

Overview of Pakistan's cement sector & SPAR6C Sector Report

22 October 2025

Jonas Hagen, PhD
Sustainability Specialist



Ministry of Climate Change
and Environmental Coordination
Government of Pakistan

SPAR6C
Supporting Preparedness for
Article 6 Cooperation

Sectoral Study

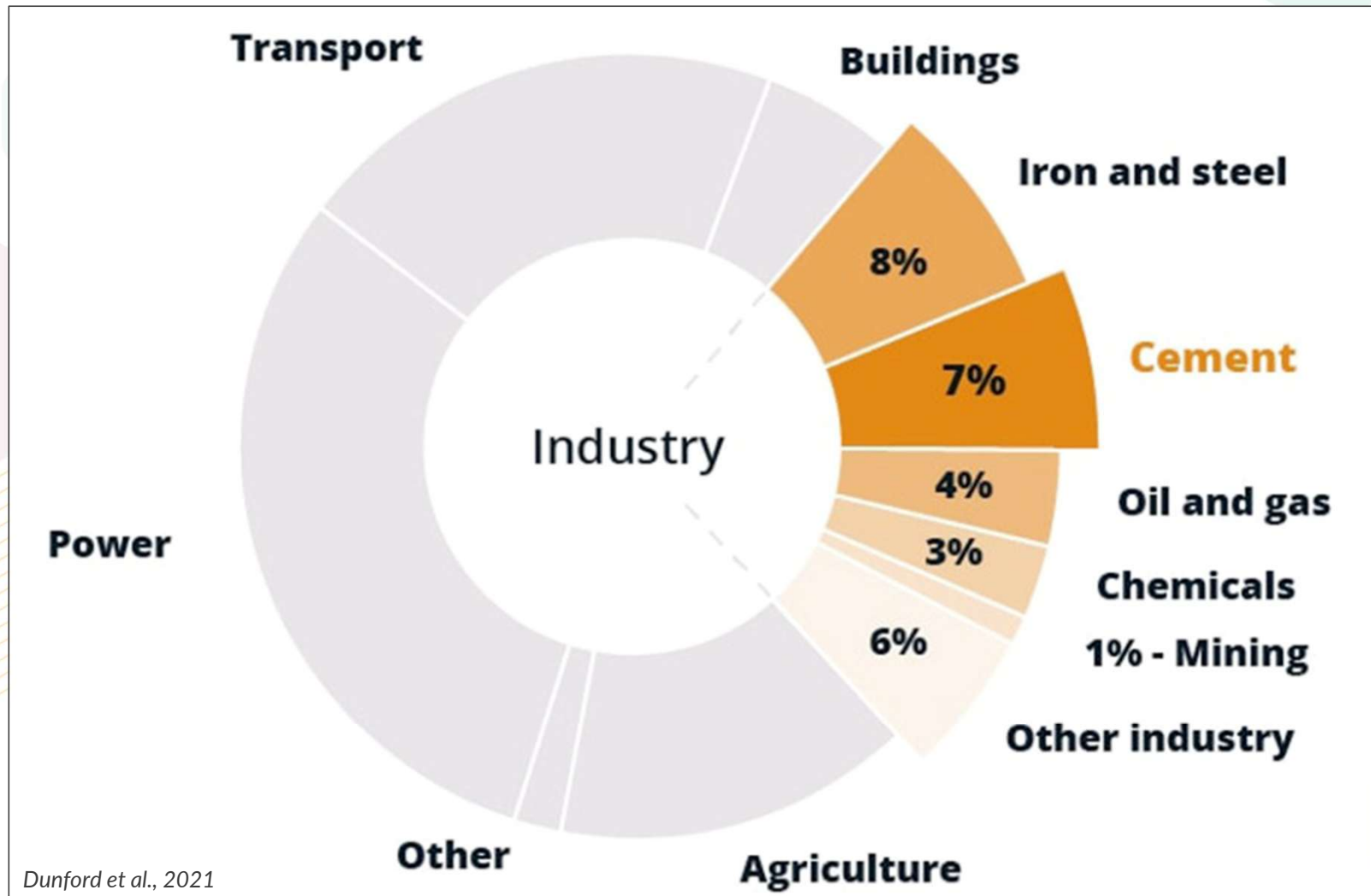
Decarbonization of Pakistan's Cement Sector: Technologies, Policy Options, and Carbon Market Opportunities



