

ANALYSTS VISIT TO HOPE CEMENT WORKS

28 September 2017



WELCOME & AGENDA



- Introductions
- Orientation & facilities
- No fire drill planned – muster point in car park
- Refreshments
- PPE
- Hazard awareness
- An overview...



Commercial overview

Tim Billingham

Interim Managing Director, Breedon Cement

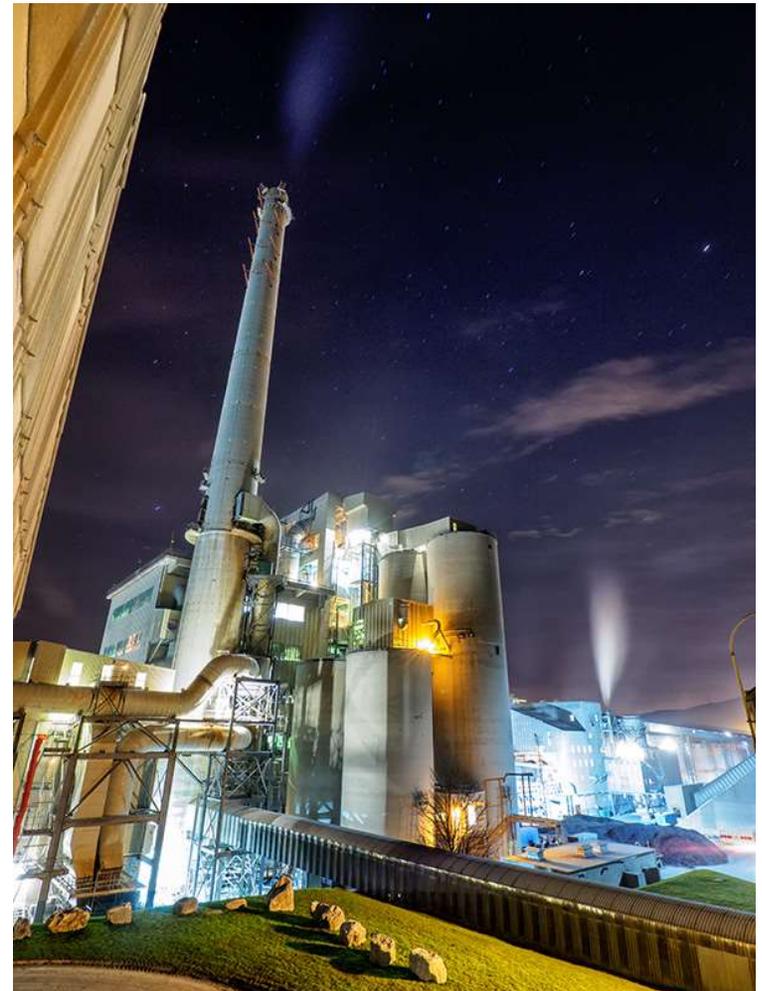
GB CEMENTITIOUS MARKET OVERVIEW



Cementitious market size: 13.5mt

Manufactured cement:	9.2mt
Imported cement:	2.1mt
GGBS/fly ash:	2.2mt

Bulk cement:	9.3mt
Packed cement:	2.0mt



Source: BDS Marketing Research 2015

MAIN ROUTES TO MARKET – BULK CEMENT



Concrete products

regular demand, logistically flexible
product quality fundamental



Readymix

more uneven demand
logistically more challenging



Adhesives

small sector
stable customer base



Soil stabilisation

small sector, construction sites rather than fixed outlets
uneven demand



MANUFACTURED PRODUCT MIX



Breedon Portland

- 28-day strength target
- applications where early strength is less crucial
- readymix, mortar, soil stabilisation

Breedon Portland Plus

- high strength at 7 days
- applications where early curing is important
- concrete blocks, precast, adhesives

