

6 November 2019

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CEMENT MARKET AND STRATEGY

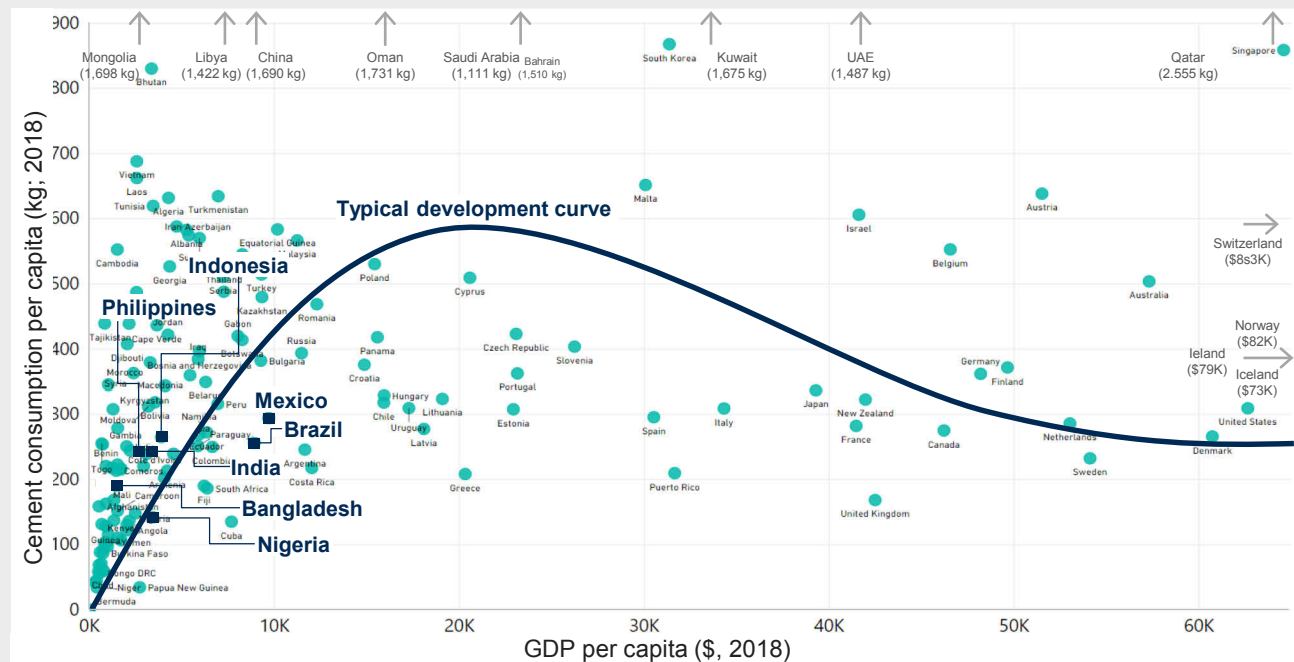
WE DISCOVER POTENTIAL

 FLSMIDTH

Key messages

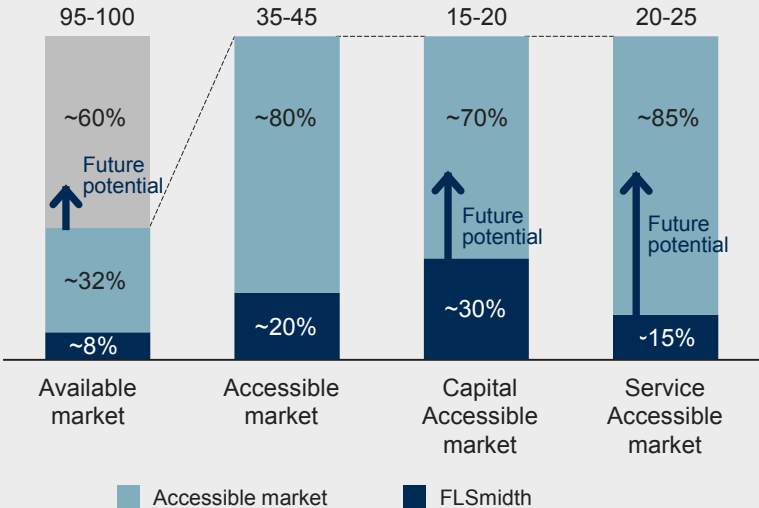
- The market provides underlying **stable growth in cement demand** driven by GDP growth, urbanisation and infrastructure investments
- **Industry transformation** from traditional stand-alone technologies to **fully integrated, digitalized manufacturing** to optimise cash, profitability, labour intensity and to cope with **sustainability** demands
- FLSmidth in strong position as **Productivity Provider #1** to address industry need for integrated sustainability and digitalization solutions
- The strategy to grow Service, Upgrades and Products – and a selective focus on premium Projects – will drive a **more stable and higher-margin portfolio** with a larger service share, **profit above growth**

Cement is fundamentally an attractive industry



FLSmidth has a good opportunity to grow – particularly in Service

Cement Projects, Products and Service available market estimate (2018, DKK bn)



- Large untapped accessible market in Parts, Services, Upgrades and Retrofits – both on own and competitor installed base
- Potential to maintain market share in projects and capture more product opportunities
