



**Italcementi Group**

# **Value Chain Management**

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*Chief Operating Officer*



# Italcementi Group at a glance



**The world's fifth largest cement producer**

**A worldwide presence in 22 countries**

**An overall staff of 18,000 people**

**A consolidated production capacity of approximately 61 million tons**

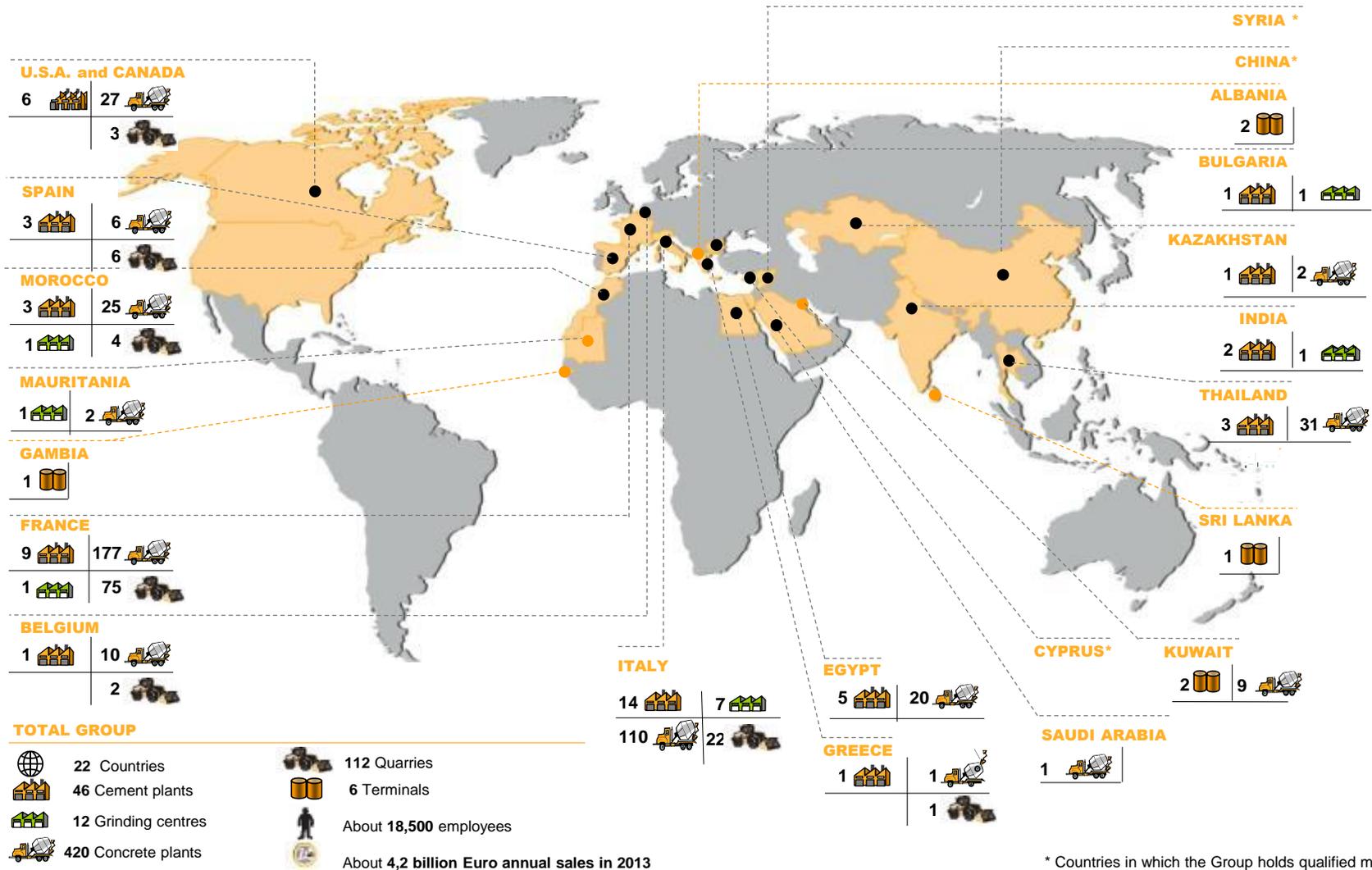
**2014 annual sales exceeding 4.1 billion Euro**

