In collaboration with Deloitte.

Cement Action Plan

OCTOBER 2025

Cement Europe

Europe's cement industry: a strategic asset for critical infrastructure

Civil
Residential & Commercial

- Cement forms the foundation of Europe's **construction sector** as the essential material in concrete & mortar used for the widest range of buildings.
- It is estimated that annual investment of **€250 billion** is required to fund Europe's housing shortage of **9.6 million units.**
- **EU-made cement** is vital to meet domestic demand whilst upholding sustainability standards.
- Cement and concrete are **recyclable** materials, enabling **circular** construction, reducing waste and preserving Europe's resources.

Mobility & Defense
Roads, Bridges & Tunnels

- Cement is used for **strong, durable, and diverse construction** needs, capable of providing the essential strength needed to support Europe's strategic demands in defense.
- Not only is this type of infrastructure essential for **civilian use, but military mobility** relies upon it too.
- It is **largely irreplaceable** – there is no other material capable of playing the role which cement does in this area.

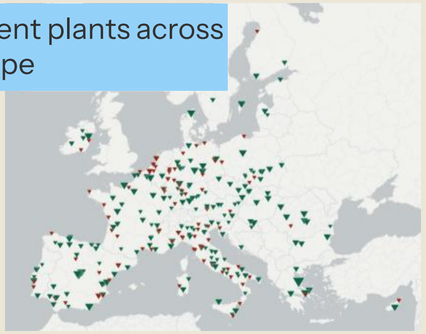
Solutions
Water, Energy, Digital

- Cement plays an increasingly important role in building the vital **infrastructure solutions.**
- From **storm water drainage to nuclear power plants,** high quality and durable cement stands as the prime material. The average nuclear power plant requires **200,000 metric tons** of concrete.
- Under InvestAI, 13 **AI factories** will be built across Europe and a significant increase in the construction of data centers is foreseen.

Cement: The material of choice for Europe's construction value chain

The cement industry and its end-product, concrete, are part of a **fully local value chain** supporting local communities with high-quality jobs.

200 cement plants across Europe



The **construction sector** is a key contributor to the EU economy with a **10% share of GDP** and **14.5 million jobs** and is fundamentally supported by **the cement industry.**

	Turnover (€)	GVA (€)	Employment
Construction sector	2.150 bn	779,8 bn	14.500 k
Concrete & mortar	73,6 bn	20,8 bn	311 k
Cement & clinker	25,8 bn	8,5 bn	57 k

The cement industry provides the essential raw material that enables Europe to build the **housing, infrastructure, low carbon energy assets,** and **data centers** of tomorrow. Our sector is also fundamental to delivering **climate-resilient** and **defense** infrastructure – helping communities adapt and thrive in a changing climate and keeping them safe.

HOUSING

€ 250 bn

of annual spending needs

- Tackling Europe's housing shortage of 9.6 million units

ENERGY

€ 570 bn

of investment needs 2028-'34

- Enabling Europe's energy transition

AI

€ 200 bn

of investments mobilized for AI

- Expanding data center capacity to support surging needs
- € 20 bn for AI gigafactories

DEFENSE

€ 280 bn

of annual spending target

- Developing and upgrading critical infrastructure

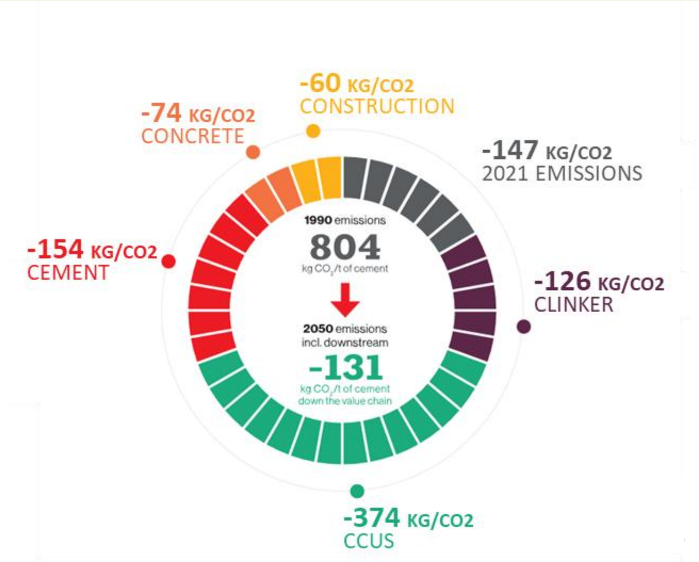
Sources: Cement Europe Key Facts & Figures 2025, Eurostat (2022,'23,'24, depending on data availability), EU MFF proposal, Report State of European Data Centers, 2025, European Data Center Association, JRC/EIGL based on McCarten et al. 2021, EU InvestAI initiative, 2025 NATO Summit 1,5% of GDP target by 2035 on critical infrastructure and others