- The demand for sustainability solutions is a potential for FLSmidth entering into new markets with customers that are today not part of the accessible market

Note: Capital incl. Projects and Products; Service incl. Spare parts, Wear parts, Services, Upgrades and Retrofits; Accessible market definition varies by segment and is on a high level based on Western suppliers in capital and FLSmidth + portion of competitor installed base in Service. Source: FLSmidth analysis

Industry trends with strong focus on sustainability

Historical **capacity expansion** has led to **regional overcapacity**

+

Surplus capacity has resulted in regional pressure on **cement prices and margins**

+

Increased difficulties in **attracting skilled labour and talent**

+

Ongoing and increased **focus on sustainability** from regulators, societies and investors

Selected elements Cement strategy

Strong focus on
**cash and
profitability**

through

**productivity
sustainability and
digitalization**



Service

- Integrated lifetime offerings
- Customer proximity through strong regions



Capital

- Boost products by configure-to-order and sustainability
- Selective approach on premium projects



Sustainability

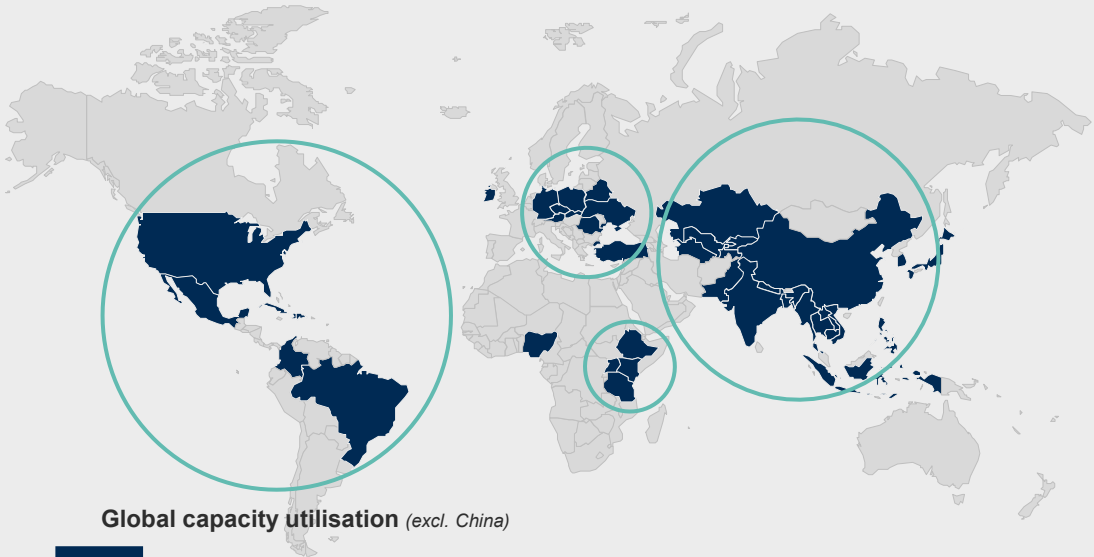
- Clear ambition to drive the cement industry towards carbon-neutrality and zero emissions



