



**LONDON LOW EMISSION**  
CONSTRUCTION PARTNERSHIP

**KING'S**  
*College*  
**LONDON**

# Low Emission Construction Partnership Update

NRMM Seminar

17<sup>th</sup> March 2016

David Green and Daniel Marsh  
Robert Hepburn and Sam Hope-Evans



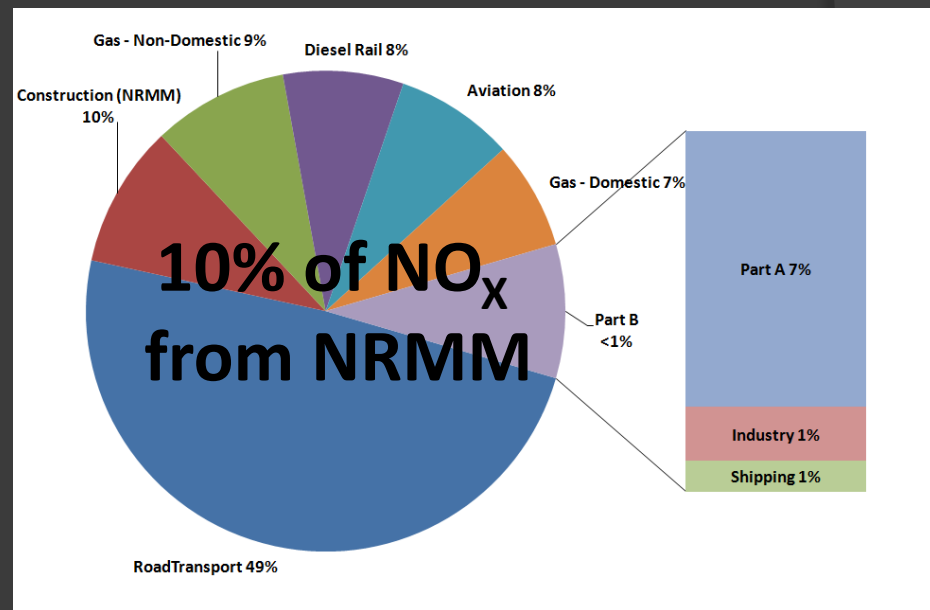
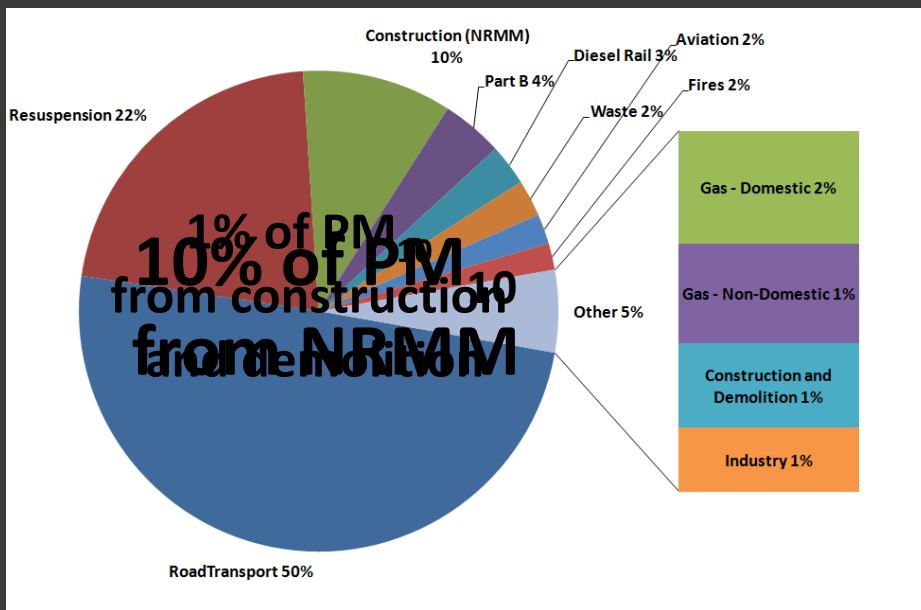
Supported by



SUPPORTED BY  
**MAYOR OF LONDON**

# Why are construction emissions important?

## London Atmospheric Emissions Inventory 2010



# What is the London Low Emission Construction Partnership?

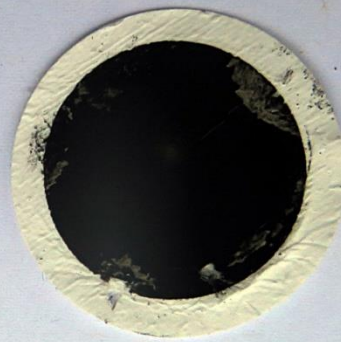
- Mayors Air Quality Fund project
  - Apr 2014 – Apr 2016
- Objectives
  - Raise awareness in the construction industry of its impact on local air quality.
  - Improve pollution monitoring and make this data available for construction sites in London.
  - Help to fund ‘best in class’ abatement measures at construction sites and encourage the uptake of pollution reduction measures.
  - Create ‘evidence base’ and evaluate the cost effectiveness/benefit for different pollution abatement techniques.

# Raising awareness...

Filter removed from Osiris dust monitor  
after 8 weeks sampling next to the offices at  
Nine Elms Northern Line Extension



Blank




Exposed for 8 weeks

# LLECP Website

# llecp.org.uk

Home About Advice Projects Resources Contact

Search


 **LONDON LOW EMISSION CONSTRUCTION PARTNERSHIP**

SUPPORTED BY  
**MAYOR OF LONDON**

## What is my legal requirement?



From September 2015 the London Mayor will introduce new standards to reduce pollution emissions from the construction industry with tighter standards proposed for the start of the London Ultra Low Emission Zone in 2020.