Europe’s cement industry: leading the race to decarbonise

Responsible for **4% of EU emissions**, the cement sector has already achieved a **28.9% net emission reduction since 1990** - even though 60% of is emissions are **process-related**, making it one of Europe's true **hard-to-abate industries.**

The cement industry is a **global leader** in decarbonisation and an **innovation-driven partner to achieve climate-neutrality within Europe** via various levers and active project development.

EU cement sector, roadmap and CO_2 emission reduction ambitions by 2050



-37%
of CO_2 emissions on cement by 2030

-78%
of CO_2 emissions on cement by 2040

-100%
of CO_2 emissions on cement by 2050

Ambition

ALTERNATIVE FUELS

Alternative fuels use increased from **2%** in 1990 to **56%** in 2023. Cement Europe ambition is to achieve **95%** fossil fuel substitution by 2050. Continued access to waste, including biomass, is key to maintain supply independence and CO_2 emissions avoidance.

CLINKER-TO-CEMENT RATIO

Ambition to reach **60%** by 2050, requiring **66 Mt** of clinker substituting materials (SCM) compared to 38 Mt today.

CIRCULAR ECONOMY

Recycling of raw materials, waste and the recovery of energy. **62%** of construction and demolition waste is recycled into aggregates, which covers **10%** of total aggregate needs.

CO_2 AS A FEEDSTOCK

CO_2 captured from CO_2 point sources in hard-to-abate sectors needs to be kept as a source of supply for growing CO_2 demand (between 250 Mt and 415 Mt by 2050).

Sources: GCCA GNR Data, Cement Europe 2050 Roadmap, Caro, Dario et al. "Environmental and socio-economic effects of construction and demolition waste recycling in the European Union." Science of the Total Environment 908 2024, VITO “CO_2 from cement industry needed for decarbonation of EU 27 society in timeframe 2030-2050” 2023

Innovation roadmap for the industry:
Over **120 investment and innovation projects** across Europe, covering decarbonisation levers along the cement-concrete value chain.

The dual challenge: Competitiveness and Decarbonisation

Without a competitive business model, the very viability of the cement industry and the prospects for industrial decarbonisation are at risk! Despite the industry's ambitions and progress, the European policy framework and its current decarbonisation support programs lack the sense of urgency to bring them in line with the Green Deal and the Clean Industrial Act.

Industrial Competitiveness challenges

These factors have eroded competitiveness considerably and led to a major increase in imports and to a sharp reduction in non-EU exports.

- Electricity cost and thermal energy access
- Regulatory inconsistency and complexity
- Trade - regulatory divergence & price undercutting in imports

Carbon Pricing EU ETS

CBAM

Industrial Decarbonisation Challenges

Lack of investment business case due to insufficient funding, regulatory risk, slow roll-out of energy and carbon infrastructure, insufficient incentives for low-carbon product uptake.

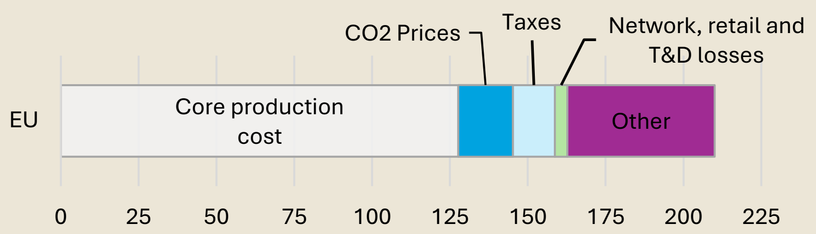
- Funding and de-risking
- Infrastructure and simplified permitting rules
- Low carbon product uptake
- Access to skilled labour

Eroding competitiveness threatens cement industrial base and investment in Europe and already generates carbon leakage - urgent action is needed

Structurally high energy prices for EU operators

Energy prices represent around **24%** of overall production costs. The electricity share of the total energy costs ranges between **50% and 60%.** **Electricity prices** are **65%** higher than before 2021 and more than twice than in some neighboring countries.