Digitalization

- Condition monitoring facilitating intelligent preventative maintenance, data analytics and process optimisation

Service: Multiple regions with high activity create a solid business potential

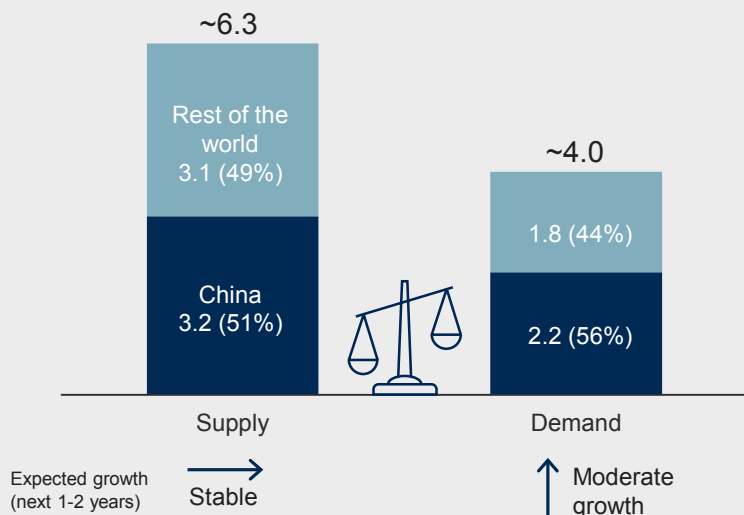


Source: FLSmidth analysis; OnField Research; CW Research

- **India, CIS and Southeast Asia** will be a growth engine with strong activity
- Modest demand growth and high utilisation levels in parts of **Europe** and **Americas**
- **Sub-Saharan Africa** likely to become more active through Chinese ‘One Belt One Road’ investments
- Our **regional setup** provides closer **customer proximity** and white spot coverage

Capital: Larger projects driven by local dynamics, products also by sustainability and productivity

Cement production vs. demand (2018, bn tons)



Cement demand

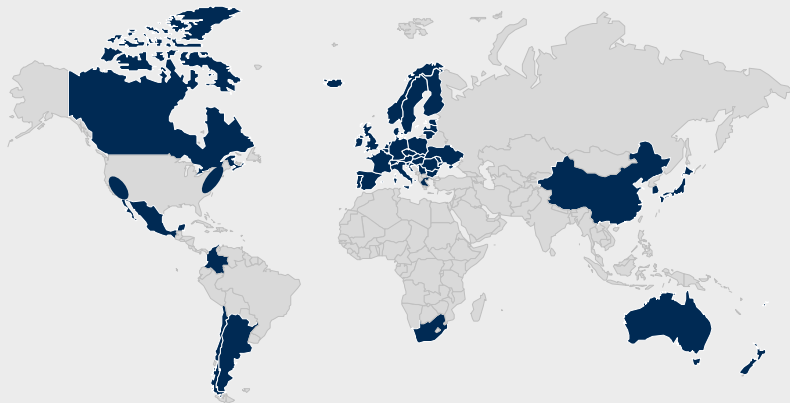
- Overall, **moderate demand growth** is expected short-term, with some **strong geographical pockets**
- **Political and economic uncertainty** impact investment appetite in construction and infrastructure
- The increase in demand is expected to lead to **regional cement price increases** – improving appetite for capital investments

Opportunities for capital:

- Investments in new capacity projects are expected in **select geographical pockets**
- The products business is supported by projects, need for **replacements in the installed fleet** as well as **sustainability-driven impacts**

Sustainability deep-dive: Regulations and CO₂ allowance prices are ramping up

Many countries already adopting carbon tax or emission trading schemes



■ ETS and/or carbon tax adopted or scheduled

Source: World Bank carbon pricing dashboard; Markets Insider

EU: Surge of CO₂ allowance price can create a large extra cash cost for cement production

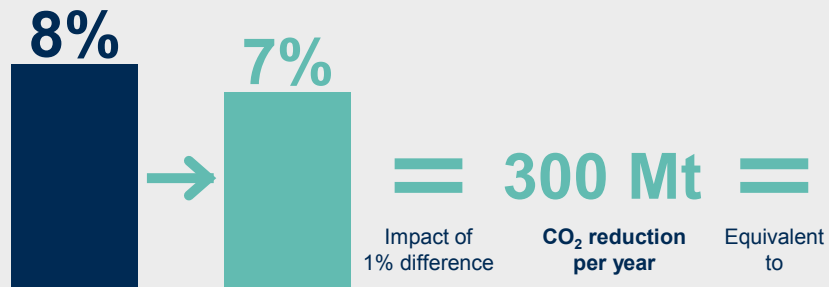


1t of cement produces 600-700kg CO₂

→ 17EUR additional cash cost today for each ton of cement

Potential environmental and business impact

What if the cement industry would reduce its CO₂ footprint by using FLSmidth equipment and solutions?



Global CO ₂ footprint	
2.6bn t/year	2.3bn t/year
CO ₂ emissions per ton of Cement	
600-700kg	500-600kg

