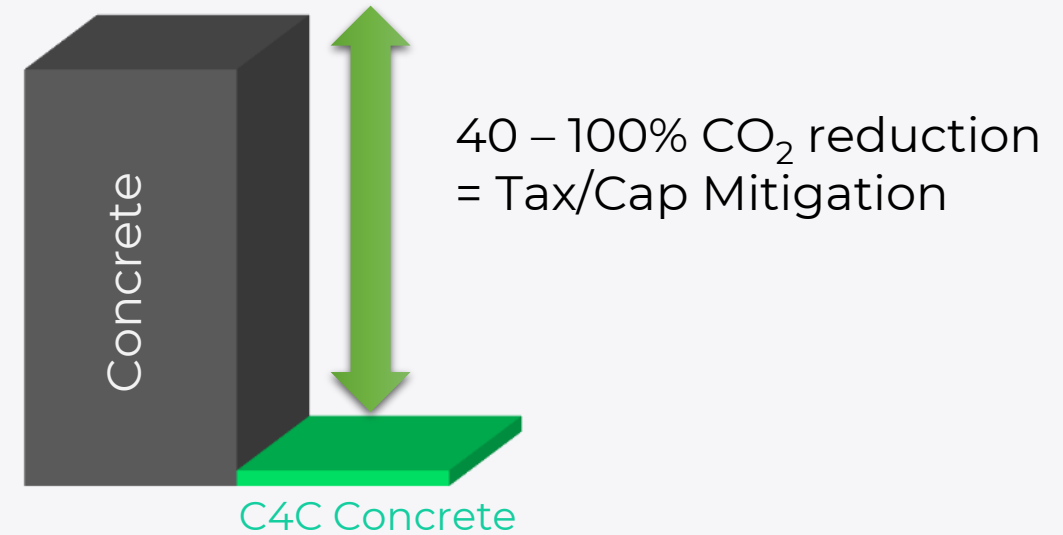
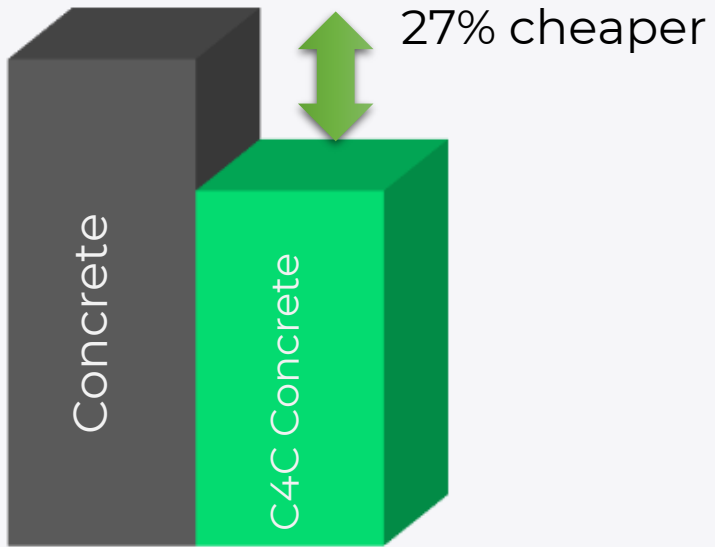
Enable
concrete
to absorb
CO₂

Reduce
embodied
carbon
40-100%

Accelerate
carbonation
from 100
years to 100
hours



Value Proposition



Every £100 of C4C Concrete
up to £40 Additional Offset
Trade Income

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Value Proposition – Building Complex



