

Betonhuis

BPN

De markt van cement en beton in Nederland





six chapters in the Betonhuis

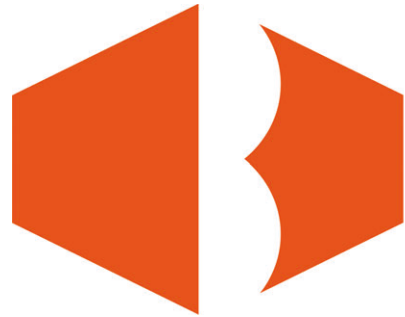
- paving blocks
- housing blocks
- readymix concrete
- sewage companies
- cement industry left last year
- big precasters (Consolis, Byldis, CRH)
- small precasters 50 family companies
 - working group 100 kg CO₂/m³



Geopolymer Camp 2024

results research group 100 kg

9-7-2024



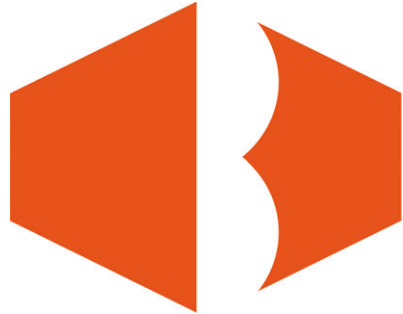
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Working group objective

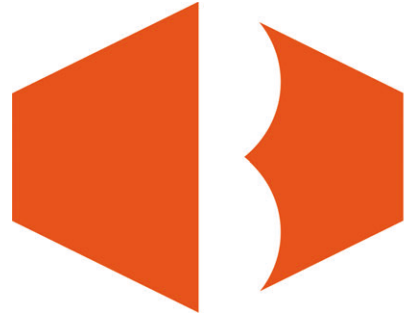
To find suitable, competitive and environment-friendly concrete mixtures with a footprint ≤ 100 kg/m³ with an environmental class XC4/XD3/XF4 and concrete strength class C45/55. The performance of these mixtures should be comparable to the SCC mixtures currently used in our plants.



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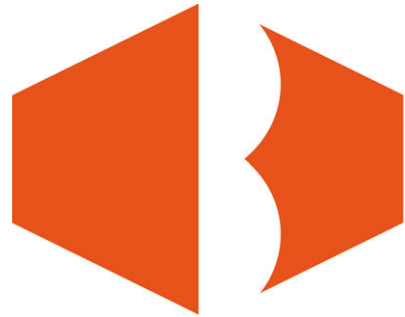
Research program working group 100 kg CO₂/m³

Technologie		Precursor or filler >				
Activatoren	code	Active Silicium	A=limestone	B=GBBS	C=Calcined Clay	D= WCB
Portland cement	GB120			CEM III B 42,4		
Portland cement	GB150			ACT cement		
Portland cement	LC3-50				LC3-50 AC	
NaOH + Na ₂ SiO ₃	GPB100			GPB100B	GPB100C	
GPB met Geosil 34417	GPB200			GPB200B	GPB200C	GPB200D
GPB met Geosil 14517	GPB250			GPB250B	GPB250C	GPB250D
Geoprime / Betolar	GPB300			GPB300B		
Sqape	GPB400			GPB400B		



