

An aerial photograph of a complex highway interchange with multiple lanes and overpasses. A large, bright yellow graphic element, consisting of several thick, rounded lines, is overlaid on the image, tracing a path through the highway lanes. The text is placed over the top left and right portions of the image.

**WE OPEN  
THE WAY**

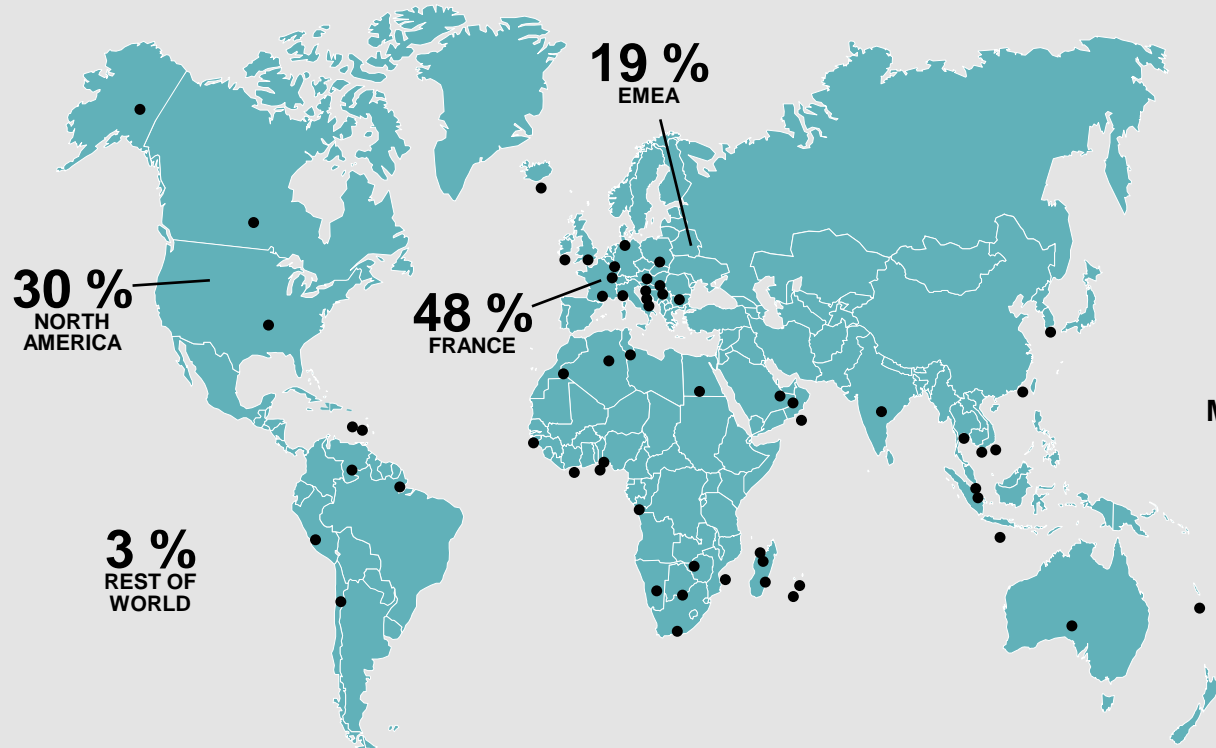
**Benn Teasdale**

**RECYCOL A41 DELIVERY**  
LOW CARBON HIGHWAY  
REGENERATION

**COLAS**

# COLAS GROUP

**GLOBAL PRESENCE IN OVER 50 COUNTRIES ON 5 CONTINENTS**  
52% INTERNATIONAL



**15.5**  
BILLION EUROS  
2022

**58**  
THOUSAND  
GLOBALLY

**3**  
THOUSAND  
MATERIALS PRODUCTION  
& RECYCLING UNITS

**#1**  
ASPHALT  
PRODUCER



