

Barriers to Sustainable and Net Zero Practices A Highways Contractor Perspective

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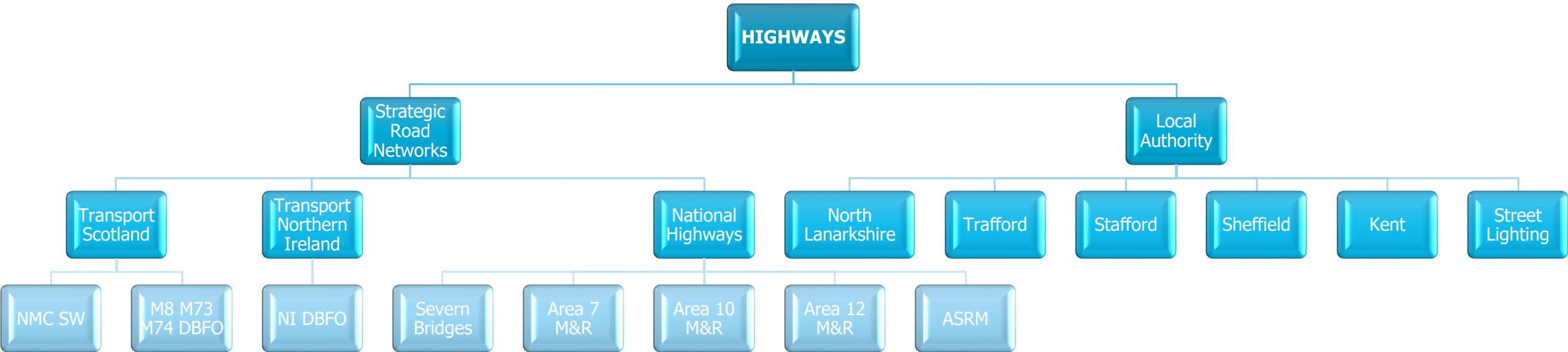
Head of Environment & Sustainability | Amey Transport Infrastructure

Personal pride in our public service

EMPOWER | ENGAGE | EXCEL



Our structure



Life Cycle
Approach

DESIGN

ameyconsulting

CONSTRUCTION

OPERATION

MAINTENANCE

Amey Transport Infrastructure

30,000
km of highways
improved and
maintained

725,000
streetlights managed
(the equivalent of all
the streetlights in
Los Angeles, New York,
Madrid and Birmingham)

150,000
tonnes of salt
spread in winter

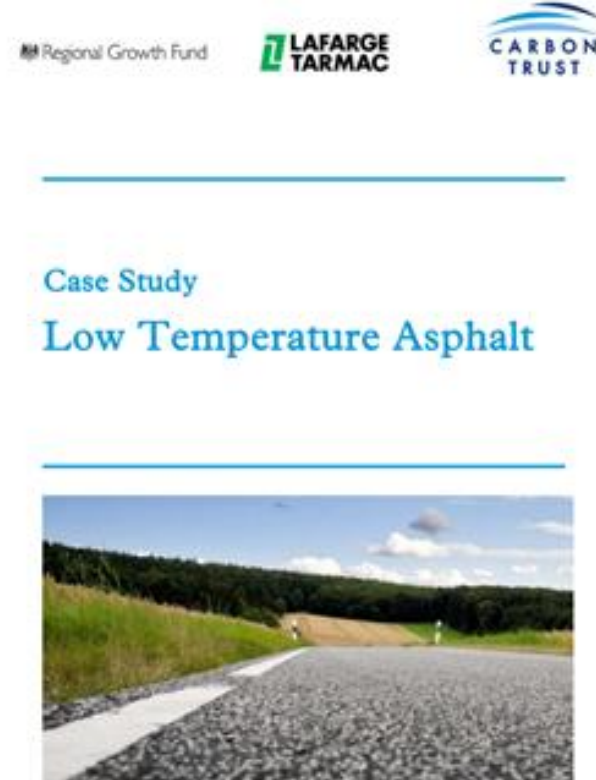
550,000
tonnes of black top laid
on UK roads every year

200+
different types of
vehicles used to deliver
a great service

Context for today ...