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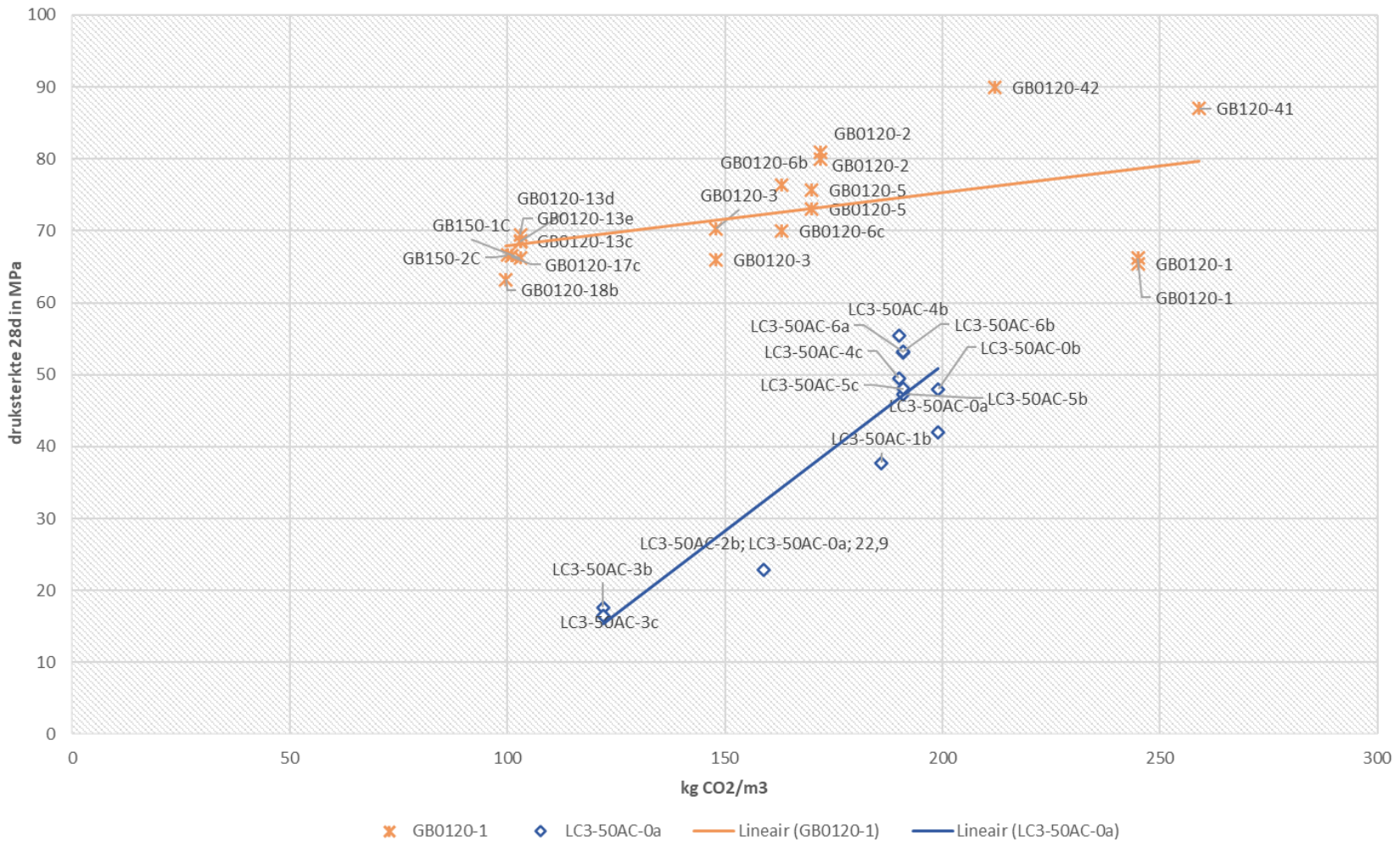