**The first cement company to be listed on the Italian Stock Exchange since 1925**

**Over 150 years-old successful business strategy implemented by a family-driven company in his fifth generation**



# Italcementi Group industrial network



\* Countries in which the Group holds qualified minority

# Sustainability at the foundation of Group's strategic development



**Industry**



**Innovation**



**Development**



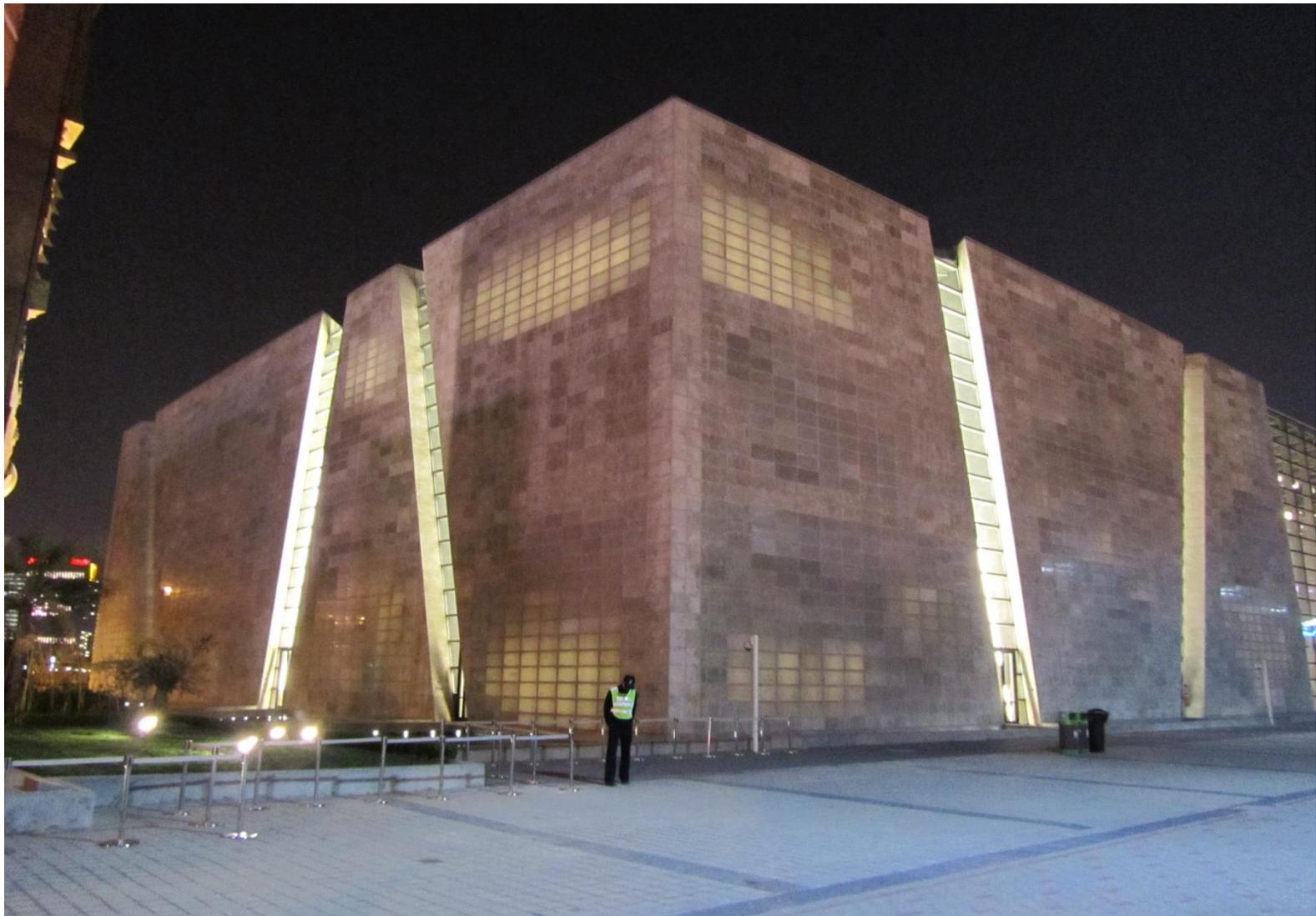
**Sustainability**

# i.lab

the heart of Group sustainable innovation



# i.light



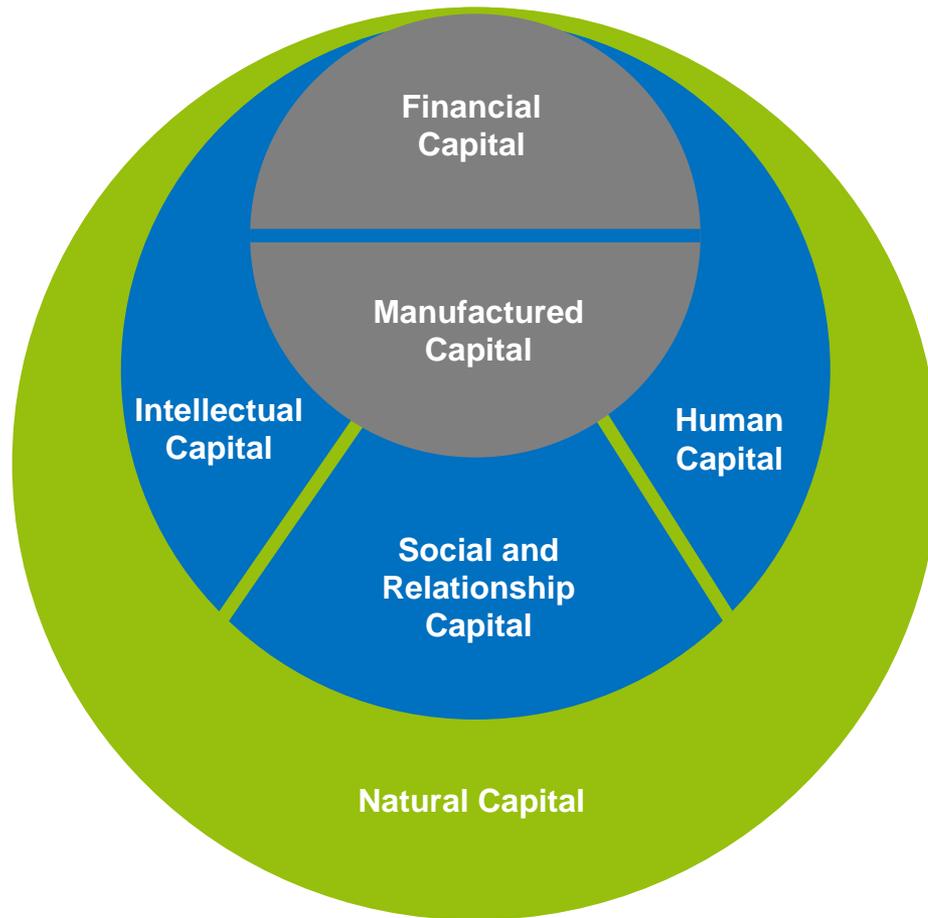
# i.active TECNO



# i.active BIODYNAMIC



# The Capitals affecting enterprise value



**Natural Capital** are natural assets, as providers of resource inputs and environmental services for economic production and social well being

**Social and Relationship Capital** addresses stakeholders, community, supply chain, customers, market, authorities, with the aim to retain social license to operate.

**Human Capital** consists of the individual's capabilities and the knowledge, skills and experience of the company's employees and managers.

**Intellectual Capital** is the product of R&D and the value created by combining material, financial and human resources.

**Manufactured Capital** are equipment and tools, human-created and production-oriented.

**Financial Capital** is understood as the pool of funds available to an organization.

# The value chain



- ❑ Value chain management require a multidimensional approach spanning over the entire life cycle, from material sourcing to the end-of-life options.
- ❑ This includes the concept of product stewardship, i.e. understanding, controlling, and communicating products performance (technical, environmental, health & safety, ...) throughout their life cycle.
- ❑ **Value chain management raises the challenge to reconcile short term imperatives (financials, ratings...) with the very long term product life cycle. A balanced approach is needed, to combine short term view with value chain improvement actions, which are expected to pay-back on the longer term.**
- ❑ **On the other hand, a balanced approach ensure better industrial efficiency and definitively contributes to build brand and reputation**