Institute of Environmental Management & Assessment (IEMA) Skills Map



2013

NATIONAL HIGHWAYS

is accelerating the use of warm mix asphalts as standard across its supply chain as part of a drive toward net zero carbon emissions.

2021

Barrier:

Poor General Environmental Awareness

Attribute

Fundamentals of Sustainability

Understanding of the implications of global trends for the environment, for society, for the economy and for organisations.

Attribute

Policy, Regulation and Legislation

Understand major policy and legislation and their implications for organisations, products and services

Attribute

Fundamental Issues and Principles

Understand environmental or socio-economic principles and their relationship with organisations, products and services



Barrier: **Acceptance of Environment & Sustainability Responsibility**

Attribute

Fundamentals of Business and Governance Principles and Issues

Understand sustainable business/governance models, their underlying principles and their relationship with organisations, products and services

Why is Warm Mix Asphalt still not standard practice in 2021 in the UK?

SPECIFICATION	PRACTICAL	PROCUREMENT
<ul style="list-style-type: none"> • Risk Adverse Attitude • Lack of National Specification • Absence of documented evidence (in situ and long term performance and durability) • Perception of Compromised Performance 	<ul style="list-style-type: none"> • Time and costs associated with seeking departures • Time and costs associated with data/information capture and feedback • Time and costs associated with trials and business case development • Competition for Innovation Funding • Lack of Urgency & Action • Poor Change Management • Poor Planning • Systems that are not suitable or sufficient • Environmental – weather, ambient and surface temperature, site conditions 	<ul style="list-style-type: none"> • Low demand leading to lack of investment in new technologies in the supply chain • Affordability - Low demand making material costs slightly higher than conventional materials • Lack of collaboration between suppliers, customers and industry experts
<i>Key Challenge</i>		
CONFIDENCE	RESOURCES	COST

NET ZERO 2050

OPPORTUNITY TO REDUCE CARBON EMISSION BY UP TO 15% COMPARED TO STANDARD HOT MIX ASPHALT

Resulting in 61,000 tonnes of CO2 saved per year, the equivalent of cutting around 300 million miles of car journeys.



Specification Barrier: **Risk Averse**

Attribute

Resilience, risk and continual improvement

Understand tools and techniques that identify opportunities and risks

CONFIDENCE



**Specification Barrier:
Lack of National
Specification**

**Absence of documented
evidence**

**Perception of
Compromised Performance**

Attribute

Analytical Thinking

Collect data, perform analysis, and
evaluate information

Attribute

Problem Reframing and Resolution

Research and plan to provide sustainable
solutions

CONFIDENCE



**Practical Barrier:
Poor Planning**

**Systems that are not
suitable or sufficient**

Environmental

Attribute

**Management and Assessment
Tools**

Identify major and relevant tools, techniques, systems and practices, their application and how they can be used to develop sustainable products and services and improve sustainability performance



**Practical Barrier:
Time and costs associated with:**

Seeking departures

**Data/information
capture and feedback**

Attribute

Delivering sustainable solutions

Identify and propose ways to improve performance

RESOURCES



Practical Barrier:
Time and costs associated with:
Trials and business case
development

Competition for
innovation funding

Attribute

Innovative and Leading practices
for a Sustainable Environment

Understand the role of innovation and other leading practices in developing sustainable products and services and providing sustainable solutions

RESOURCES



Practical Barrier:
Lack of urgency & action

Poor change management

Attribute

Leadership for Change

Support change and transformation to improve sustainability

RESOURCES

Net Zero and sustainable practice takes a collective effort

Procurement Barrier:
Low demand

**Lack of collaboration
between suppliers,
customers and
industry experts**

Attribute

Relationship Development

Engage with stakeholders

Attribute

Effective Communication

Deliver effective communication and capture feedback

COST

Leading Sustainable Change

**“Be brave, be curious, be determined,
overcome the odds. It can be done”**

Stephen Hawking, Brief Answers to the Big Questions



Thank you

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