**ROADS**



**AIRFIELDS**



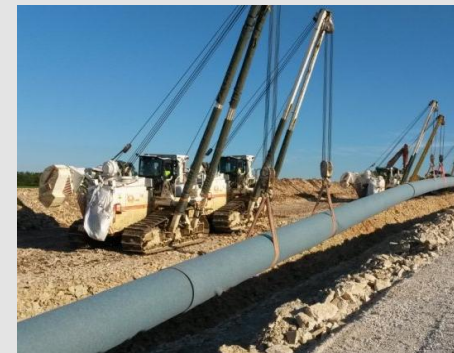
**MATERIALS**



**RAIL**



**PORTS**



**SPAC**

# DECARBONISING IS A CHALLENGE

## DENSE INTERNATIONAL NETWORK OF PRODUCTION, STORAGE & RECYCLING UNITS

518 ASPHALT PLANTS

463 QUARRIES & GRAVEL PITS (IN OPERATION)

174 CONCRETE PLANTS

147 EMULSION PLANTS



420 RECYCLING UNITS

1 BITUMEN REFINERY LOCATED IN KEMAMAN, MALAYSIA

71 BITUMEN STORAGE TERMINALS



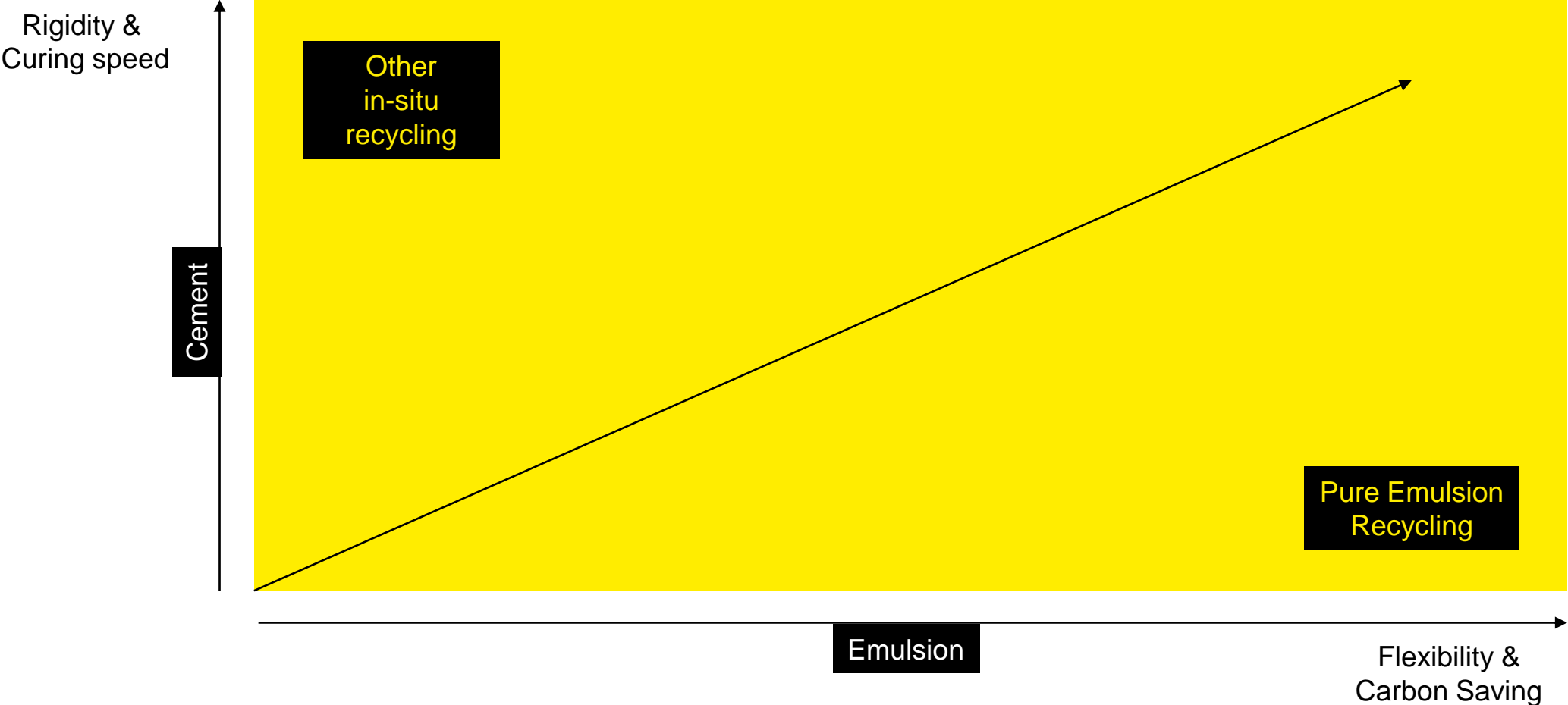
# THE RECYCOL SOLUTION

- Recycling 100% of the binder course, cold and in-situ
- Emulsion based – flexible binder course
- With cement for accelerated curing + additional rigidity
- Typically ~70% carbon saving – Cheshire ~65% saving
- 20+ years of experience in France
- A41 video (next slide)