# Cementitious materials: the value chain



**Very short distance**

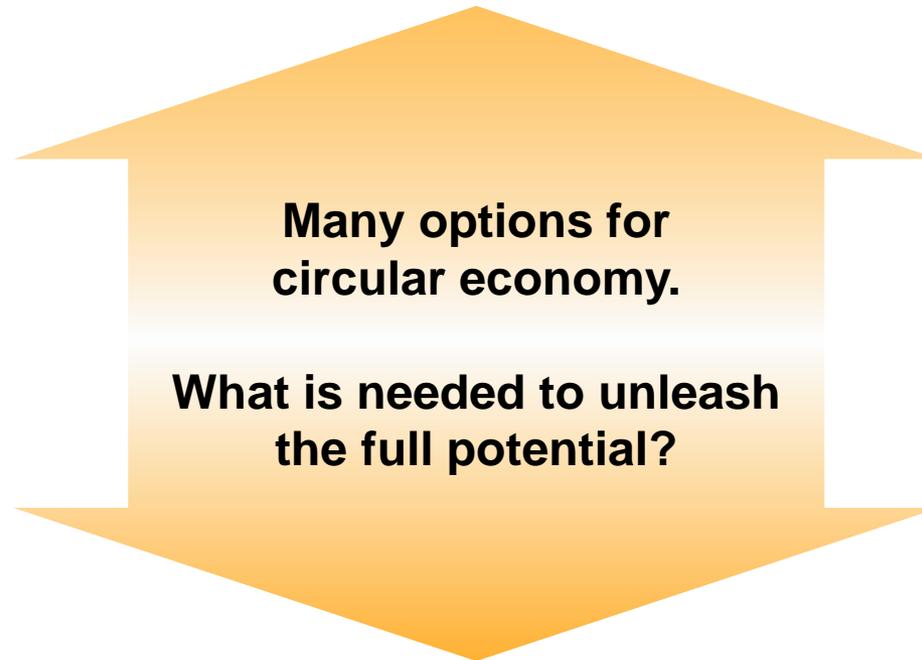
## **Variable timeframe**

- materials: need for long term resources availability
- cement/concrete: short-term transformation
- use: very long term durability

Additionally, the various steps of the life cycle have also different recycling potential and timeframe:

- up to cement: mostly process optimisation
- concrete: great opportunities for recycling and eco-design
- use: durability and performance make the difference
- end-of-life: economically viable recovery options are needed

# Cementitious materials: virtuous cycles



Other processes or post-consumer

# Construction materials: virtuous cycles



**The room for effective, innovative, breakthrough practices increases along the life cycle, where more participative mechanisms are needed**



**Other processes or post-consumer**

# Materials phase



The currently available or already (partially) implemented practices decrease along the life-cycle, while it seems that the breakthrough practices needed to unleash the full potential of value chain management point at some outstanding issues:

## Current sustainable practices

- Sustainable quarrying
- Rehabilitation and biodiversity plans
- Responsible sourcing
- Sustainable procurement practices
- Local sourcing
- Short logistics
- Alternative materials
- End-of-life

## Breakthrough practices

- Fiscal/regulatory support**
- Market incentives**
- Value chain partnerships**

# Production phase: cement



The currently available or already (partially) implemented practices decrease along the life-cycle, while it seems that the breakthrough practices needed to unleash the full potential of value chain management point at some outstanding issues:

## Current sustainable practices

- Energy efficiency
- Alternative fuels and biomass
- Material efficiency
- Alternative materials
- Recycled materials
- Clinker/cement ratio
- Valorization of clinker/bypass dusts
- Products design
- Product stewardship

## Breakthrough practices

- Fiscal/regulatory support**
- Market incentives**
- Value chain partnerships**

# Production phase: concrete



The currently available or already (partially) implemented practices decrease along the life-cycle, while it seems that the breakthrough practices needed to unleash the full potential of value chain management point at some outstanding issues:

## Current sustainable practices

- Recycled content (slag, fly ash, ...)
- CWD (Construction & Demolition Waste)
- Additives
- Reduced dosing of cement
- Products design
- Product stewardship

## Breakthrough practices

- Fiscal/regulatory support
- Market incentives
- Value chain partnerships

# Use phase



The currently available or already (partially) implemented practices decrease along the life-cycle, while it seems that the breakthrough practices needed to unleash the full potential of value chain management point at some outstanding issues:

## Current sustainable practices

- Durability
- Performance (energy, material, comfort)
- Product design
- Sustainable building solutions
- Supportive architecture

## Breakthrough practices

- Fiscal/regulatory support
- Market Incentives
- Value chain partnerships
- Integrated products/solutions design
- Promotion of sustainable lifestyles

# End-of-life phase



The currently available or already (partially) implemented practices decrease along the life-cycle, while it seems that the breakthrough practices needed to unleash the full potential of value chain management point at some outstanding issues:

## Current sustainable practices

- Selection processes
- Product design
- Policy incentives

## Breakthrough practices

- Fiscal/regulatory support
- Market Incentives
- Value chain partnerships
- Integrated products/solutions design
- Promotion of sustainable lifestyles

# Conclusions

The following elements come out as the most relevant

- ❑ **Fiscal/regulatory support**, to cut un-sustainable practices and “monetize” the efforts towards sustainability
- ❑ **Market incentives**, to foster higher awareness of downstream users and creating rewarding schemes for sustainable products
- ❑ **Value chain partnerships**, to explore business solutions beyond the proprietary boundaries, by creating cross-cutting interaction based on shared principles
- ❑ **Integrated products/solutions design**, to ensure a long term oriented stewardship, mastering in a comprehensive way the products features and life-cycle
- ❑ **Promotion of sustainable lifestyles**, to market responsible patterns of consumption in customers and end-users