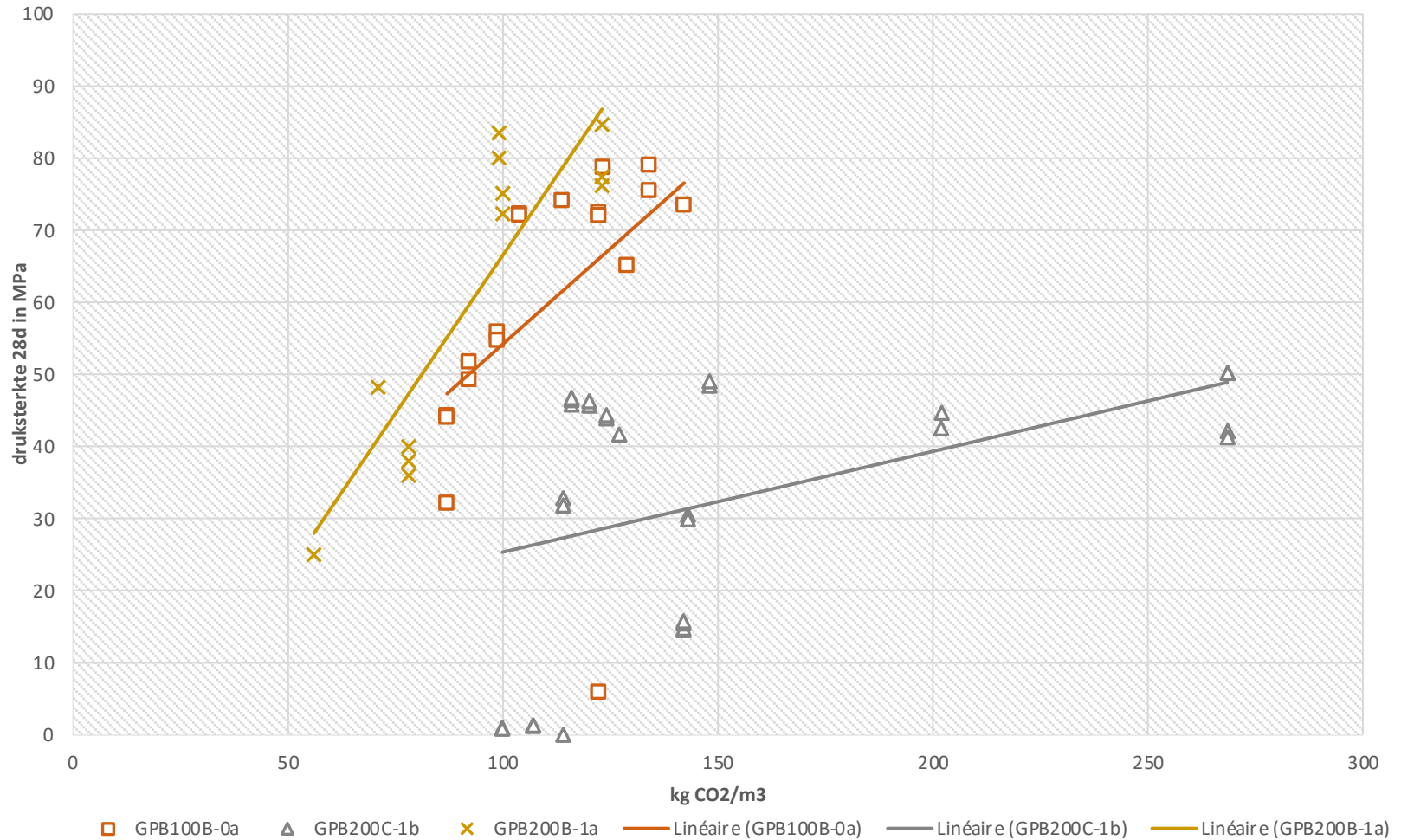
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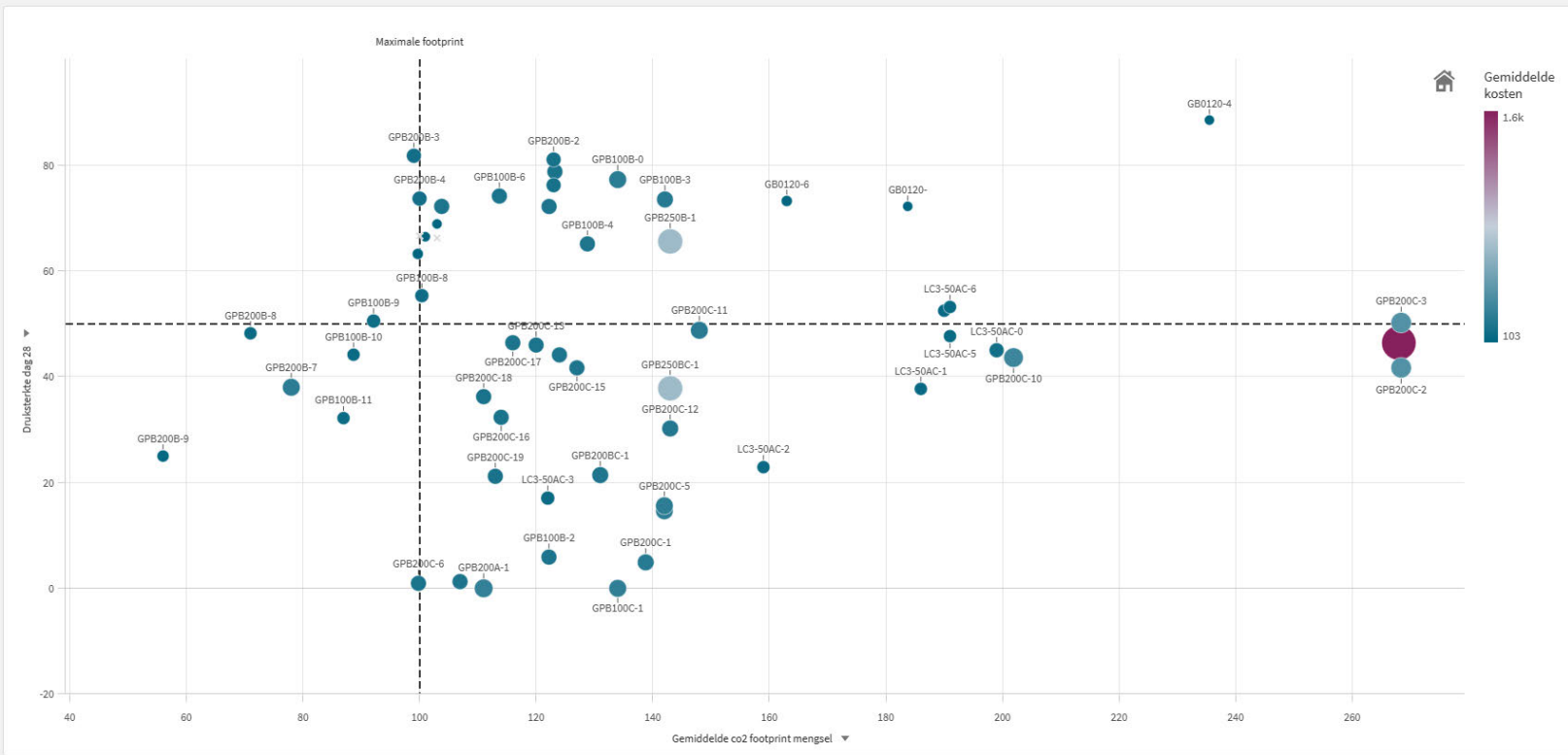
Korte termijn mogelijkheden GB120, GB150, LC3-50 druksterkte 28D in relatie tot CO2 footprint



Lange termijn mogelijkheden Geopolymeren druksterkte 28D in relatie tot CO2 footprint



Betondichtheid



Dimensie

- Familie
- Mengsel
- Kubus

Recommendations

- 1) Improve existing mixture
- 2) Develop a new ZVB Martin Hunger "the limit for CEM III B "
- 3) Conduct research on the boundary conditions of the CEM III B
- 4) Continue to develop LC3-50 as an alternative to blast furnace slag
- 5) Continue research on AAC
- 6) Continue to develop Geopolymer concrete
- 7) Information
- 8) Better follow developments in the world (college and university)



thank you for listening

[The birth of a new concrete.mp4](#)

a cementless and GBBS-less concrete

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The birth of a new concrete

cementless and GGBS- less concrete