Breedon Rapid

- high early strength
- reduces curing costs in cold weather
- precast concrete

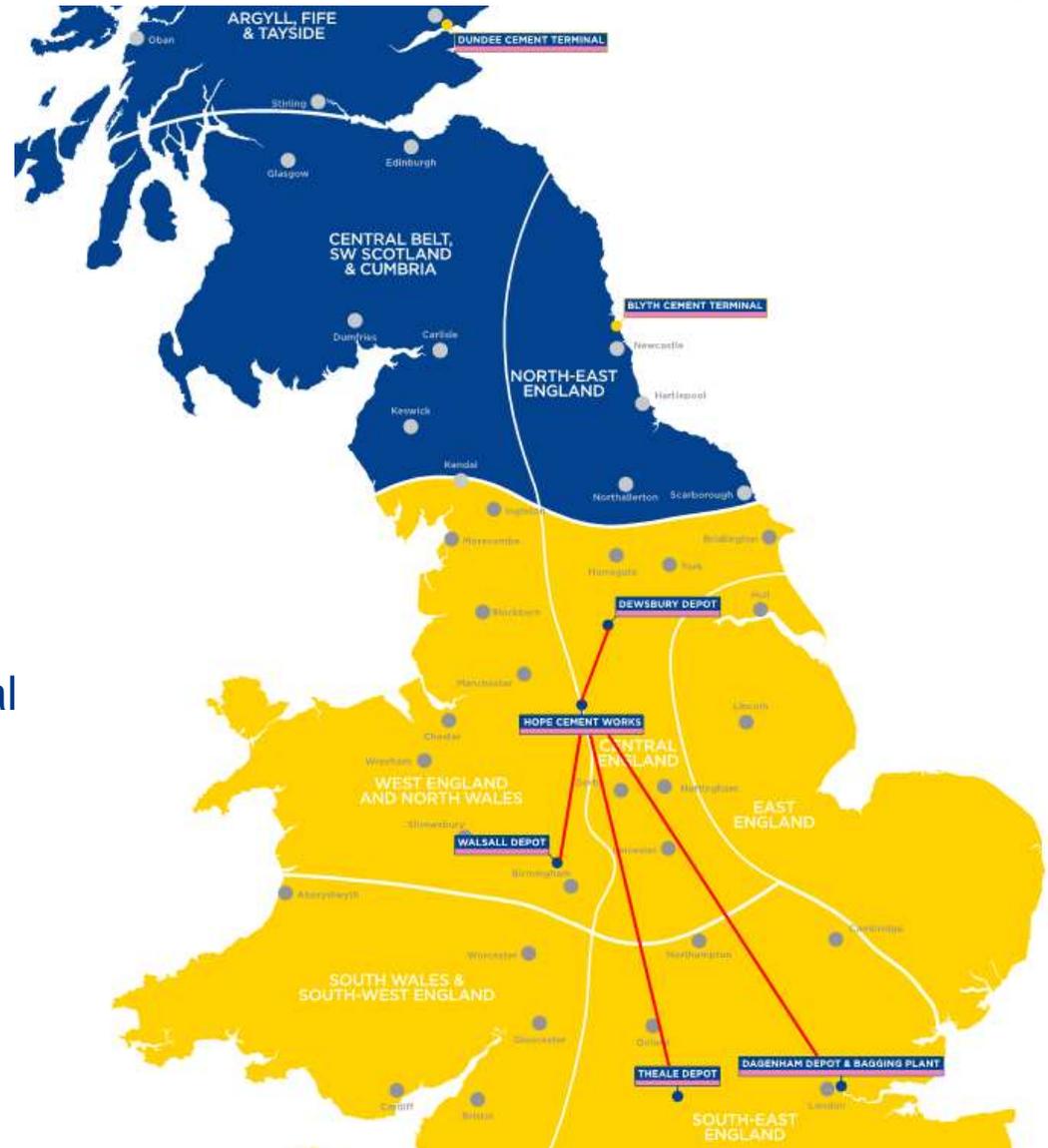
Bagged cement

- full range inc. General Purpose & Professional Grade
- sold through regional builders merchants
- heavy emphasis on service & delivery