copenhagen
climate centre



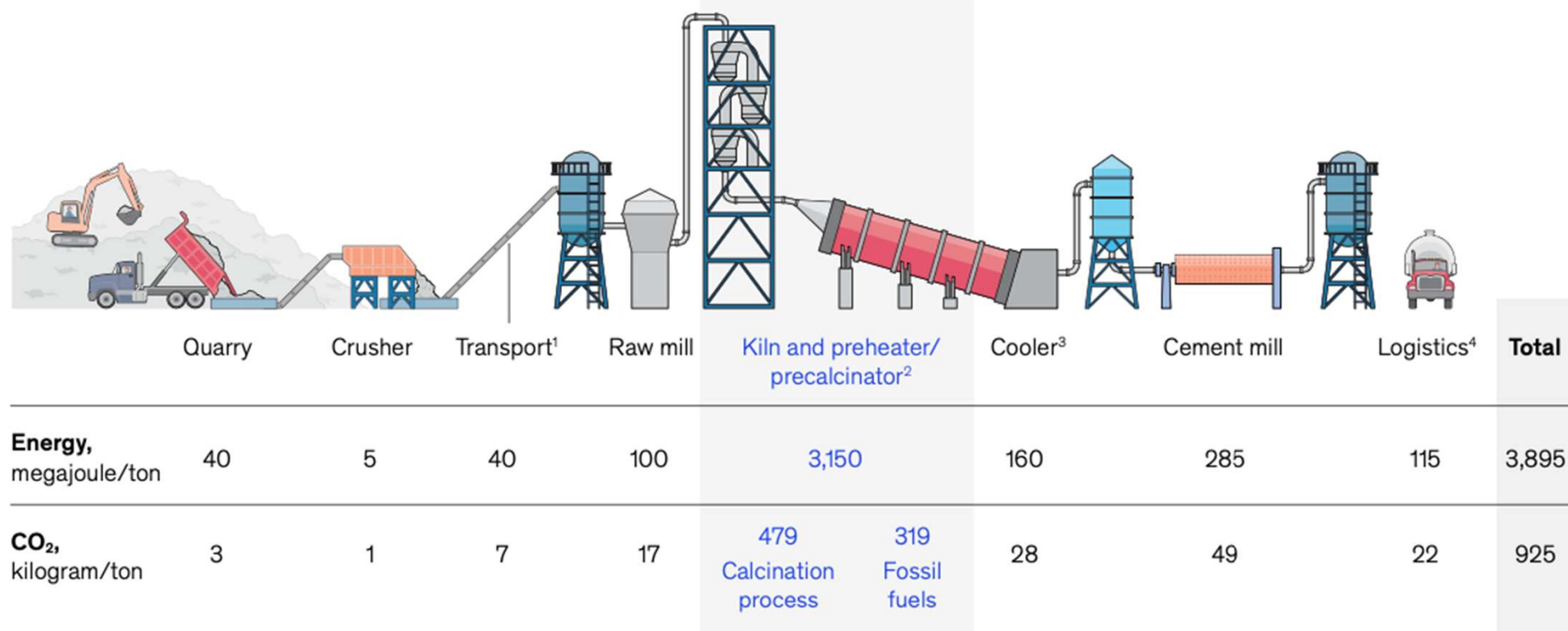
SPAR6C
Supporting Preparedness for
Article 6 Cooperation