Cement industry share of global CO₂ emissions

DIRECTIONAL



485,000

km² of **forest** could absorb = an area larger than **Germany**



258M

households' annual electricity use powered by fossil fuels

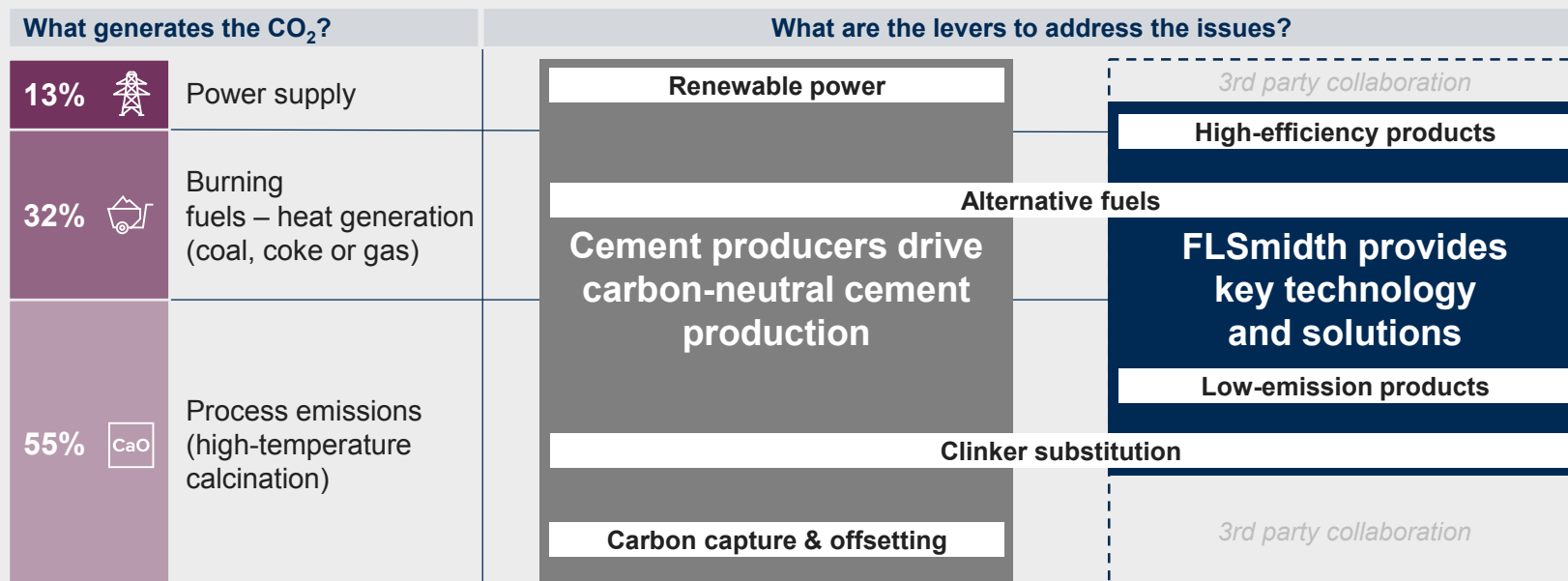


DKK 40m

annual savings on CO₂ spend in a 6,000 tpd cement plant

Our main sustainability ambition in Cement is to enable our customers to become carbon-neutral

How could a cement producer become carbon-neutral?





FLSmidth portfolio strongly supports the sustainability ambition

Calciner upgrades/ replacements, incl. ow-NO_x calciner, SCR solutions, SNCR, filter conversions, forthcoming technologies

Emissions



Hot disc, bypass & dust washing, AF handling/ dosing/ storage/ drying, ash compensation, forthcoming technologies

Alternative fuels



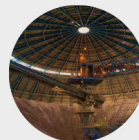
Sustain-
ability

Efficiency



Energy efficiency

Grinding systems, coolers top cyclones, burners, fan upgrades, power efficiency upgrades in other key equipment



Clinker substitution

Clay calcination, blending systems



Process optimisation

Automation upgrades, robotised labs, remote monitoring

Sustainability drives business opportunities for FLSmidth in all business areas

Upgrades

- Reduction of carbon and other emissions is a significant business opportunity requiring integrated upgrades and retrofits

Products

- Increased focus on work environment generates business in packaging and filtering
- Energy efficiency and process optimisation supports most product lines including digital solutions and automation

