BATIÇİM
2025-2053
CLIMATE ACTION PLAN:

5C DECARBONIZATION ROADMAP

BATI ANADOLU BATIÇİM BATISÖKE BATIBETON BATILİMAN BATIENERJİ

1C Clinker

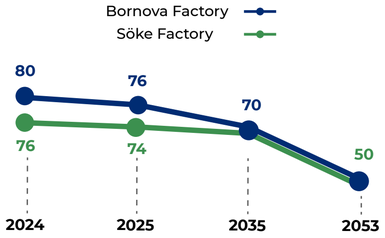
Future Plan: CCUS – Carbon Capture, Utilization and Storage: In the long term, the secure storage of captured CO_2 or its redirection to areas of use such as synthetic fuel and chemical production is considered a crucial tool in Batıçim's net-zero journey.

Fuel Change Switching: The target is **30%** in 2035, **50%** in 2040, and 2053. The goal is to reach a replacement rate of **60%**. In this context, the construction of a waste preparation facility at the Söke factory has been initiated, with a target date of 2025.

Reducing the Clinker/Cement Ratio: Key steps include increasing the share of limestone-based cements (PLCs) in production, switching to cement types with higher admixture content, and adopting new generation binder technologies.

Thermal Efficiency: The target is to reduce waste heat utilization by **20%** in 2035 and by 2053. The goal is to increase it to **25%**. In this context, an investment in 25,000 MWh / Year Waste Heat Recovery (WHR) at the Söke factory has been initiated for 2025 .

Target Credit/Corporate Factor (%)

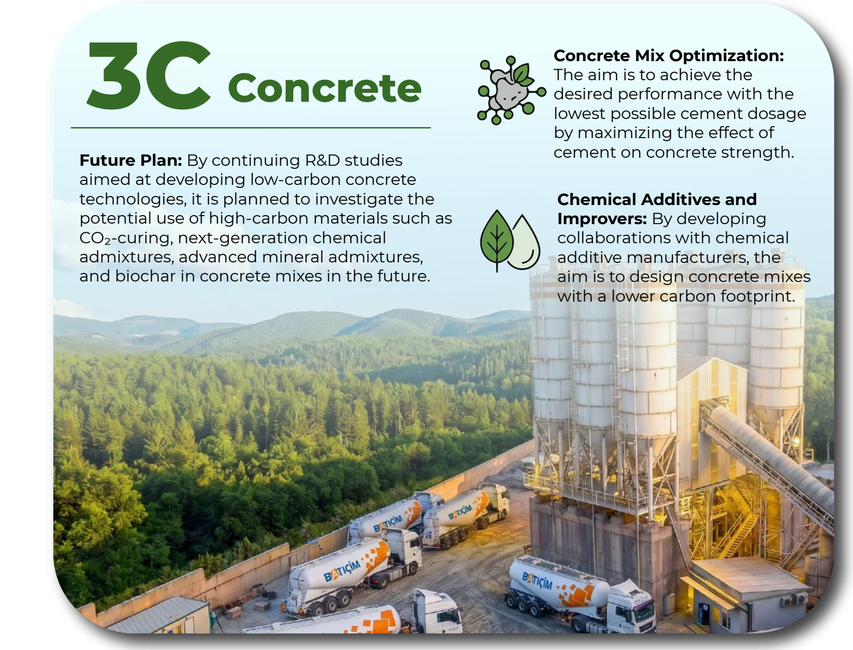


2C Cement

Future Technologies: For 2040 and beyond, innovative options such as CO_2-cured concrete products, MgO-based cements, or geopolymer binders will be evaluated as potential pilot application areas, depending on technological developments.

Complementary Cement Materials Strategy (CCM): We are outlining a transformation path that is consistent with the long-term clinker/cement ratio target of **25%** CCM by 2035 and **40%** CCM by 2053.

Limestone Cement and New Binders: The widespread adoption of PLCs and the evaluation of alternative coupling technologies are seen as significant opportunities to reduce the carbon intensity of the product portfolio.



3C Concrete

Future Plan: By continuing R&D studies aimed at developing low-carbon concrete technologies, it is planned to investigate the potential use of high-carbon materials such as CO_2-curing, next-generation chemical admixtures, advanced mineral admixtures, and biochar in concrete mixes in the future.

Concrete Mix Optimization: The aim is to achieve the desired performance with the lowest possible cement dosage by maximizing the effect of cement on concrete strength.

Chemical Additives and Improvers: By developing collaborations with chemical additive manufacturers, the aim is to design concrete mixes with a lower carbon footprint.

4C Construction

Future Opportunities: The aim is to expand circular economy practices in construction processes and increase the use of recycled materials.

Material Efficiency & Circular Economy: In this context;

- Practices such as recovering returned concrete
- Using surplus concrete as aggregate
- Utilizing demolition concrete in new projects stand out.

5C Carbon Uptake

Carbon Sequestrant Products: In the 2053 vision, carbon-negative concrete products using aggregates containing biochar or directly captured CO_2 may be possible.

CO_2 Absorption through Concrete Carbonation: The ability of concrete to absorb a certain amount of CO_2 over time through carbonation is considered a natural carbon sink effect in the industry.

Expanding Carbonation Curing: As the technique of trapping significant amounts of CO_2 in prefabricated concrete through CO_2 curing becomes more widespread (after 2040), joint projects can be undertaken with prefabrication customers who supply cement.