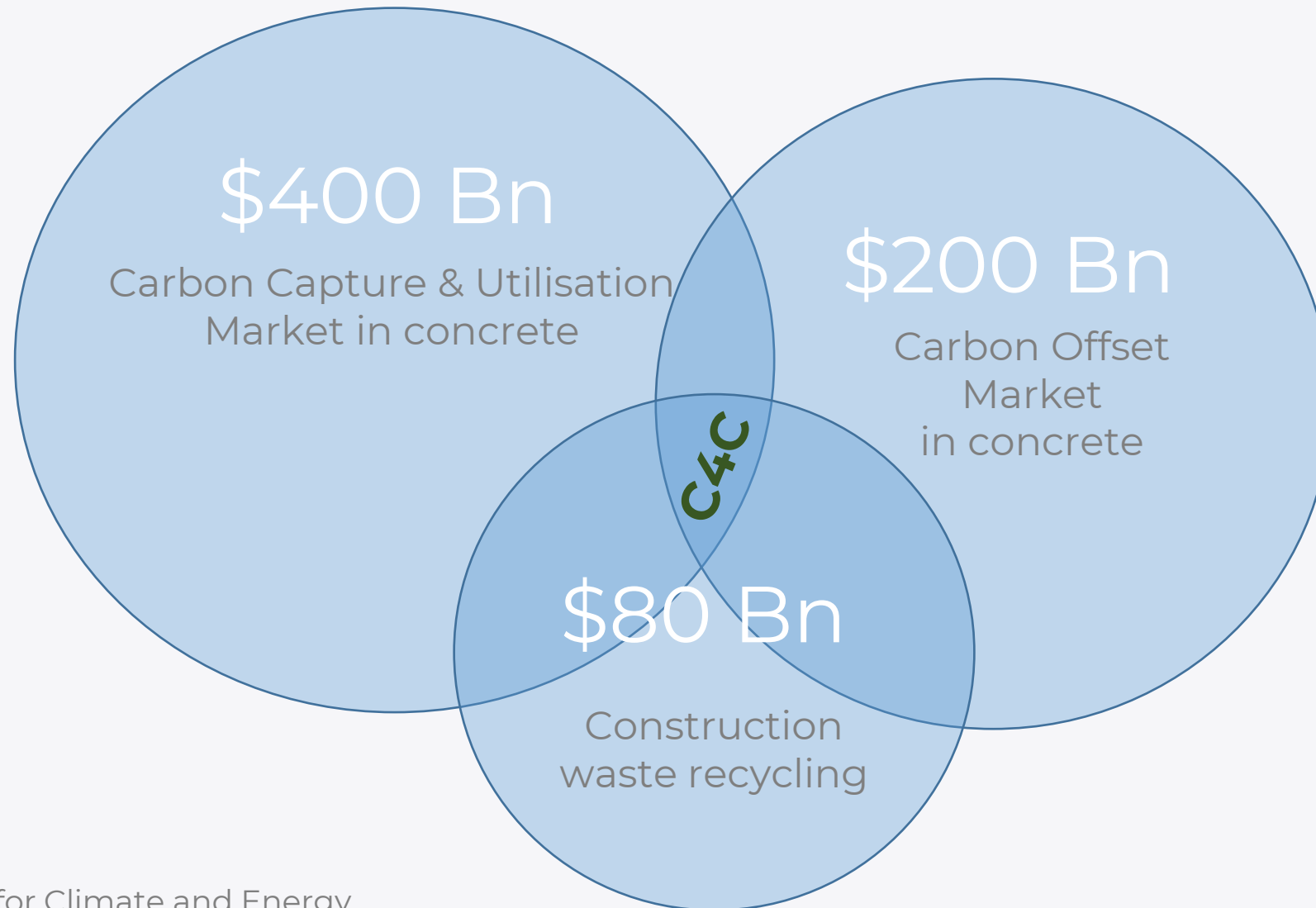
£6.9 million Savings



Traditional	100,000 m ³ concrete	C4C
£ 7 million	<i>Cost (cement reduction)</i>	£ 5 million
£ 1-3 million	<i>CO₂ tax & CO₂ Collections</i>	£ 0 – 1 million
£ 0	<i>Carbon offset</i>	£ -2.2 million
£ 9.7 million	<i>Total cost</i>	£ 2.8 million



Concrete & Cement Market 2030*



* luxresearchinc, Center for Climate and Energy Solutions, Industrial Technology Development Organization Japan

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Competitive Advantage

	Geography, EU	Ready Mix Concrete	PreCast concrete
	✓	✓	✓
	✗	✓	✗
	✗	✓	✗
	✗	✓	✗
	✗	✗	✓
	✗	✗	✓

Industrial Deployment

Supply Chain

Agreement to produce concrete



Negotiating for Proposed Road A11



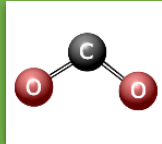
Proposed temporary floor



Technology fits with company goals



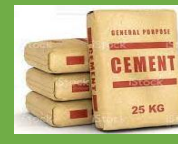

C4C technology advantages for ready-mix concrete



CO₂
Sequestration



Concrete
Strength



Cement
reduction



Concrete CO₂
reduction



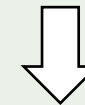
0.15%



8%



6%



4%



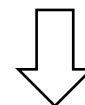
>20%



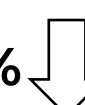
100%



40%



60%



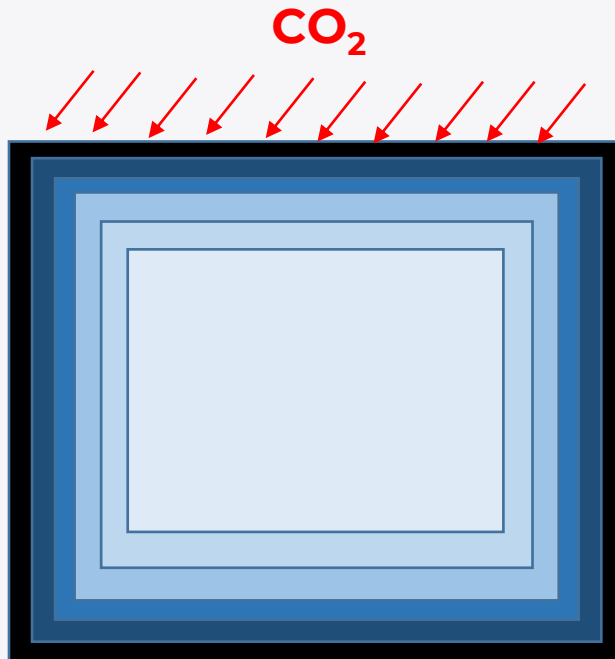
C4C technology advantages for precast concrete

