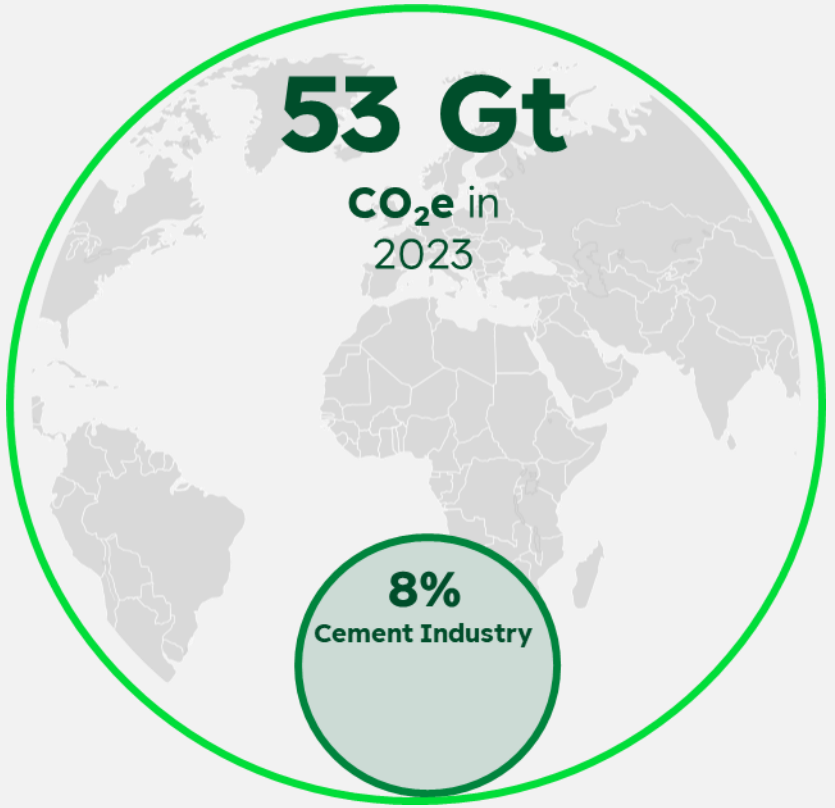

Sostenibilidad XXL en la industria de la construcción
Heidelberg Materials

El sector cementero es responsable del 8% de las emisiones globales de GEI

Las emisiones de CO_2 son una parte irremediable en el proceso de producción del clinker portland





El sector cementero español consumió 2’8 Mt de materias primas recicladas y 1’1 Mt de CDRs en la fabricación del clínker (2024)

Las emisiones de CO_2 son una parte irremediable en el proceso de producción del clínker portland



Pero acometemos acciones para minimizarlas en su fabricación y la del cemento portland

Utilizando fuentes renovables o alternativas de energía para reducir los combustibles fósiles

Incluyendo adiciones para reducir el contenido de clinker en el cemento

Añadiendo tecnologías de captura y almacenamiento de carbono para reducir las emisiones que no se eliminaron

¿Cómo se puede minimizar la huella de carbono embebida en el sector de la construcción?

	Tipo de cemento	Composición declarada (K/L/V/S)				Indicador de circularidad	Cemento GWP A1-A3 (kgCO2e/t)		Hormigón preparado GWP A1-A3 (kgCO2e/m3)		GRT (GCCA)	evoBuild CC GWP A1-A3 (kgCO2e/t)		evoZero GWP A1-A3 (kgCO2e/t)	
	DAP sectorial (Fck=35 MPa ANEFHOP)						662		287		D				
	CEM I 52,5 R (<2021-2027)	98%	-	-	-	16%	682	3%	263	-9%	D	381	-42%	54	-92%
	CEM II/A-V 52,5 R (2023-)	88%	-	11%	-	22%	626	-5%	246	-14%	D	356	-46%	63	-91%
evoBuild	CEM III/A 52,5 L PM-ES-CP1 (2025-)	40%	-	-	60%	>60%	308	-53%	162	-43%	C	185	-72%	52	-92%
evoBuild	CEM IV/A (V) 52,5 R-SR (2024-)	75%	-	23%	-	36%	560	-15%	227	-21%	D	330	-50%	80	-88%
evoBuild	CEM II/B-M (V-L) 42,5 R (2023-2027)	75%	9%	16%	-	28%	533	-19%	236	-18%	D	303	-54%	53	-92%
evoBuild	CEM II/C-M (V-L) 42,5 R (2025-)	59%	11%	30%	-	36%	450	-32%	209	-27%	C	268	-59%	72	-89%
evoBuild	III/A 42,5 N/SRC (<2021-)	56%	-	-	41%	48%	421	-36%	199	-31%	C	249	-62%	62	-91%
evoBuild	CEM II/C-M (V-L) 32,5 R (2022-)	54%	18%	28%	-	33%	424	-36%	221	-23%	C	258	-61%	78	-88%
evoBuild	V/A (S-V) 32,5 N/SRC (<2021-)	50%	-	21%	24%	50%	378	-43%	198	-31%	C	224	-66%	58	-91%
	evoBuild CC CEM II/C-M (V-L) 42,5 R	59%	11%	30%	-	36%	268	-59%	149	-48%	B				
	evoZero CEM II/C-M (V-L) 42,5 R	59%	11%	30%	-	36%	72	-89%	85	-70%	A				