[Read more...](#)



## Working together to build a cleaner London

### Are you a...


-  Project manager
-  Property developer
-  Local resident
-  Local authority officer

### How do I find out about...

-  Health advice
-  Non Road Mobile Machinery


### Air Pollution Forecast


Today

 Moderate

[More information and health advice](#)


### Tweets

  
**Construction Dust UK** @ConstructDus  
New #NRMM #emission standards o  
#London from September 2015 - ar  
#construction pic.twitter.com/9z/Eo

  
**Construction Dust UK** @ConstructDus  
#Air #Pollution Linked To Stroke: Hig  
May Narrow The Arteries medicaldai  
#construction #health @TheBHF

Home About Advice NRMM Projects Resources Contact

Search


 **LONDON LOW EMISSION CONSTRUCTION PARTNERSHIP**

SUPPORTED BY  
**MAYOR OF LONDON**

## London Low Emission Construction Partnership





The London Low Emission Construction Partnership (LLECP) is a collaboration between the 'Cleaner Air Boroughs' in central London and King's College London. The project is funded by the Greater London Authority (GLA) and aims to reduce emissions from the construction industry.

[Read more...](#)






## Working together to build a cleaner London

### Are you a...

-  Project manager
-  Property developer
-  Local resident
-  Local authority officer

### How do I find out about...

-  Health advice
-  LLECP construction projects
-  Non Road Mobile Machinery



# Outreach

- [ilecp.org.uk](http://ilecp.org.uk)
  - 1200 unique visitors since the launch in July
  - 5:27 average session duration
- @ConstructDustUK
  - >1000 followers within the target industry
  - >1600 tweets
- Meeting people
  - 14 large developers
  - 6 conference presentations
  - 200 Project brochures delivered to developers, construction sites and local authorities





# Success?





# Improve pollution monitoring

Home About Advice NRMM Projects Resources Contact

Search



SUPPORTED BY  
MAYOR OF LONDON

## Projects Map

Argent - King's Cross Central  
BAM Construction - South Camden  
BAM Construction - Swiss Cottage  
BAM Construction Ltd  
Berkeley Group, City Forum, Islington  
Camden - Freight Lane CMA trials  
Catalyst - Wornington Green  
Construction Demonstration  
Ealing - Horn Lane  
Environment Agency W4F, Orpington  
Keltbray - Earl's Court Exhibition Centre  
Laign O'Rourke - Nine Elms NLE  
Lend Lease - Heygate Estate  
Vinchi Bam - Victoria Station Upgrade  
Argent - King's Cross Central

This map shows projects where measurements are available. Select a project from the list or map to show details. Access beyond this page is restricted to authorised users.

[Go back to the projects overview](#)

Thank you for accepting cookies. You can now hide this message or find out more about cookies.

Hide More info

SUPPORTED BY  
MAYOR OF LONDON

## Graphing tools

2. Select time period: 1 Jan 2015 to 2 Jan 2016

3. Select averaging period: Hourly

**replot the graph**

Warning: Data for species PM10 for selected period has not been ratified and must be considered with care. Why?  
View Period = 1-Jan-2015 to 2-Jan-2016

Kings Cross 4 - Coopers Lane (hourly means)

replot the graph

Air Pollution Forecast

Today  
Low

[More information and health advice](#)

### Tweets by @ConstructDustUK

Construction Dust UK @ConstructDustUK  
#London boroughs can access the @LDN\_environment  
#construction #NRMM register for #planning #compliance & enforcement... buff11N9XoHJ

Construction Dust UK @ConstructDustUK  
Working together to improve #London's air via @LDN\_environment



# 'Best in class' abatement measures... and creating an evidence base...





# Abatement measures



Dust suppressant



Fuel additive



Green mode / fuel additive



Intelligent power solutions

# Portable emissions measurement system (PEMS) for generators



- Generators are currently only manufactured to EU stage IIIa standards
- EU stage V not due until 2020 or later
- Run 24/7 for off-grid supply until site electrification
- Often 'over specified' for actual load requirement so wastes diesel and increase emissions



# LLECP Stage 2

- MAQF 2016-2019
- LLECP 1 was 6 local authorities
- LLECP 2 will be 12 local authorities
- Objectives
  - REDUCTION
  - OUTREACH
  - SUPPORT FOR ENFORCEMENT

FindAPhD PHDS EVENTS FUNDING ADVICE EMAIL UPDATES

Home > PhDs > Characterising non-road mobile machinery emissions through portable emissions testing and emissions inventory development

Share this page: [Facebook] [Twitter] [Google+] [LinkedIn]

### Characterising non-road mobile machinery emissions through portable emissions testing and emissions inventory development

King's College London | Health Schools | London | United Kingdom

Dr Green  
Dr Beevers

Friday, April 29, 2016

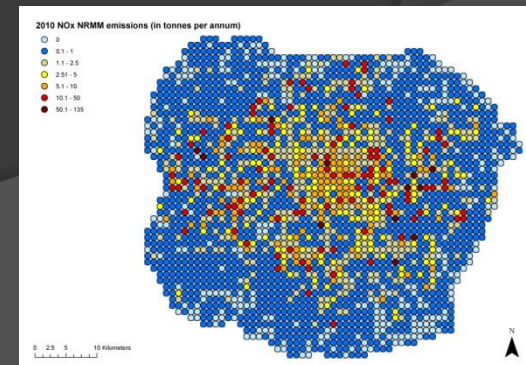
Funded PhD Project (Students Worldwide)

Email Now! Apply Online Back to Results

View all PhDs at King's College London

Find out about studying in United Kingdom

Related PhDs





llecp.org.uk

@ConstructionDustUK

[erg-construction@kcl.ac.uk](mailto:erg-construction@kcl.ac.uk)