SUPPLY NETWORK



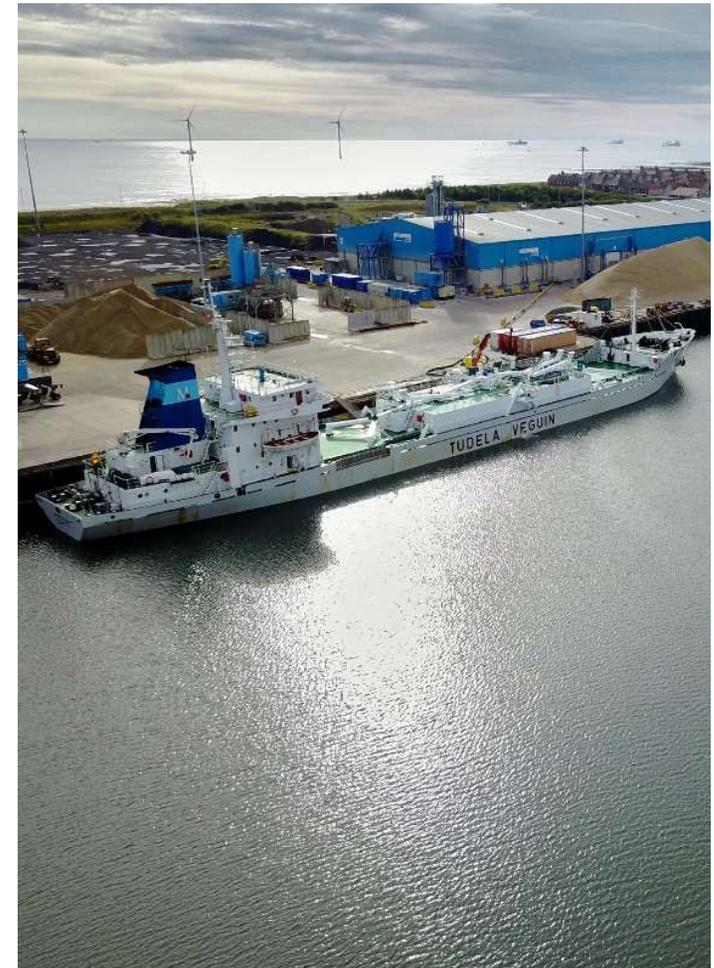
- 44 road tankers
- 175 rail wagons
- c.1mt pa transported by rail
- 4 rail-fed depots serving major conurbations & industrial/ commercial centres
- 2 import terminals adding flexibility



IMPORT TERMINALS



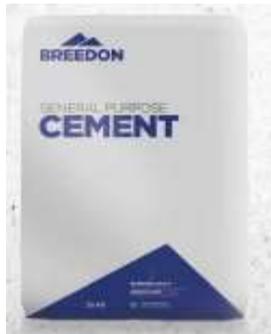
- Valuable complement to Hope Works
 - improved stock management
 - increased supply flexibility
- Expanding our cementitious business
 - cement + GGBS



BAGGED CEMENT



Comprehensive range of GP, PG & specialist products



BAGGED CEMENT



- Additional route to market for our cement
- Packed, stored & distributed from Dagenham
- Focused on local geographies
- Emphasis on service:
 - consistent 1-3 day lead times
- All bags plastic & waterproof
- Distinctive & contemporary packaging
- Recently rebranded Breedon:
 - well received by merchants



GB MARKET OUTLOOK: 2017-19



Construction output forecast to grow by c. 4%
Cementitious sales forecast to grow by c. 4%

Infrastructure output to grow by c. 25%
Private housing starts to grow by c. 7%

*Approx. two-thirds of our sales
are to these two end-use markets*



Sources: ONS/Construction Products Association; Mineral Products Association

LOOKING AHEAD: PRIORITIES



- Re-phase shutdowns to improve stock management
- Continue to improve logistics management
- Focus on customer segmentation
- Optimise potential of Dagenham