Distancia de transporte del cemento al punto de consumo (kms.) 30

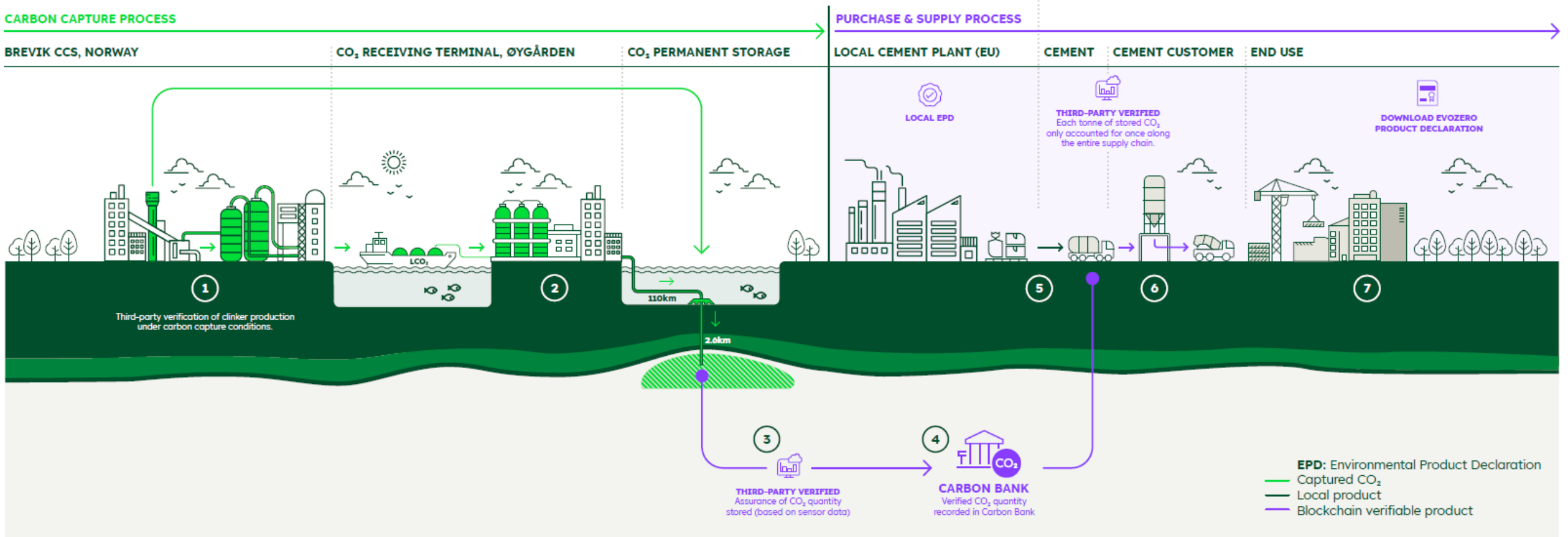
Heidelberg Materials' Carbon Bank
evoZero Carbon Captured

Track the entire journey of your evoZero material via the Carbon Bank

Heidelberg Materials uses Environmental Attribute Certificates (EACs) to track and allocate the CCS benefits to cement products. The generation of EACs is tied to the production of clinker under carbon capture conditions at Brevik. Each tonne of clinker produced under CCS conditions carries an emission reduction of 307.3 kg CO_2eq./t clinker compared to non-CCS operations. Therefore, each EAC carries a reduction of 307.3 kg CO_2 eq./t clinker.

1. Clinker production and carbon capture.
2. Shipment and permanent storage of captured CO_2.
3. Third-party verification of clinker produced under carbon capture conditions and volumes of permanently stored CO_2.
4. Registration in the carbon bank.
5. Upon purchase of evoZero Carbon Captured, the Global Warming Potential (GWP) specified in the local plant's Environmental Product Declaration (EPD) is balanced by Environmental Attribute Certificates (EACs) from the Carbon Bank. The required EACs are calculated based on the GWP stated in the EPD of the corresponding local product.
6. After delivery and invoicing of evoZero, a Carbon Bank withdrawal is triggered.
7. An evoZero Product Declaration may now be issued and included as a voluntary disclosure in customers' sustainability reporting.

evozero
Carbon captured near-zero cement



Disclaimer: Chain of custody models are not part of EPDs. Carbon reductions will be provided by an evoZero Product Declaration. 'Carbon reductions' refers to the volumes of carbon permanently stored, calculated as the total amount of CO_2 stored minus the CO_2 emissions generated across the CCS value chain.