



LONDON FIRE BRIGADE

# Cleaner Vehicles

*If we can do it, anyone can*

Nicole Fletcher, Head of Sustainable Development



*World's third largest fire and rescue service, serving London with 5,500 fire-fighters*

## Our Fleet

- Our fleet is maintained and procured by our Contractor based on our output specification
  - 209 frontline vehicles
  - 75 specialist HGVs
  - 29 minibuses
  - 53 vans
  - 86 fleet cars
  - Over 200 salary sacrifice lease cars

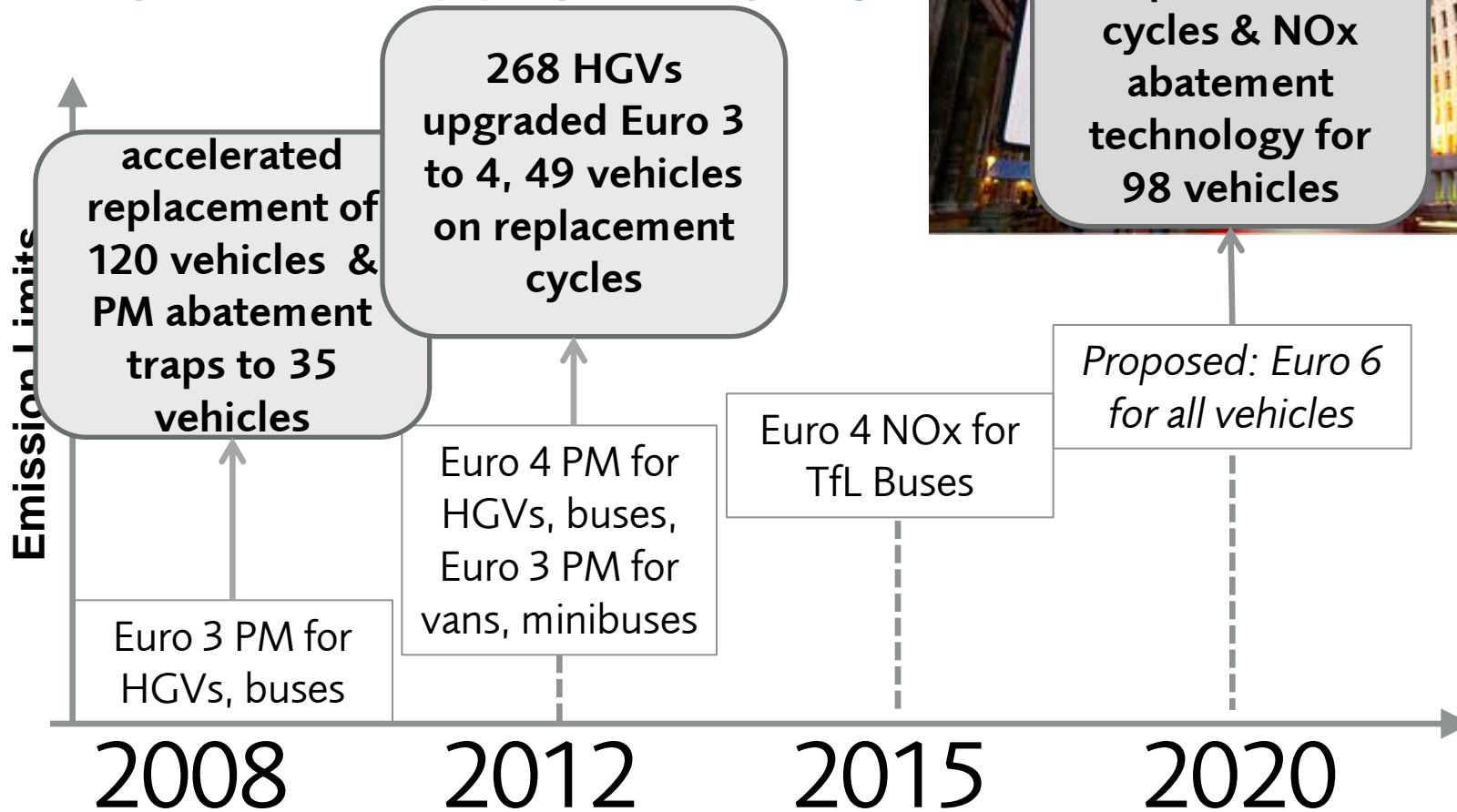
*Some 225k HGVs and LGVs licensed to London addresses*