Dunford et al., 2021

Raw materials, energy, and resources

Clinker and cement manufacturing



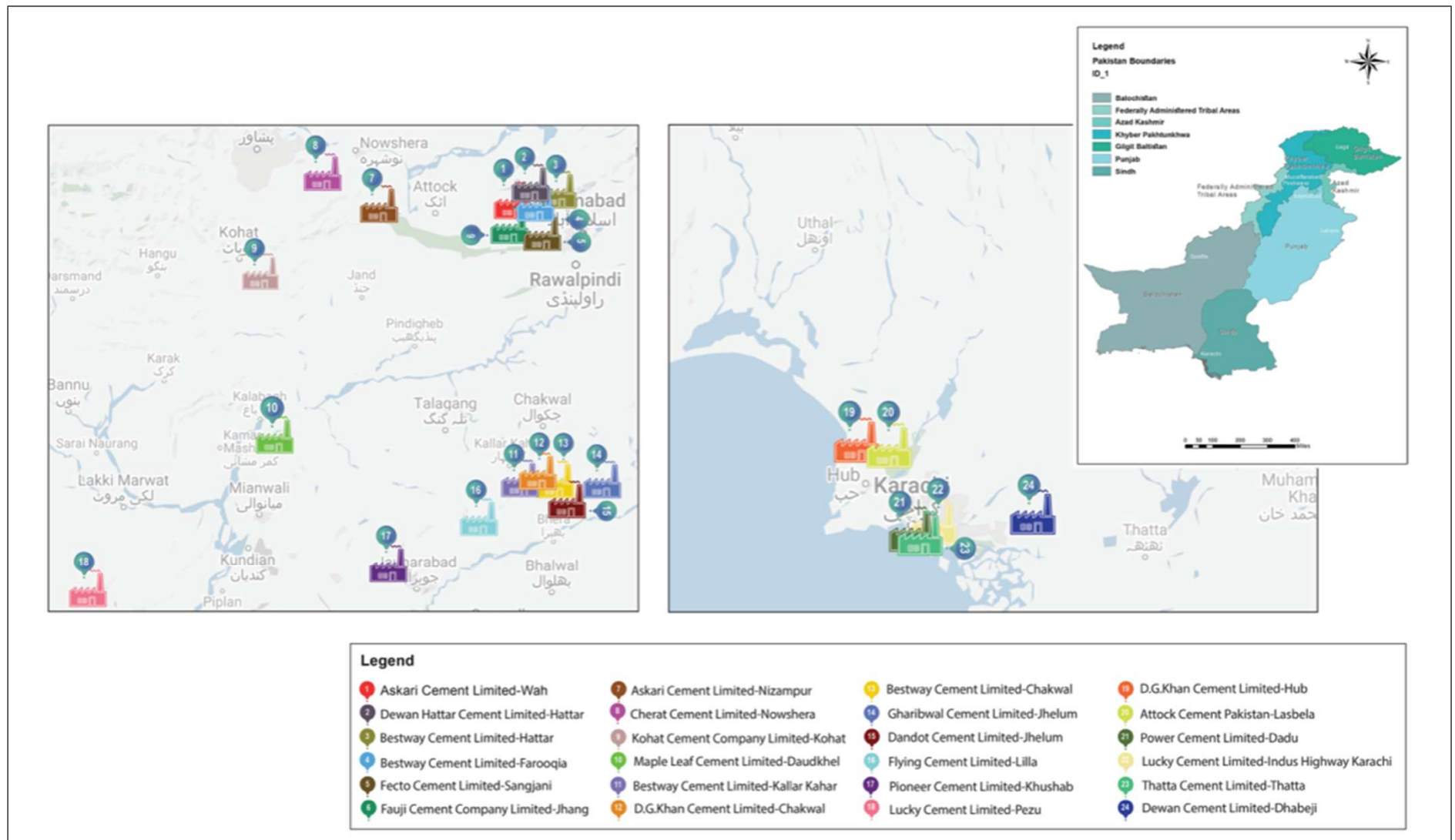
¹ Assumed with 1kWh/t/100m.

² Assumed global average, data from the Global Cement and Concrete Association, Getting the Numbers Right 2017.

³ Assumed reciprocating grate cooler with 5kWh/t clinker.

⁴ Assumed lorry transportation for average 200km.

McKinsey Report **Laying the foundation for
zero-carbon cement**



Rasheed, R., Tahir, F., Afzaal, M., & Ahmad, S. R. (2022). Decomposition analytics of carbon emissions by cement manufacturing—a way forward towards carbon neutrality in a developing country. *Environmental Science and Pollution Research*, 29(32), 49429–49438.