# EMULSION VS CEMENT

## IN-SITU RECYCLING



# RECYCOL ROUTE MAP

**2000**

**>20 YEARS RECYCLING  
IN FRANCE**



**2022**

**UK URBAN ROAD  
COVENTRY**



**2023**

**LOCAL MAJOR  
ROAD**



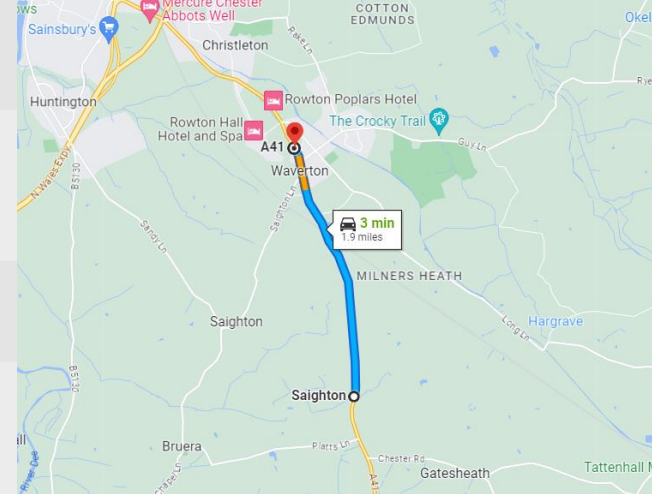
**2024**

**NH & STRATEGIC  
ROAD NETWORK**

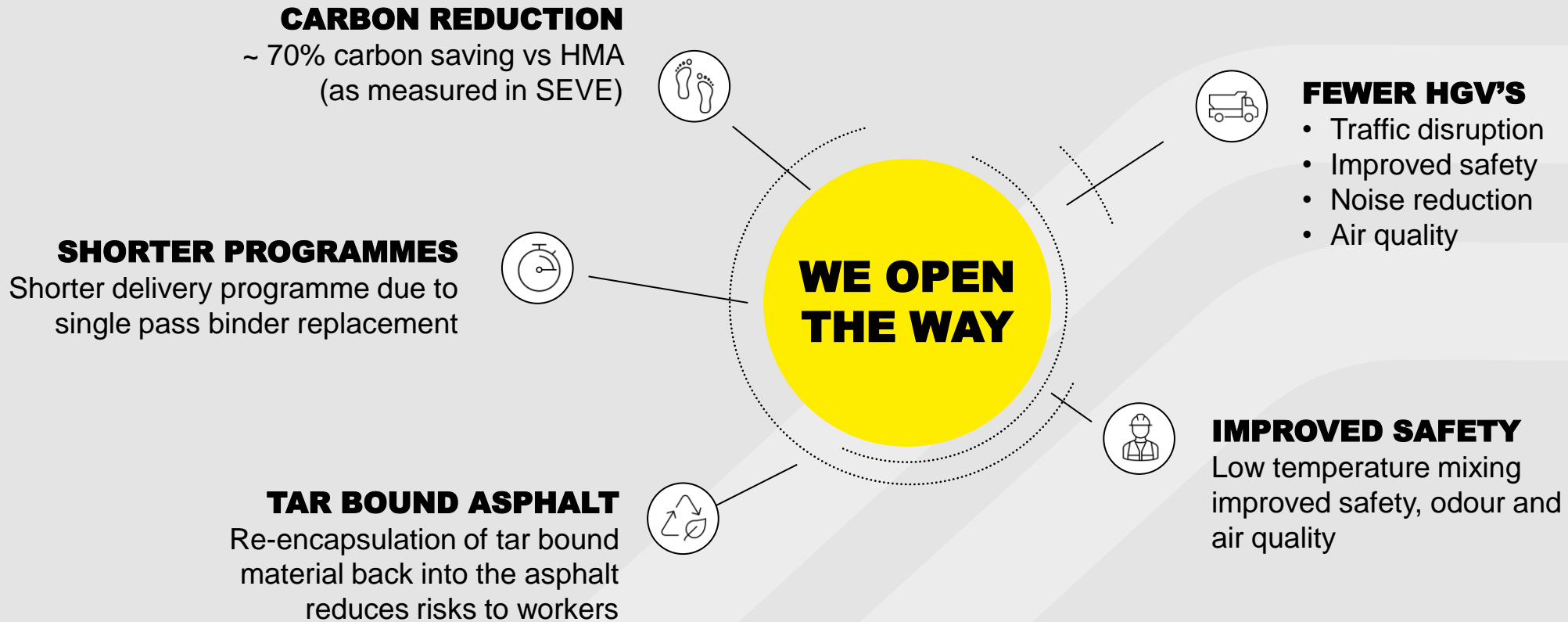


# A41 CHESHIRE WEST

- **A41 RESURFACING**
- **SCHEME DETAILS** – 2km (+250m) of the A41 (Waverton to Hatton Heath) – 5 days full road closure – 3<sup>rd</sup> October 2023 – 7<sup>th</sup> October
- **PROCESS STEPS:**
  - Surface course removal - depth 40mm
  - Binder Course Recycling @100% - depth 70mm
  - Surface course relaid as SMA - depth 40mm
- **PROGRAMME SO FAR** - and the extra section (250m)
- **TESTING** – FWD to be completed, cores taken and will produce pavement and mix designs proposal to National Highways



# BENEFITS





# FINAL WORD

- A joint effort - Thanks to CW&C!
- A growing market – Several solutions towards net zero surfacing
- Aspirations for 2024 – Growing the market

