

# Cement Production in Ireland 2016

## INVESTMENT

€500 MILLION

INVESTED IN MODERN PLANT SINCE 2000



### MODERN DRY PRODUCTION FACILITIES

4 cement kilns on the Island using BAT dry process clinker manufacturing. Energy efficient mills require 30% less electricity putting Ireland ahead of the EU average

## MARKETS

40%

EXPORTED TO THE UK AND EUROPE



### DOMESTIC AND EXPORT MARKETS

Through cost efficient operations and flexible work practices the industry has secured and grown these vital export markets

## JOBS



2,000 PEOPLE EMPLOYED

Chemical, mechanical, electrical, process and environmental engineers are essential to operate cement manufacturing facilities

## FUELS

>34% OF THE FOSSIL FUELS HAVE BEEN REPLACED

### FOSSIL FUEL REPLACEMENT

Since 2008 there has been steady progress replacing imported fossil fuels with 'ready-to-use' fuels produced from local residual waste materials.

Lagan Cement's fossil fuel replacement is currently 65%

## ALTERNATIVE FUELS



1 TONNE OF CO<sub>2</sub> SAVED FOR EVERY TONNE OF SRF OR TYRES USED TO REPLACE FOSSIL FUELS

Source: Prognos Report, 2008  
Resource savings and CO<sub>2</sub> reduction potential in waste management in Europe and the possible contribution to the CO<sub>2</sub> reduction target in 2020

## CARBON

EACH BAG HAS A

20% ↓

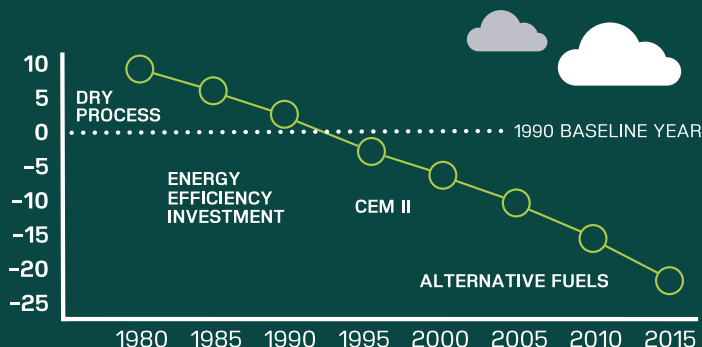
LOWER CARBON FOOTPRINT



CONTINUOUS REDUCTION IN CARBON EMISSIONS DUE TO;

- ongoing investment
- further fossil fuel replacement
- increasing clinker substitution

## CARBON REDUCTION



# Cement Production in Ireland 2016

## CEMENT PRODUCTION

### RAW MATERIAL PREPARATION

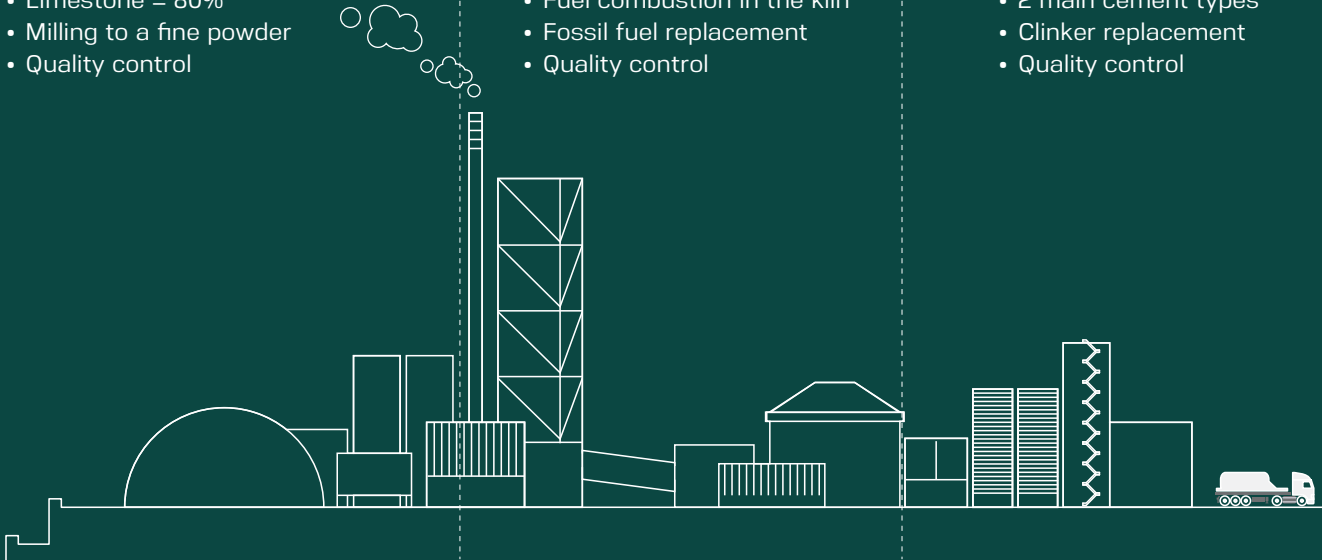
- Quarry - local materials
- Limestone = 80%
- Milling to a fine powder
- Quality control

### CLINKER PRODUCTION

- High temperature >1450°C
- Fuel combustion in the kiln
- Fossil fuel replacement
- Quality control

### CEMENT MILLING

- Energy efficient mills
- 2 main cement types
- Clinker replacement
- Quality control



## PRODUCTS

### ECO-EFFICIENT CEM II CEMENTS

Since 2006, Eco-efficient CEM II cements have been manufactured using local raw materials and now represent more than 80% of cement sales in Ireland.

## CERTIFICATION

Independent International Verification  
 ISO 9001 – Quality  
 ISO 14000 – Environmental  
 BES 6001 – Responsible Sourcing



# CONCRETE

## STRONG, SAFE, SUSTAINABLE

Concrete – 2nd most used substance on the planet after water

### Circular Economy

- Local materials
- Durable, resilient
- 100% recyclable

### Comfortable, affordable housing

- Thermal mass
- Fire resistance
- Security