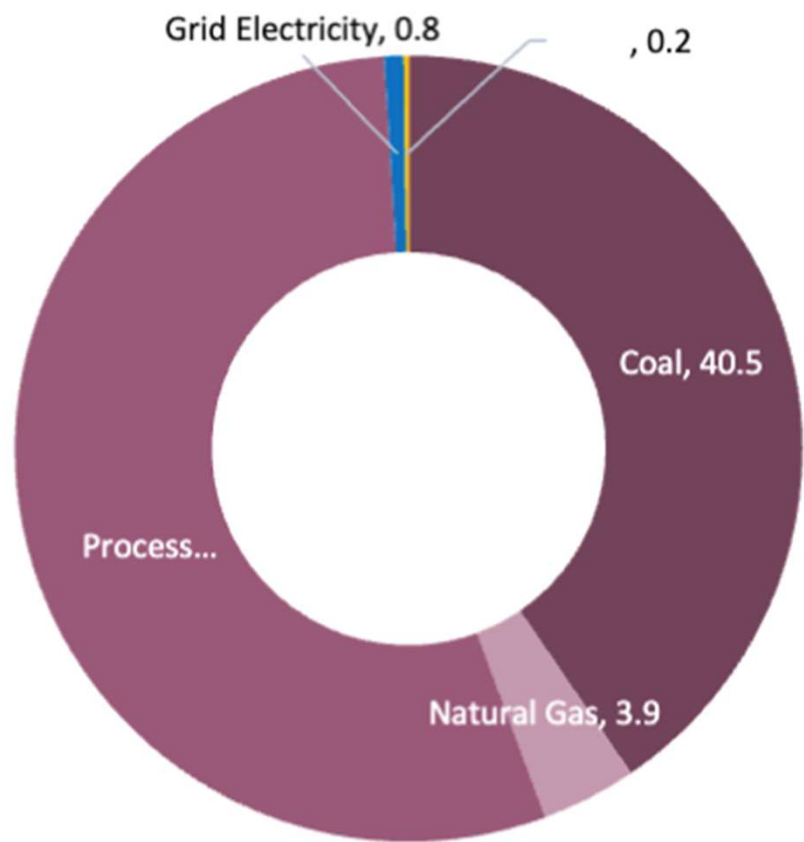


<https://www.dgcement.com/plants.html>

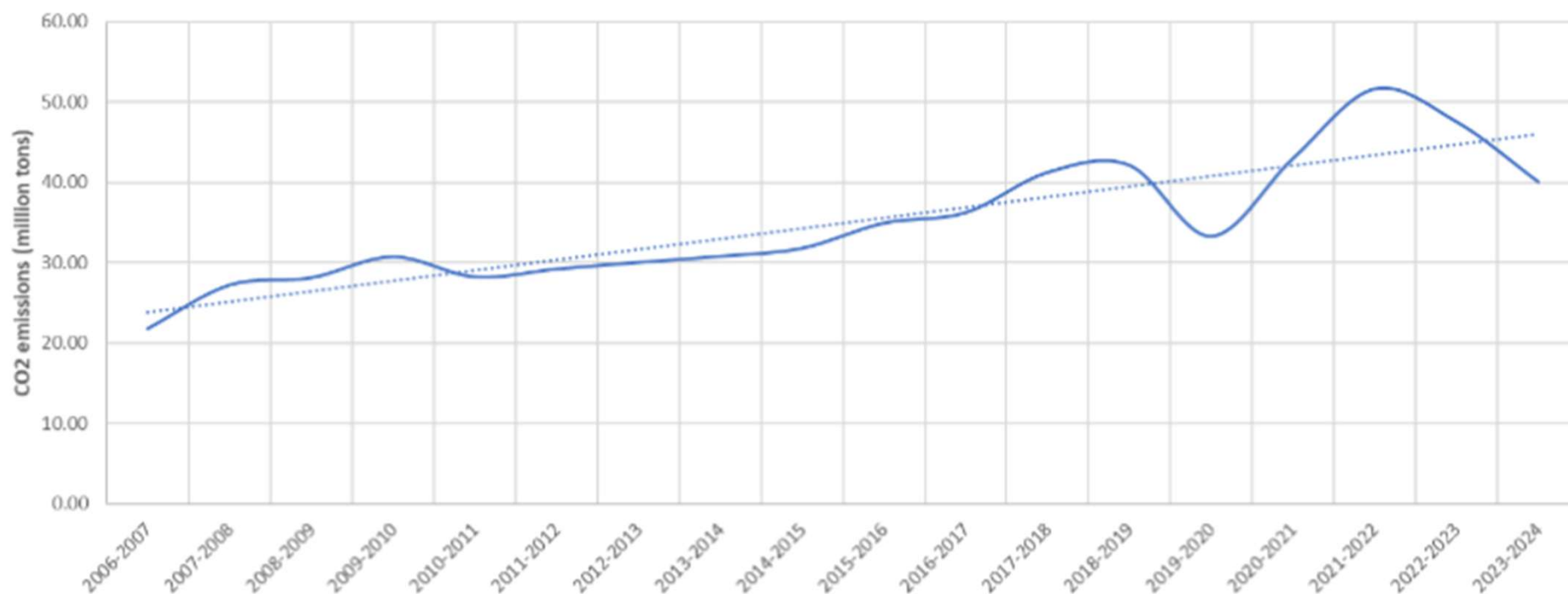


https://reonenergy.com/pro_type/solar-power-project/page/2/

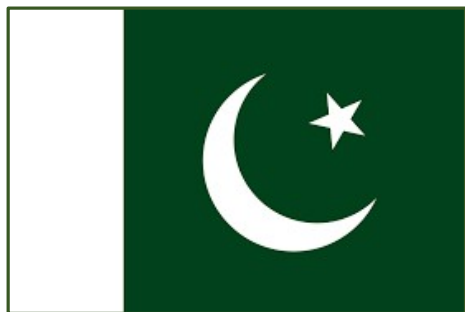
CO2 Emissions from Cement Production in Pakistan, by Source