Quarry & plant overview

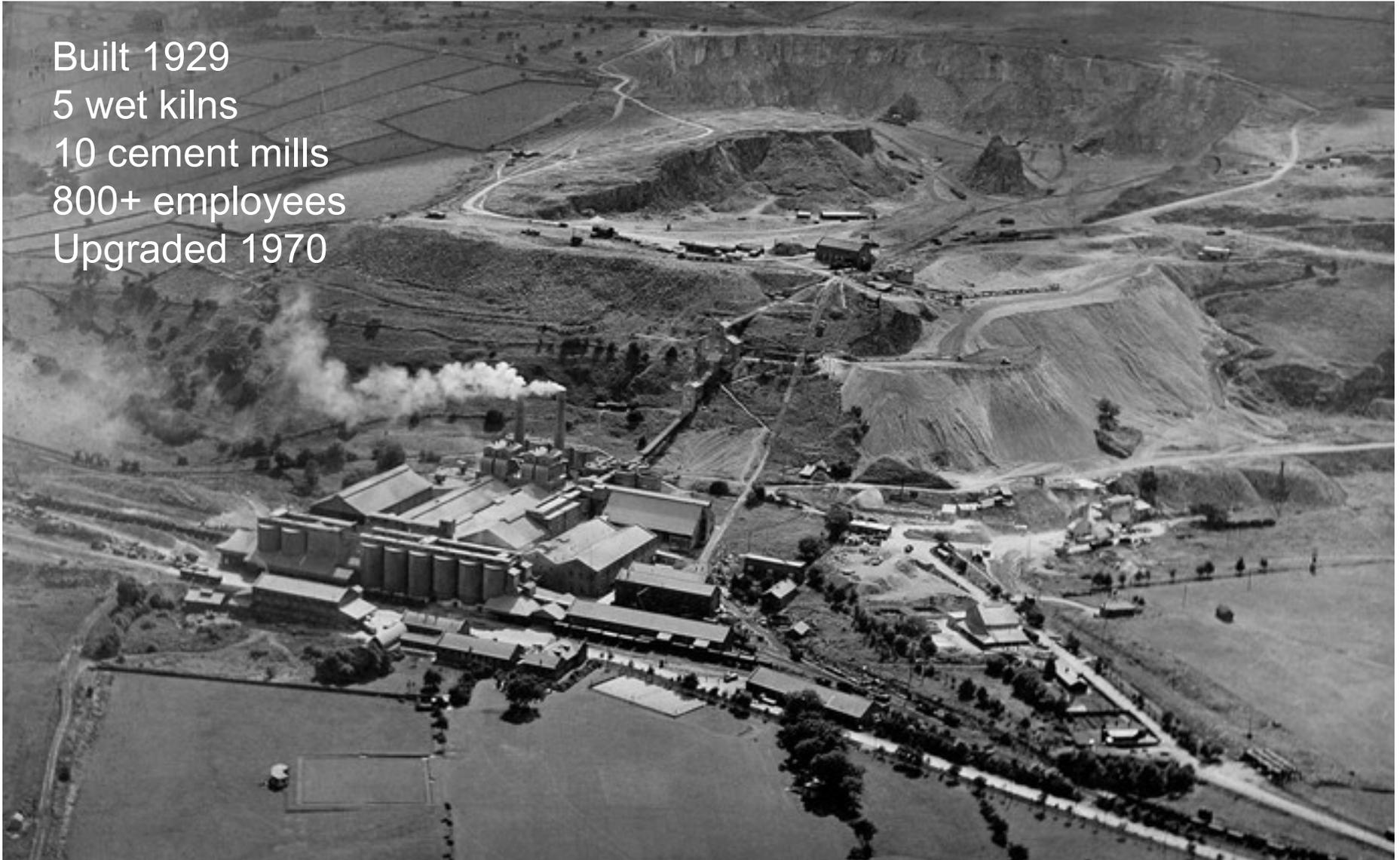
Ed Cavanagh

Hope Cement Works Manager

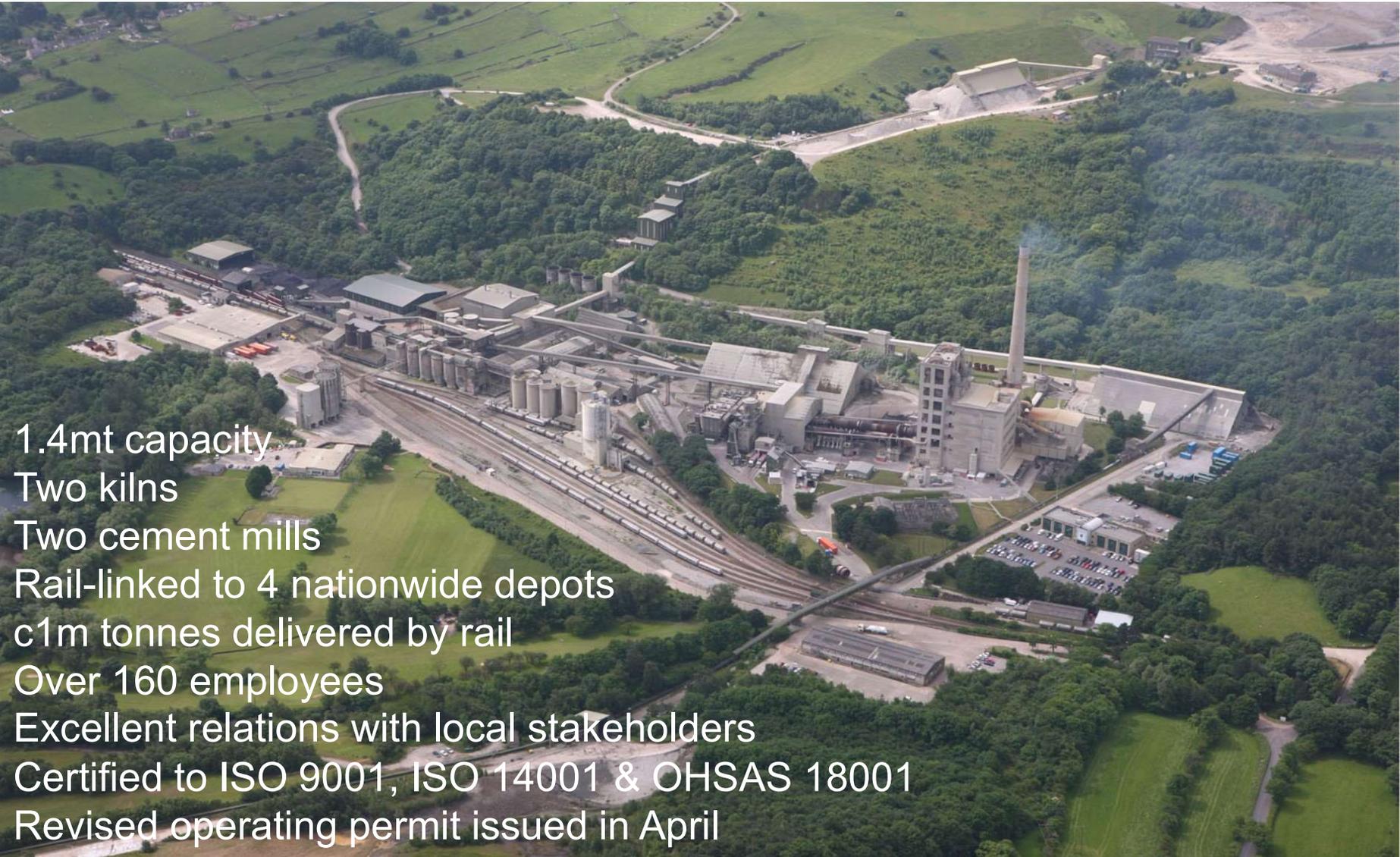
OVERVIEW OF PLANT & QUARRIES



Built 1929
5 wet kilns
10 cement mills
800+ employees
Upgraded 1970



CURRENT VITAL STATISTICS

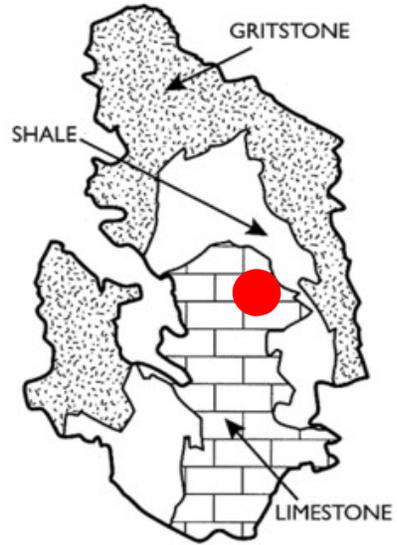


1.4mt capacity
Two kilns
Two cement mills
Rail-linked to 4 nationwide depots
c1m tonnes delivered by rail
Over 160 employees
Excellent relations with local stakeholders
Certified to ISO 9001, ISO 14001 & OHSAS 18001
Revised operating permit issued in April

SITE PLAN



WHY ARE WE HERE?