Breakdown of electricity price components (€/MWh)



*Decarbonisation will entail an increase in energy demand by a factor between **2** and **5***

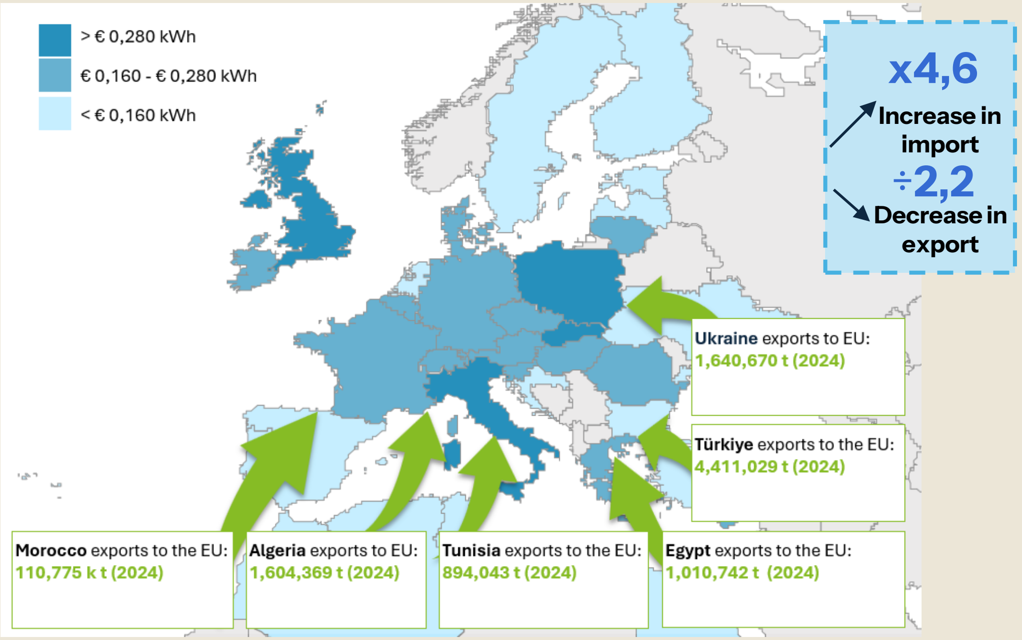
Regulatory uncertainty, regulatory and ETS costs, permitting

European producers are experiencing a rapid erosion of their competitiveness coupled with a lack of fair treatment vis-à-vis non-European producers. The CBAM is intended to ensure equal treatment in terms of carbon costs but only covers carbon-related imbalances.

ETS | IED | RED | CSRD | Taxonomy

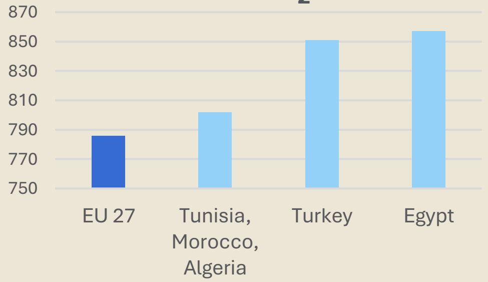
~5% of production cost — EU Commission identified reduction potential of bureaucratic costs at € 8 bn

Increase in imports of more carbon intensive cement and clinker not subject to triple cost impact (carbon, energy, regulatory)



- Imports into the EU increased from **2.4 Mt (2016**) to **11.3 Mt (2024)**
- **9.48 Mt CO2** associated with 2024 imports vs **8.91 Mt CO2** for comparable EU production

CO_2 intensity of clinker comparison in/outside of EU (CO_2 /Tonne)



Sources: Cement Europe 2050 Roadmap, Cement Europe Members, European Commission, IEA