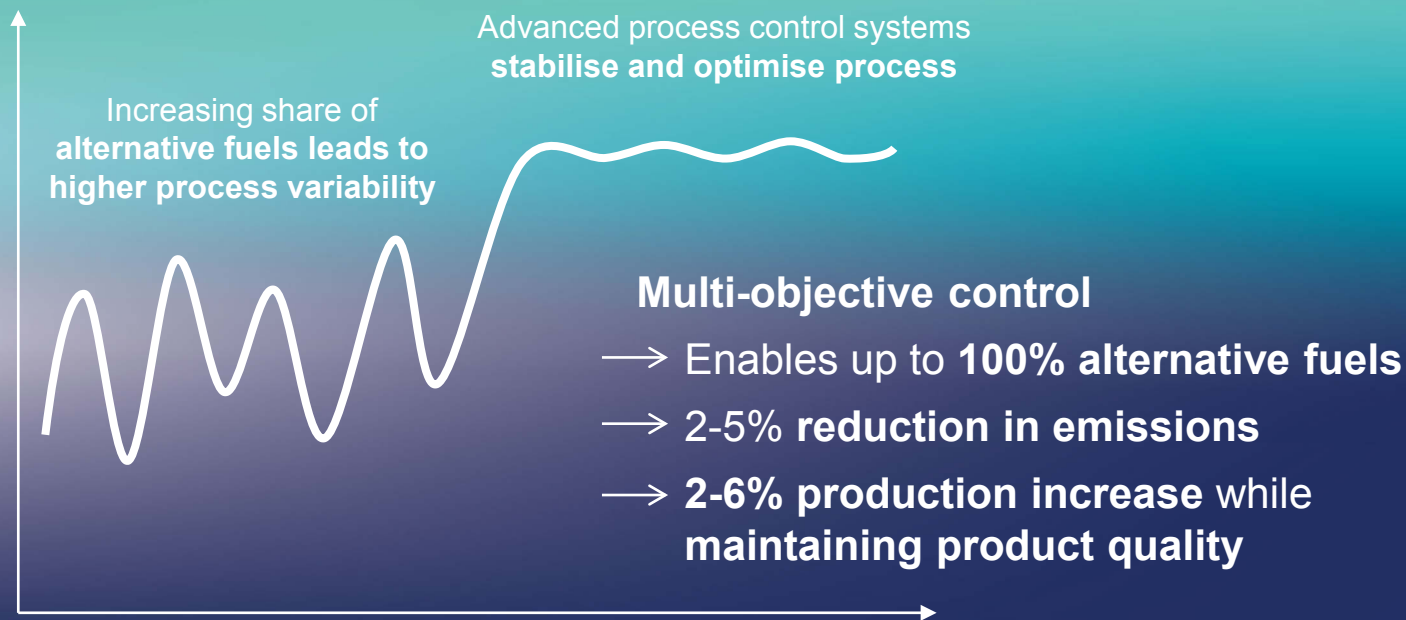
Services

- More advanced operations require intelligent preventative maintenance and spare part solutions for the full plant
- Remote monitoring, data analytics and process optimisation

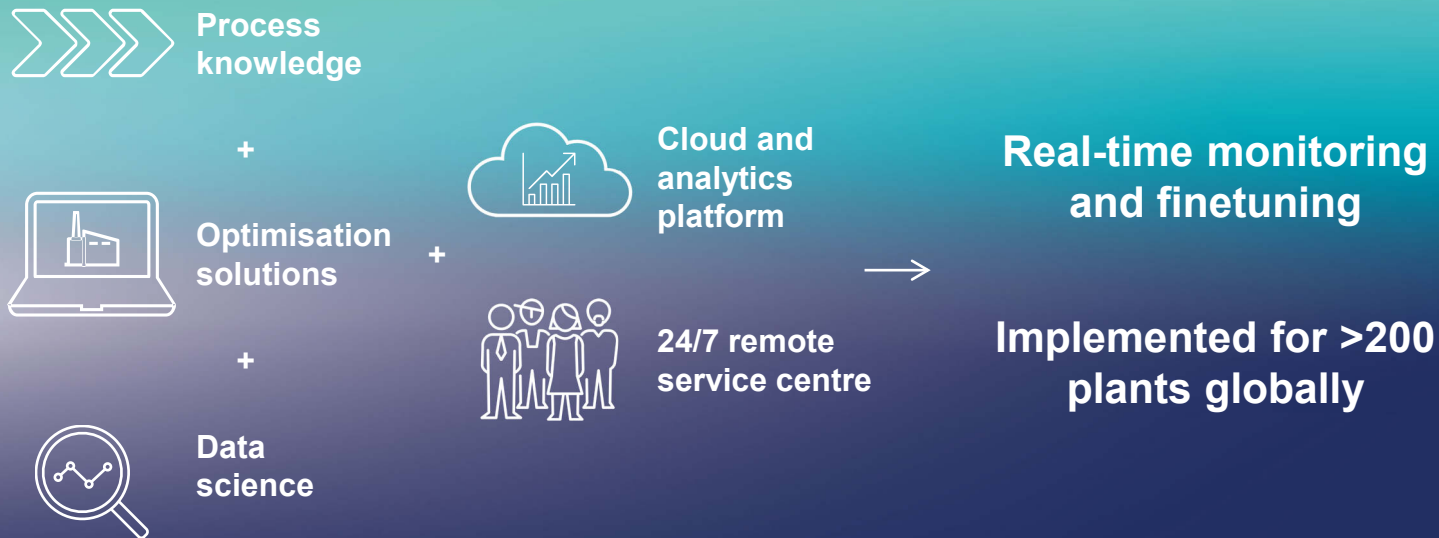
Projects

- More demanding environmental regulation can make new brown- or greenfield lines more attractive than lifetime extensions
- Tighter CO₂ regulation can drive increased demand for grinding stations