LIMESTONE QUARRY



1.5 km long, 0.6 km wide
165 metres deep
Reserves of 36.5 million tonnes
2 million tonnes pa extraction

Carboniferous limestone
335 million years old



SHALE QUARRY



Remaining area of shale extraction



Site of Roman fort

Carboniferous shale of variable sulphur content
Reserves of 3 million tonnes
0.3 million tonnes pa extraction (pre-PFA substitution)
Substituting with PFA

RESERVES MANAGEMENT

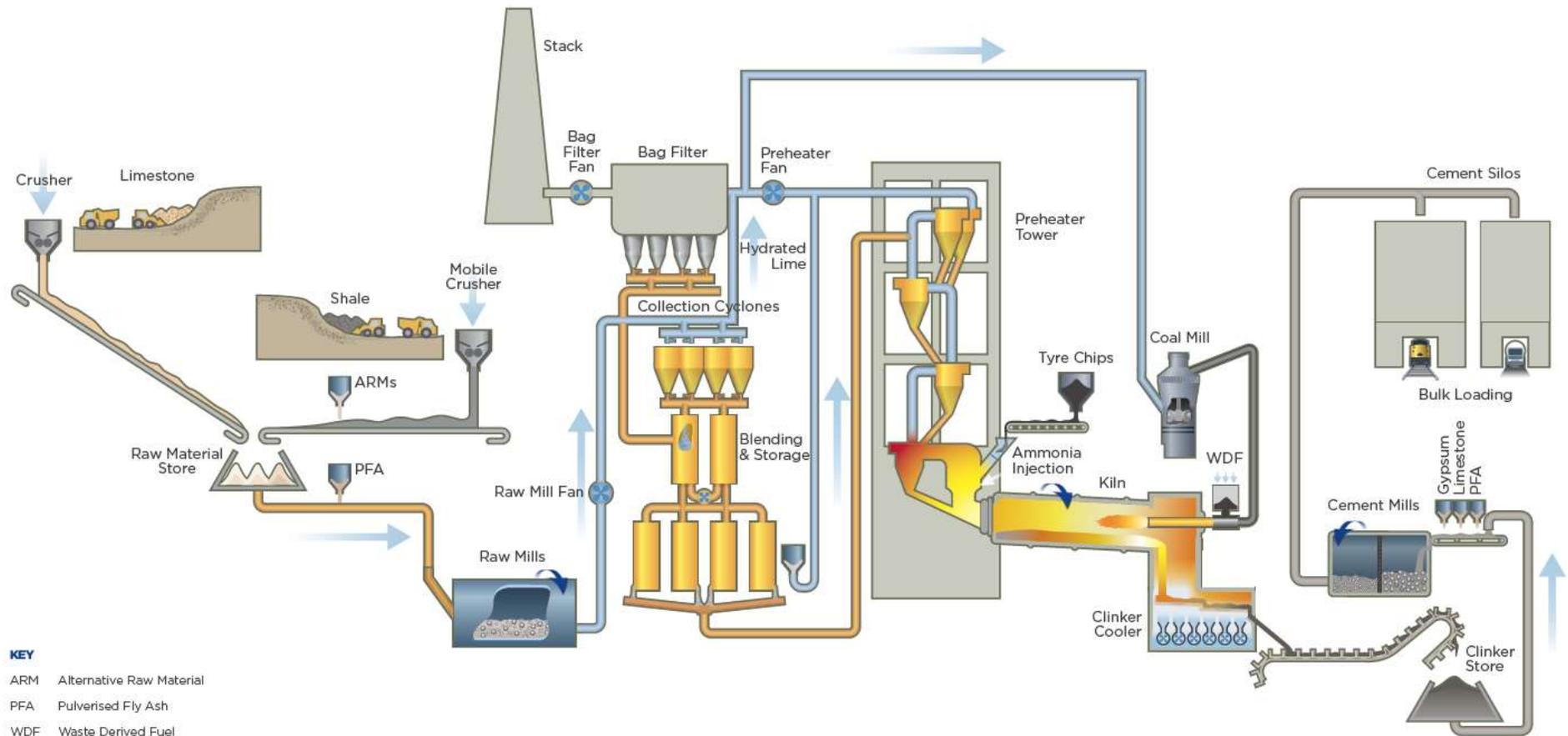


- Strategic approach driven by complexity and planning
- Working with the DNPA well ahead of current extraction consent limitations
- Limestone quarry options around Duchy & Bradwell Moor
- Scoping environmental impact assessment (EIA) and pre-application stages
- Discussions underway with PDNPA regarding shale quarry extraction options
- Shale alternative options being explored in parallel
 - alternative shales, marls, etc.
 - conditioned ash feed options: dried on site /dried at Hope / fed 'wet' at Hope
 - run-of-station ash utilised when available