C4C	Competitors
High efficiency (CO ₂ mixture)	Low efficiency (CO ₂ chambers)
Suitable for reinforced concrete (Controlled carbonation)	Not for reinforced concrete (un-controlled carbonation)
Non-purified CO ₂ (>10%)	Purified CO ₂ (95%)
Wide applications (All types of cement)	limited application (Especial cement)

Efficiency

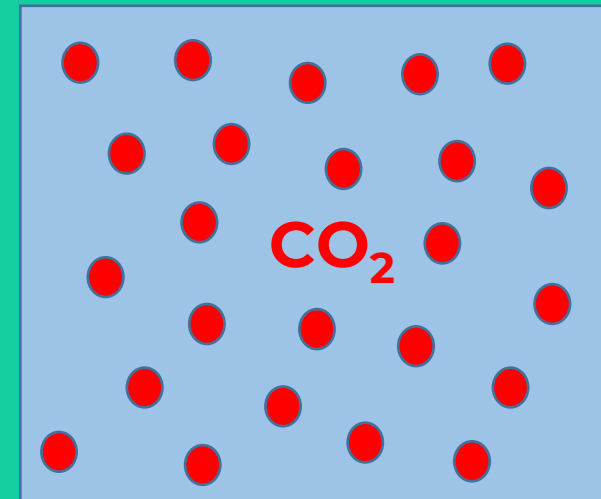
CO₂ Chamber

Not efficient method



C4C

Very efficient method



carbonation



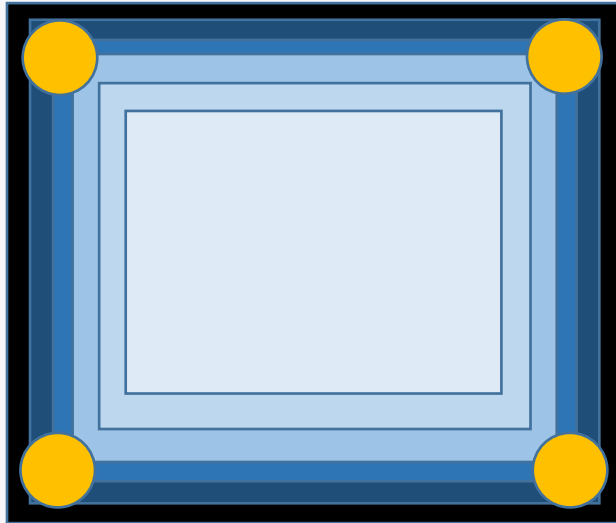
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Suitability for reinforcement

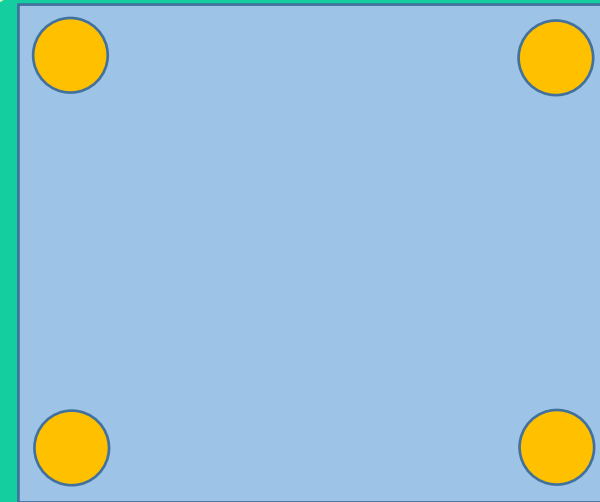
CO₂ Chamber

PH reduced significantly



C4C

PH is controlled



Carbonation 100%



PH=9

Carbonation 0%

PH=13

Climate Impact - CO₂ Mitigation (annual)



Team



CEO

Sid Pourfalah

PhD, CEng, MICE, MICT

- Established serial entrepreneur - CEO & Manager of 2 start-ups (£100 million)
- Concrete industry expert.



CTO & COO

Michael Wise

PhD, BEng (Hons)
MChemE

- 10 years experienced process technology scale-up.
- Technical lead in 3 start-ups (£18 million), Fundraising €8 million



CFO

Adam Osman

BSc

- Investment professional within Wealth Management/Private Banking – JP Morgan
- Introduced over £140million assets under management



CCO

Aisling O'Loghlen

PhD, BA (Hons) MSc, MPlan

- 10 years in climate crisis project management
- Project Manager of €10.5million Horizon 2020 Ireland £1million UKRI

Recent Achievements

KTN Transforming
Foundation
Industries



UN COP26, Most Innovative
NetZero Project



Latin America Net
Zero (£50k)



Innovate Edge Grant
(£100k)



Climate-KIC Top 10
project (£100k)



COP-26, Showcase



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