

LafargeHolcim: Building better outcomes for Major Infrastructure Projects







The LafargeHolcim group at a glance



90 countries



2,500 operations



29.5 billion CHF net sales



115,000 employees



Listed on the Swiss stock exchange SIX and Euronext



Challenges in Australian Major Project procurement

- Tender assessment processes do not promote collaboration or reward the identification of innovative alternative solutions
- Copy and paste specifications containing unnecessarily onerous testing frequencies and approval requirements
- Reluctance of Regulatory bodies to adopt new material technologies
- Contract frameworks result in adversarial relationships and do not appropriately reflect project complexity
- Inappropriate provision of retentions and/or bank guarantees
- Allocation of risk management responsibility to those least able to manage it





Industry Examples

Project Owners and Regulatory Bodies are increasingly reluctant to accept or consider proposals for innovative or alternative solutions

Major Roads Infrastructure Project

Privately Developed International Airport

incorporating recycled
materials reject that had the
potential to save the project
over \$40M

Development and testing of innovative construction material technologies required to be "tested" in house.

Major Oil & Gas Project

Despite alternatives being available, fly-ash was imported from Thailand to produce concrete for this project.



Our infrastructure business









Infrastructure is one of LafargeHolcim's core markets. We are:



The global leader

in the construction material industry



No. 1

in technology in our industry

Infrastructure is a **global play** where we aim at **bringing value as from the projects' design stages.**This is based on three pillars:

In-house infrastructure sectoral expertise



A partnership approach on a global scale



World-class excellence in project execution





Creating value for our clients' projects

We work across the project lifecycle – well before any construction work begins



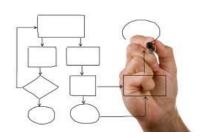
By co-developing solutions with our clients, we are able to provide:





Sector expertise – Infrastructure solutions

Creating value from the project design phase



Infrastructure Program at LafargeHolcim R&D center (LCR)

A dynamic R&D portfolio, fueling infrastructure and Building sector

- Hydraulic Road Binders/Soil Stabilization
- Innovative Coating for Concrete Pavements
- Fast-Track Concrete
- Roller-Compacted Concrete
- Unbound Granulars Optimization



- · Railways:
- Precast Track Slab



Transport

Roads

- Windmill Towers
- Solutions for Mining Applications
- · Stabilised Fill
- Water Management (Hydromedia)
- Prefabricated Modular Structures.
- Depolluting Solutions



What opportunities do we see for improvement

- Alternative Commercial Frameworks (JV's, Strategic Alliances, Partnering Agreements)
- Standardised Framework Agreements
- Early engagement in the project life-cycle
- Embedment of technical experts in tender and project teams
- Development of project specific innovative alternative solutions
- R&D partnering with Industry and Regulatory bodies



We need to create a forum where industry can collaborate, identify innovative technologies and support the adoption of solutions that are measured on performance and efficiency rather than price.