HOPE WORKS: CEMENT-MAKING PROCESS



HOPE WORKS CEMENT-MAKING PROCESS



£14M INVESTMENT & OPTIMISATION COMPLETED



New clinker shed

Kiln 2 shell section & tyre

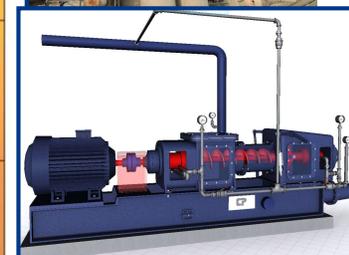
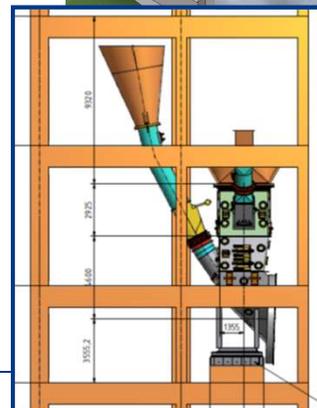
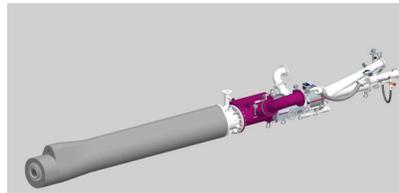
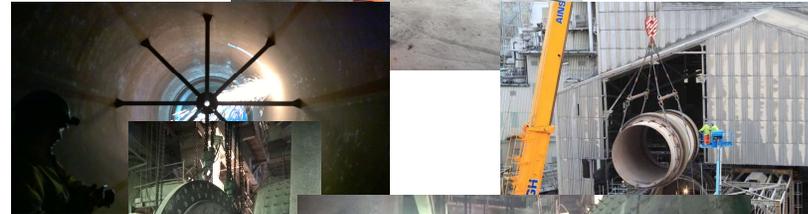
SWF plant

Chimney repairs

Firing pipe replacements

Kiln back-end replacements

Kiln feed system uprating



ARM & WDF STRATEGIES



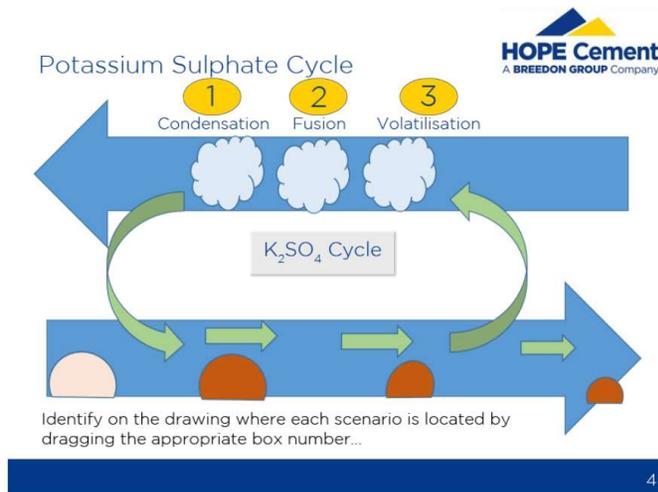
- Since 2001, Hope has utilised 1.2 million tonnes of waste in the process:
 - 0.7 million tonnes of alternative raw materials
 - 0.5 million tonnes of waste-derived fuels
- We have progressively increased coal substitution:

Waste Derived Fuel	First year of Introduction
Chipped tyres	2001
Meat & bone meal	2006
Processed sewage pellets	2011
Solid waste/recovered fuel	2013

TRAINING & APPRENTICESHIPS



- On-site 'Production Coach' dedicated to process knowledge development
- Control Room Operators (CROs) focus, inc. performance monitoring
- Continually enhanced modules to include plant modifications & new technologies



- Engineering apprentice scheme approved by IET & IMechE in 2016
- Succession planning a continual focus to achieve the right personnel balance

COMMUNITY ENGAGEMENT



- Crucial to commercial operation & long-term future of plant
- Wide range of key stakeholders including:
 - Peak District National Park Authority
 - Parish and County Councillors
 - Residential & commercial neighbours
 - MPs
 - Tourist Board and Marketing Peak District & Derbyshire
- Managed via committee memberships & individual relationships
- Open Days, local shows, plant tours, etc.



ANY QUESTIONS?