Competitiveness first: the prerequisite for a successful transition

Proposed Actions

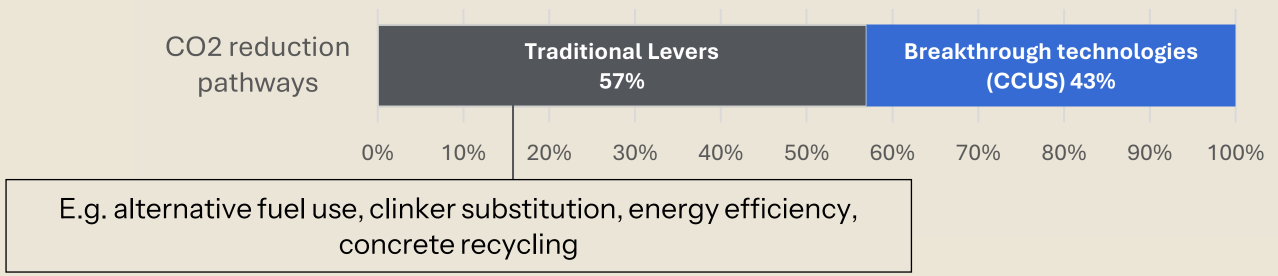
IMMEDIATE ACTION (END 2025)	*FOLLOW-UP ACTION (2026)*
CBAM: Level playing field regarding carbon costs both for imports and exports	
• On-time implementation • Ensure ETS/CBAM mirroring requirements • Address resource shuffling/anti-circumvention • Export solution • Taric Codes to avoid circumvention	• Review and compensation measures in case of non-functionality • Carry out impact assessment on triple regulatory, carbon, energy cost impact EU-third country producers
ETS: Securing business planning security	
• Publish benchmarks in compliance with Annex I EU ETS	• Planning certainty residual emissions for hard-to-abate sectors post 2040 • Carbon removals integration in ETS • Review CO_2 accounting rules (emission to the atmosphere)
COMPETITIVE ELECTRICITY PRICES	
• State aid electricity cost relief • Reduce electricity duties and levies to 0 for EII (ETD)	• Interconnection investment plan (Energy Highways) • Electricity market reform, away from marginal pricing
THERMAL ENERGY: Reinforcing strategic independence	
• Equal access to alternative fuels for all uses of combustible waste • Avoid unintended RED certification requirement for use of biomass waste in cement kilns	• Explicit recognition of co-processing in EU regulations and level playing field with waste management sector

Funding and infrastructure gaps endanger cement's path to Net Zero

The cement industry is hard-to abate and relies on CCUS for 43% of its roadmap

2/3rd of all emissions in the cement industry are process emissions.

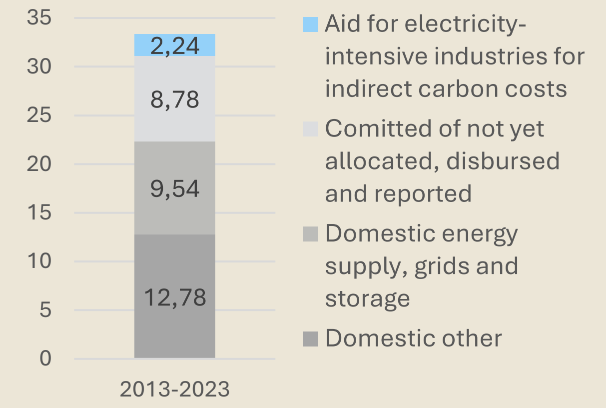
CO2 reduction pathways of the Cement Europe Roadmap



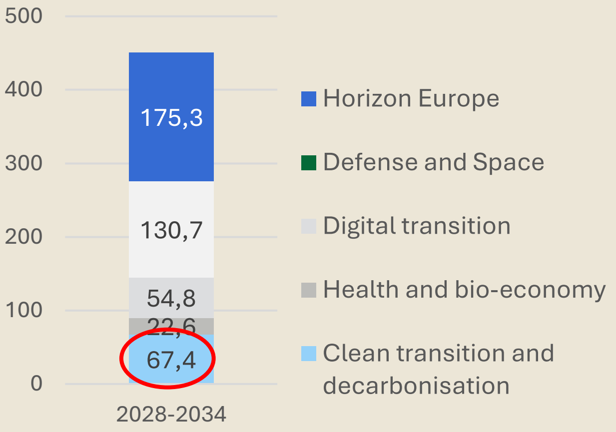
Energy and carbon infrastructure deployment **slowed down** by permitting & planning issues.