# London's Air Quality

- levels of  $PM_{10}$  and  $NO_2$  continue to exceed national air quality standards in some areas of London
- $NO_2$  levels recorded as worst in Europe, more than 3 times the limit in some locations
- Not expected to meet EU air quality limits until after 2030 without further measures



# Low Emission Zone



Ultra Low  
Emission Zone

# Emission limits & Car Schemes

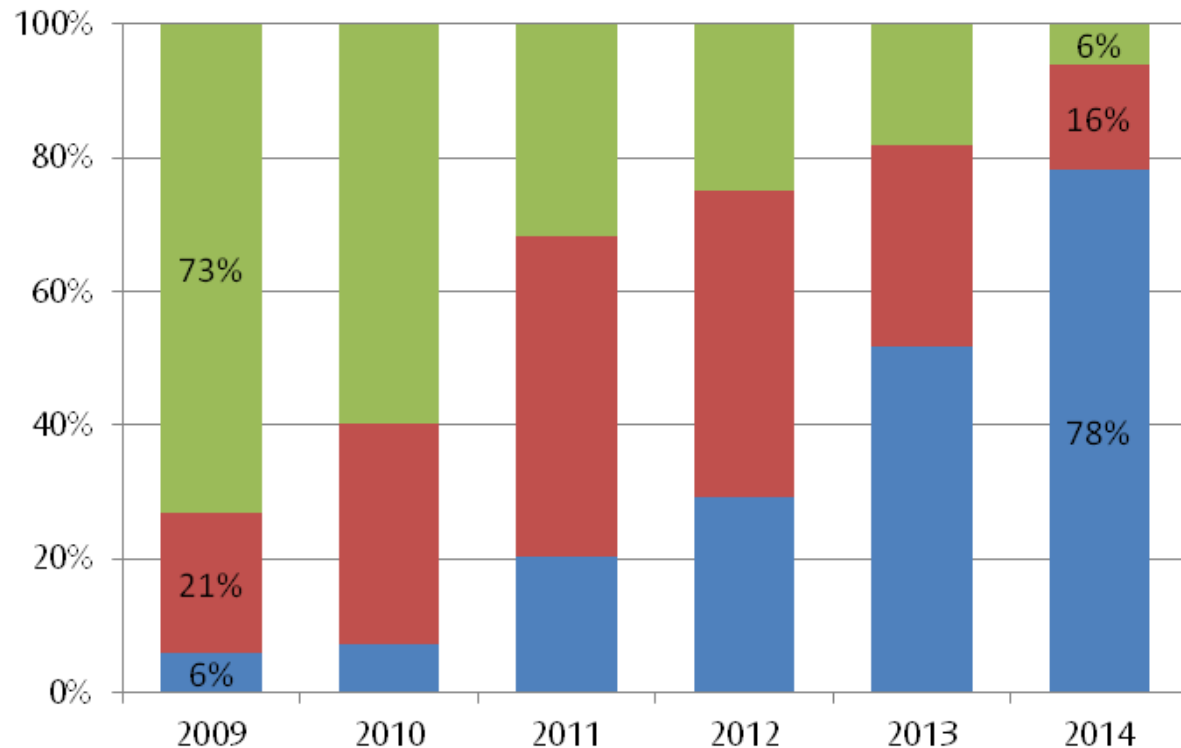
Emission Limits set in 2009	Lease Car Subsidy	Business Mileage Claims
<121 g/km CO <sub>2</sub>	100%	All schemes
121 - 150g/km CO <sub>2</sub>	50%	All schemes
>150g/km CO <sub>2</sub>	0%	Existing* users of private vehicles (must comply upon their next change of vehicle)

- Standards introduced for 3 car schemes for lease and private vehicles.
- Our fleet contractor proposed a new fleet car at 119g/km CO<sub>2</sub>, providing a benchmark for car schemes.
- GPP criteria and UK Government Buying Standards considered.