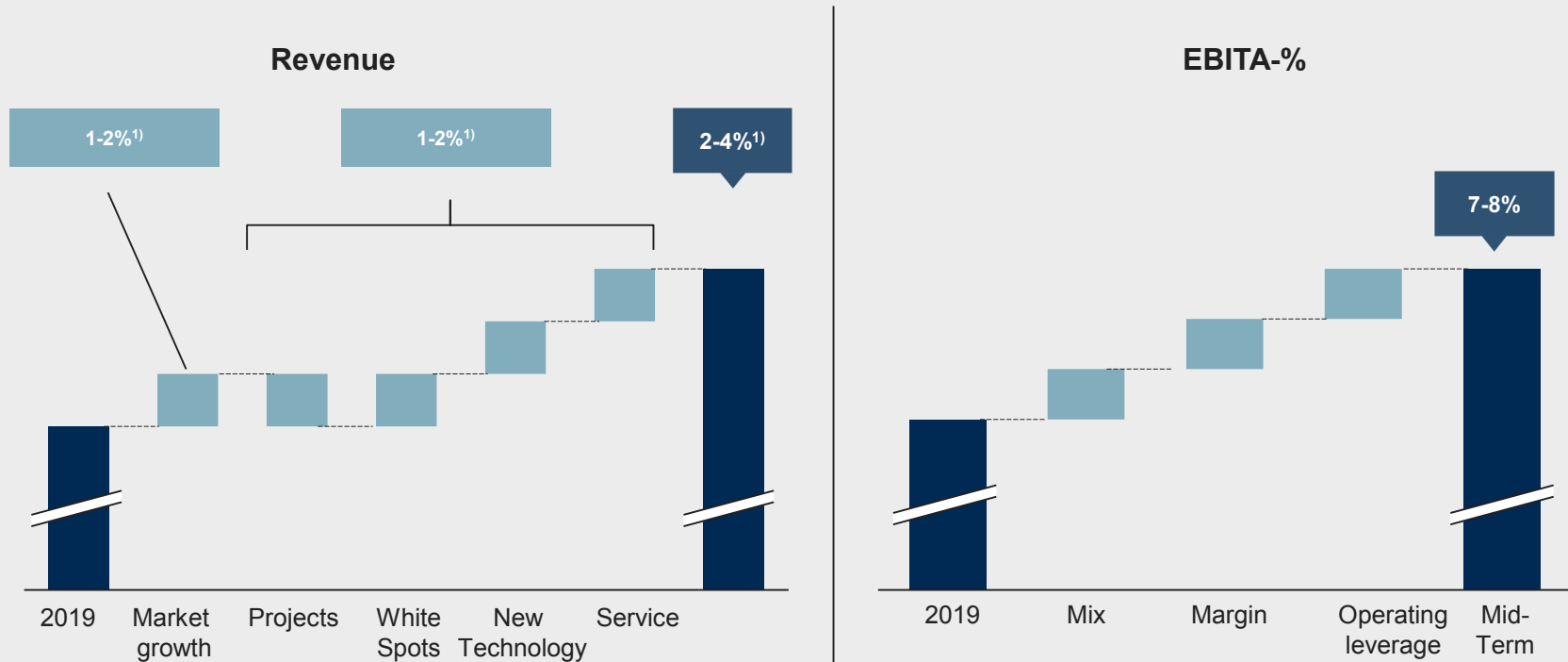
Optimising operations through Digital



Optimising operations through Digital



Cement revenue and EBITA margin



¹⁾ Average annual growth rate over the cycle

Size of bars does not reflect relative share

Thank you



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