Insufficient funding & de-risking tools for decarbonisation of hard-to-abate sectors

Member State ETS auctioning revenues and reported usage, scope EU-27 (bn €)



European Competitiveness Fund incl. Horizon Europe (bn €, current prices)



The Competitiveness Fund totals € 67.4 billion for industrial decarbonisation, which integrates the remaining **€ 41.2 billion** from the Innovation Fund (IF).

Estimated ETS cost for the cement sector 2023-2034

€ 97 bn – € 162 bn

Cement sector demand:

Frontload 75% of new ETS revenues in Cement decarbonisation Fund

Sources: MFF, Innovation fund, European Environmental Agency, Cement Europe Roadmap, Cement Europe Members

Unlocking the transition

Proposed Actions

IMMEDIATE ACTION (END 2025)	FOLLOW-UP ACTION (2026)
Adequate funding, robust public grants, de-risking value chains	
• Frontload ETS revenue for decarbonisation and plant modernization • Implement EU Carbon Contracts for Difference for decarbonisation levers • Introduce de-risking mechanisms for FOAK projects	• Recalibrate MFF for decarbonisation of industry • Foresee flexibility in funding instruments to address unforeseen risks (incl political)
Rapid deployment of CO2 infrastructure	
• Enforce NZIA implementation on permitting, injection capacity target, single points of contact, transparency of CO2 storage data	• Introduce binding CO2 injection targets (2035,2040,2045) • CO2 purity standards • Publish CCS Transport & Storage package
Low carbon & circular product uptake	
• Public procurement: minimum levels of low embodied carbon purchases /progressive binding target for CO2 content per M3	• Prioritize low carbon & circular product uptake in financing instruments through market mechanisms • Move towards performance-based product standards • Enable access to secondary raw materials
Access to skilled workforce for whole construction value chain	
• Fund training and education to address skills shortages • Enforce NZIA Zero Skills Academies	• Develop quality job profiles for the transition

Securing Europe's Future: a policy partnership for competitive, sustainable cement Our call to action

The European cement industry has a clear vision and **ambitious roadmap for a net-zero future**. We are ready to invest in our decarbonisation journey and to deliver low carbon, circular materials needed to build homes, infrastructure and green economy.

But the transition is at risk – without a **level playing field**, without streamlined **infrastructure** deployment, and without a **reliable financial framework, including de-risking tools.**

We have the ambition and the technology. Now we call for a **strong policy partnership** to turn this shared vision into reality and ensure Europe's cement industry remains a driving force in achieving a carbon-neutral economy.

ANNEX: POLICY ASKS AND KPIs IN MORE DETAIL

Energy cost: cost relief; interconnection; market (marginal pricing) reform; access to thermal energy

ACTION 1: Cost reduction through mix of immediate and mid-term measures:

- Reduce duty rate on electricity to zero for EIIs as allowed under the Energy Taxation Directive.
- State aid rules to allow for network tariffs reduction and indirect compensation (compatible with CBAM indirect cost inclusion).
  - Affordable Action Plan/Energy taxation
  - Q4 2025

ACTION 2: Deep energy market review including marginal pricing and deeper network interconnection.

- Affordable Action Plan
- Start Q2 2026

ACTION 3: Continued and competitive access to waste, including biowaste, as an alternative fuel to fossil fuels – recognize co-processing in EU regulations.

- Single Market enforcement Circular Economy Act
- Start Q2 2026

Regulatory consistency: long-term business planning security; regulatory consistency and simplification

ACTION 1: Provide immediate business planning certainty through publication of ETS benchmark values for next trading period and allow for a transitional period for application.

- Benchmark Regulation
- End 2025

ACTION 2: Provide long-term planning certainty and stability by harmonizing CO_2 accounting rules and design a solution for residual ETS emissions post-2040.

- ETS Reform
- Mid 2026

ACTION 3: Adopt an EU-wide definition for hard-to-abate process emissions (2/3 of cement manufacturing emissions).

- ETS Reform
- Mid 2026

ACTION 4: Ensure coherence between different pieces of EU legislation applying to the same business operations (e.g. requirements under Industrial emissions Directive (IED) and decarbonisation rules under ETS.

- Omnibus/simplification

ACTION 5: Define major decarbonisation projects as "project of common public interest".

- NZIA implementation & enforcement

ACTION 6: Integrate carbon removals (negative emissions) into the EU ETS.