\*Existing users are those that joined the scheme prior to the emissions policy

# Emissions Improvements

% of lease cars in emission categories



- 170g/km CO<sub>2</sub> previous average
- **Expected** £280k saving & 30% CO<sub>2</sub> reduction based on 50% vehicles within 121-150 g/km CO<sub>2</sub> range

- > 150 g/km CO<sub>2</sub>
- 121 - 150
- 0 - 120

# Testing Electric Vehicles

- Supplier engagement led to short term trials 2008-now of 10 different models of 100%, hybrid and range extender EVs at no cost.
- Desktop research in 2012 tested 2 user groups and identified EVs that meet technical requirements for range & space, but not cost.
- Range extender EV models successfully trialled by operational staff on duty.
- Aim to introduce EVs into our fleet via our 2015 car replacement cycle through our supplier led tender.





# Electric Vehicle Chargepoints at Stations



- 75% Government grant funding announced
- Market research indicated suppliers would provide the remaining 25%
- Tendered on the basis of nil cost to the authority including:
  - PAYG technology only
  - Provision of some publicly accessible chargepoints
- **Result:** Project to install EVCs at 75 locations, up to 21 publicly accessible:
  - 100% external funding
  - no supplier transaction fee for LFB fleet



# Fleet Contract – innovation as a contract requirement

20 year contract to source and maintain a Fleet of over 500 vehicles incorporating continuous improvements requirements:

- Contract Efficiency review every 2 years:
  - **37% Emission reduction target: Contractor proposals to reduce emissions by Year 10**
  - Market knowledge and research: proposals for new and evolving technology to improve the service, equipment and/or business process
  - Supply chain mapping: identify and address risk

# What is FIRED-uP?



- European Commission funded project: June 2012 to August 2015
- Investigating innovative ways to make the LFB and Ghent fire brigade fleets greener
- Researching the impact on the environment of fire service vehicles
- Opportunity to source and procure new equipment

# Prioritisation

- 21 technologies assessed for environmental, commercial, innovation potential including Biofuels, electric/hybrid vehicles, lightweight construction, LED lights
- London solution →
  - Vehicle telematics - most promising technology in short term
  - Changes in thought/behaviour as important as technology
- Ghent solution →
  - Technology solution: combined second line emergency and logistics vehicle

*Opportunity to compare the outcomes of the two approaches?*



FIRE SERVICES DEVELOP INNOVATIVE PROCUREMENT

# Activities to date

- Identifying needs
- Market research and analysis
- Informing the market



- PIN / web
- Demo days
- Conferences
- Workshops
- Scoping sessions
- Articles in the press

## ***LFB***

- Specification development
- Pre qualification questionnaire
- Invitation to tender
- Shortlisted tenderers
- Competitive dialogue
- Evaluation
- Award of framework (TBC)

## ***Ghent***

- Moderated workshop
- Specification development
- Invitation to tender
- Shortlisted tenderers
- Negotiated procedure
- Legal review and approval
- Award of framework (TBC)



FIRE SERVICES DEVELOP INNOVATIVE PROCUREMENT

# Future Aspirations...Horizon 2020



# Thank you

## Contact:

Nicole Fletcher

Head of Sustainable Development

London Fire Brigade

e: [nicole.fletcher@london-fire.gov.uk](mailto:nicole.fletcher@london-fire.gov.uk)

w: [london-fire.gov.uk](http://london-fire.gov.uk)

w: [fired-up.eu](http://fired-up.eu)