



This project is co-financed by the European Union
and the Republic of Türkiye



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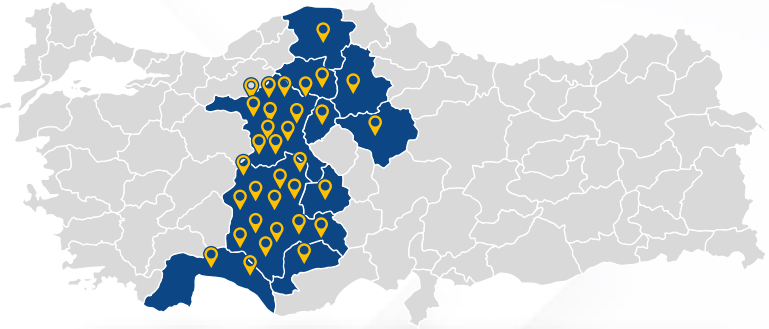
PRESENTER FULL NAME: ÇAĞATAY ALP ARSLAN

ORGANIZATION: VICAT GROUP TÜRKİYE

WORKSHOP NAME: TWIN GREEN AND DIGITAL TRANSITION OF INDUSTRY

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Description of the Organisation



2

Cement
Plants



50

Batch
Plants



8

Quarries



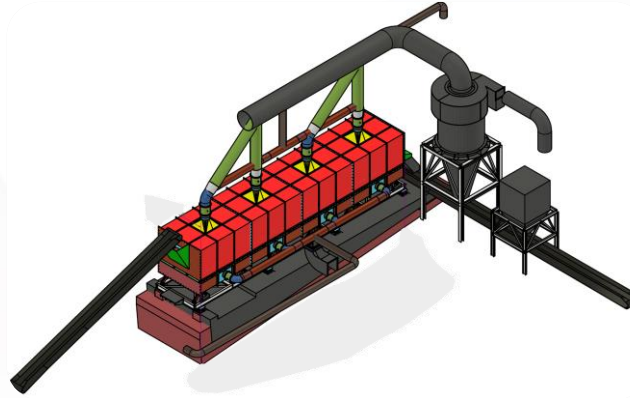
2

Waste
Processing
Plants

- **Vicat Group** is an organization that provides high-quality solutions in the fields of cement, ready-mixed concrete, and construction materials across **6 geographical regions** and **12 countries**.
- **As of 1991**, it has also been present in the Turkish market as **Vicat Group Türkiye**.

Vicat Group Türkiye

- **6 Business Units**
Cement, Concrete, Agregate, Lime, Waste, Transportation
- **9 Legal Entities**
2 Public Companies Baştaş Çimento & Konya Çimento
- **1.438** employees
- **1** officially registered **R&D&I Center** with **17** researchers.
- **3** successful international projects **United Circles, SKILLS4EII, TESBE**
- **Laboratory, pilot and industrial scale project demonstrations**
- **Advanced laboratory infrastructure**
XRD, XRF, TGA, polarized microscope, laser granulometry, etc.



6,5% Market Share in Turkish Cement Market

Vicat Türkiye **#1** in Central Anatolia with **≈31,6%** market share

Funded by grants from **2 EU Projects**

UNITED CIRCLES, SKILLS4ELL

Active collaboration with **397 institutions** from **38 countries**

32 international project applications under **8 different grant programs**

Membership in **90 R&D center knowledge sources**

Trademark and Patent Applications



2.6 Mt/Y Production Capacity with **2 Production Lines**

Size Reduction From 500mm to 32μm by Mills

R&D&I Center For **TRL 1-9 Research And Demonstration Activities**

Advanced Equipment and Laboratories
Laboratory & Pilot Scale **Carbonation Reactor**

Industrial Scale **3D Printing**

Novel Environment Friendly Cement Type
Design And Production

Research Fields

- **Carbon Capture, Utilization and Storage**
- Accelerated **carbonation**
- Utilization of **secondary** and **alternative** resources



- **Digital** Transformation
- **Hydrogen** combustion
- Concentrated **Solar** Power
- **Green** clinkerization



- **Sustainable** and **Innovative** Products
- **Waste heat recovery** and **thermal storage**
- Skill Requirements for **Green Transition**



- **3D** concrete printing
- **AI supported** cement production
- **Autonomous** and smart transportation



On-going Projects

- **UNITED CIRCLES**

Networked industrial-urban symbiosis value chain demonstrators for biomaterials, C&DW, circular water loops & WWTPs, driven by Hubs 4 Circularity.

- **SKILLS4EII**

Skills Alliance for the Green, Digital and Social Transformation of the Energy-intensive industries.

- **TESBE**

Development of new and cost-effective sustainable composites for advanced buildings, energy efficiency, and thermal comfort of occupants.

In-house Projects

- Effect of Mineral Admixture Components' Density, Granulometry, and Fineness on Cement Setting Time
- Industrial-Scale Carbonation of Recycled Concrete Aggregate
- Design and Production of Environmentally Friendly Cement with Reduced Carbon Footprint Using Bottom Ash and Limestone Additives
- Design and Production of Calcium Sulfoaluminate Cement
- Oil Well Cement Design and Production

We offer expertise, seeking for consortiums

- 1. HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-05: Advanced manufacturing technologies for leadership of EU manufacturers in products for the net-zero industry (Made in Europe Partnership) (IA)**
- 2. HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-11: Enhanced logistics and operations of construction sites (IA)**
- 3. HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-31: From heat-driven processes to the use of mechanical and electric forces (Processes4Planet partnership) (IA)**
- 4. HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-32: Green and resilient flexible production processes (Processes4Planet partnership) (IA)**
- 5. HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-34: Smart integration of net zero technologies into Energy Intensive industries (Processes4Planet and Made in Europe partnership) (IA)**
- 6. HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-35: Embedding upcycling technologies into viable business (Processes4Planet partnership) (IA)**
- 7. HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-42: Innovative Advanced Materials (IAMs) for product monitoring, smart maintenance and repair strategies in the construction sector (RIA)**



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TÜRKİYE