- ETS reform
- Mid 2026

ACTION 7: Align RED III RFNBO sunset clause to allow for a CCU value chain that can respond in a growing CO_2 demand.

- RFNBO revision clause

ACTION 8: Clarify that RED sustainability classification was not intended to apply to the biomass fraction of waste used as fuel in cement kilns.

- Interpretative clarification of RED / Simplification
- Q1 2026

CBAM: robust and fast implementation; avoid circumvention; preserve EU capacity

ACTION 1: Finalize all secondary CBAM legislation and ensure CBAM/ETS mirroring requirements.
- CBAM Regulation
- End 2025

ACTION 2: Put in place CBAM anti-circumvention plan addressing resource shuffling and identifying remedial trade measures to address potential social and environmental dumping.
- Amendment CBAM Regulation
- 2026 CBAM revision

ACTION 3: Efficient monitoring: **adopt TARIC Code modification.**
- Regulation
- Q4 2025

ACTION 4: Ensure implementation at national level / capacity building with customs authorities.
- Involve OLAF and CBAM sectors to design training
- Start Q4 2025

ACTION 5: Provide a "CBAM effectiveness audit" + impact assessment comparing triple cost impact (regulatory, carbon, energy) EU-third country producers and determine a compensation scheme in case CBAM proves ineffective (Draghi Report).
- CBAM Regulation
- 2026 CBAM revision

ACTION 6: Maintain free allowances for exported goods / Solution tailored to affected producers.
- Amendment to CBAM regulation
- Q4 2025

Financing: public grants for deployment; value chain de-risking

ACTION 1: Public-private co-financing model in line with Chapter 5 CISAF financed by ETS revenue.
- Clean Industrial Deal State Aid Framework (CISAF)/ETS revenue
- Implementable

ACTION 2: Promotion of CfDs as de-risking instrument and clarify state aid compatibility criteria.
- Addition to CISAF/ETS revenue/Industrial decarbonisation Bank
- 2026

ACTION 3: Develop CCS breakthrough financing model:
- fast-track ICPEI for "general interest" CO_2 pipeline and storage infrastructure involving Member States and energy-intensive industry sectors.
- scale up capture projects aiming at 60% total cost.
  - MFF Competitiveness Fund, ETS revenue, Connection Europe Facility, Innovation Fund
  - Start 2026

ACTION 4: CO2 capture to be financed by Innovation Fund topped up by ETS revenues through the "auction as a service" system.
- CISAF (Chapter 7)
- Implementable

CCS infrastructure: rapid roll-out of CO2 public interest infrastructure network

ACTION 1: Accelerate adoption and execution of EU wide CO_2 transport & storage package covering all means of transport.
- CO2 Transport and storage regulatory package announced in Industrial Carbon Management Communication
- Q4 2025

ACTION 2: Propose binding CO_2 storage targets (EU and potentially national) for 2035, 2040, 2045.
- NZIA implementation
- Ongoing

ACTION 3: Define CO_2 purity standards.
- CEN working on basis of EU Commission mandate
- From 2027

Low carbon & circular product uptake: incentivize through market demand

ACTION 1: EU-wide mandatory disclosure of Global Warming Potential value.
- Construction Products Regulation/ Upcoming standards
- CPR adopted/Standards under preparation

ACTION 2: Promote a European CO_2 labelling framework with flexibility in methodology (baseline) for Member States.
- Industrial Decarbonisation Accelerator Act
- 2026

ACTION 3: Set EU minimum targets for national public procurement of low-carbon cement and concrete based on labelling scheme.
- Non-price criteria in public procurement
- 2026

ACTION 4: Implement binding CO_2 limits at building level by 2030 based on a material-neutral whole life carbon methodology for construction materials.
- National Decarbonisation Roadmaps for buildings (as required by EPBD)
- Initiate 2030

Access to skilled workforce: develop quality job profiles to attract and maintain workforce

ACTION 1: Sustain construction value chain workforce skills capacity in quality and quantity through a strategic planning including proper funding

- Dedicate earmarked MFF Fund for upskilling/reskilling of construction sector workforce
- 2026-2028

ACTION 2: Mapping of skills shortages and involve Member States in designing remedial action

- Incentivize and support ongoing cooperation Cement Europe / EFBWW
- 2026

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