CO2 Emissions from Cement Production in Pakistan



Authors' calculations using data from from the APCMA - All Pakistan Cement Manufacturer Association



71-233

www.flaglane.com

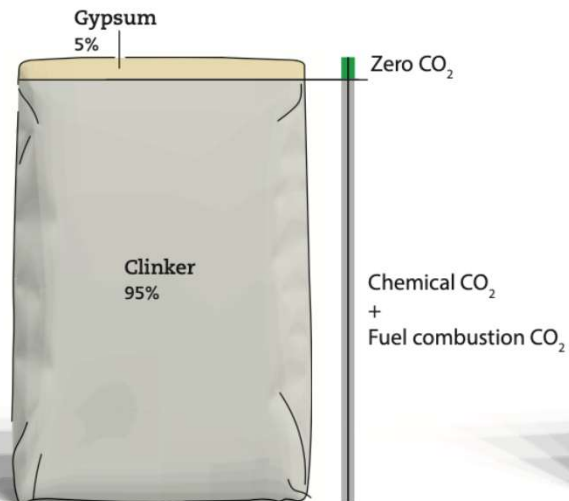


550

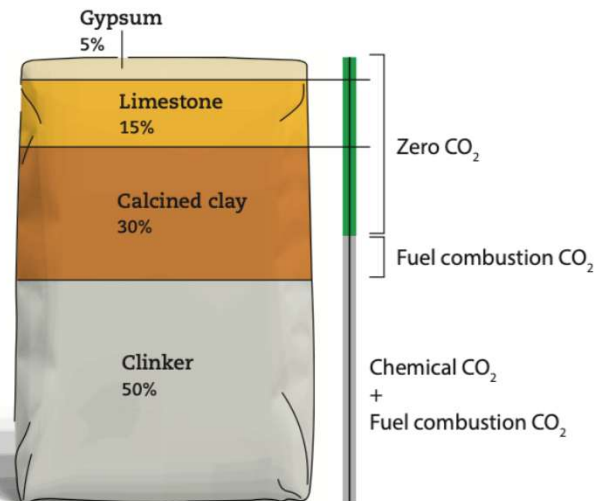
www.freepik.com

Opportunities

- **Carbon Credit & Funding Potential:** Pakistani cement firms could engage in baseline-and-credit activities to generate ITMOs
- **Proven Track Record:** Previous successful CDM projects demonstrate sector capabilities
- **Economic Benefits:** Carbon finance can help scale up investments in lower-carbon technologies
- **Technology Transfer:** Access to advanced decarbonization technologies through international cooperation

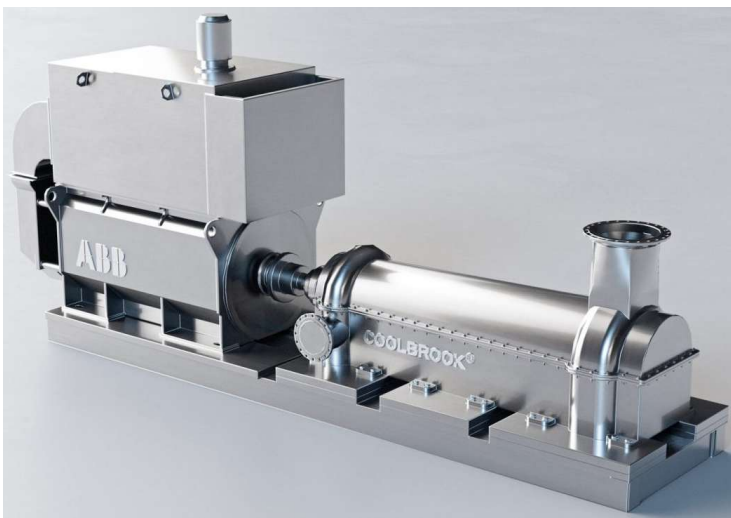


OPC



LC³

<https://lc3.ch/>



<https://coolbrook.com/electrification-solutions/rdh-industrial-process-heating/>



<https://www.businesswire.com/news/home/20241202648162/en/SLB-Capturi-Completes-Construction-of-the-Worlds-First-Industrial-Scale-Carbon-Capture-Plant-at-a-Cement-Facility>



SPAR6C

Supporting Preparedness for
Article 6 Cooperation

Thank you

Contact information

Jonas Hagen

jonas.hagen@heat-international.de

CARBON LIMITS



The
Federal Government

