

# Good afternoon!



## Greening your fleet: Challenges for local authorities?

#### **Emissions controls...**



"Be it known to all within the sound of my voice, whoever shall be found guilty of burning coal shall suffer the loss of his head"

**Edward I, King of England 1273** 



# Environmental: CO<sub>2</sub> emissions and air quality



#### Greenhouse gases (CO<sub>2</sub>):

- Global warming, sustainability...
  - Reduction of fuel consumption
  - Use of alternative fuels

#### **Noxious matter**

Acid rain, air toxicity, smog, global warming...

- Technology known and available
- Harmfulness determined by age vehicle





# Environmental: air quality and CO<sub>2</sub> emissions...

- Four regulated exhaust emissions:
  - Carbon monoxide (CO)
  - Hydrocarbons (HC)
  - Nitrogen oxides (NOx)
  - Particulate matter (PM)







### Plugged in fleet initiatives



- Energy saving trust supported by DFT
- Over 120 electric vehicle reviews for fleets:
- Whole life costs EV v. ICE using fleet's own fuel and electricity costs
- Analysis of the drive cycle does it meet the fleet's needs?
- If barriers exist, what can be done to overcome them?
- Infrastructure advice
- Report with clear recommendations

## **Tackling preconceptions**



The vehicles are not appealing

Range is an issue

The costs do not add up

EVs are a fad

There's not enough charging posts

## **Cost analysis**

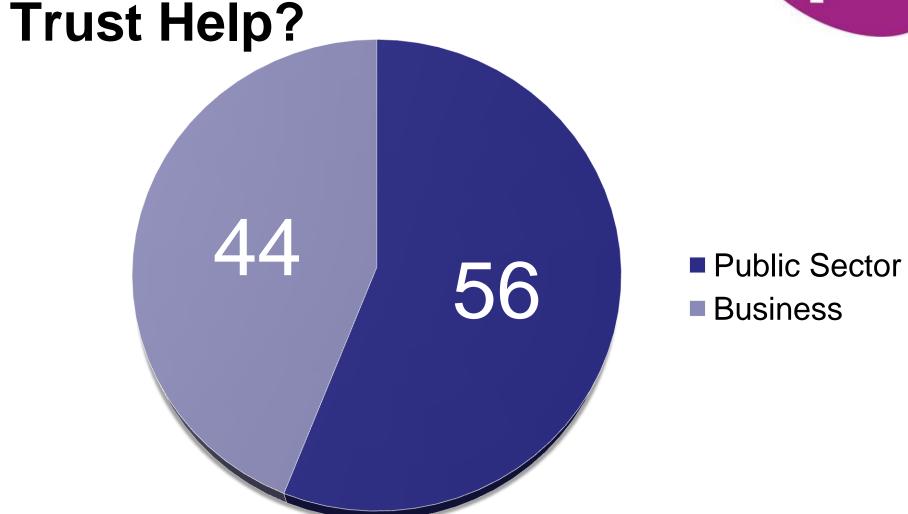
apse har of small vanes

This example shows the savings across a number of small vans:

Make	Ford Transit Connect T200 LWB	Renault Kangoo Z.E. ML20	Renault Kangoo Maxi Z.E.
Vehicle type/fuel	Diesel	Electric	Electric
Term - months	60	60	60
Annual mileage	15,000	15,000	15,000
Diesel £/litre net / electricity pence per kW hour/	1.20	8.42	8.42
Official Fuel consumption MPG/ Wh/km	38.1	155	155
Fuel costs	£ 12,382	£ 1,811	£ 1,811
Lease Costs	£ 13,318	£ 20,819	£ 22,741
Total cost	£25,700	£22,630	£24,552
PPM based on annual projected mileage	34	30	33

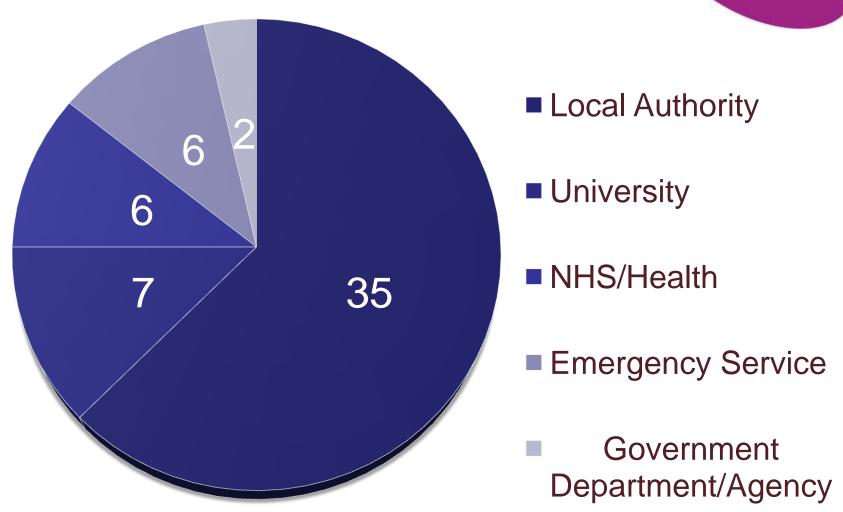
Who did the Energy Saving





#### Public Sector clients (2013/14)





#### **Impact** (2013/14)



From 100 reviews, they identified 1,422 fleet vehicles where a business case existed.

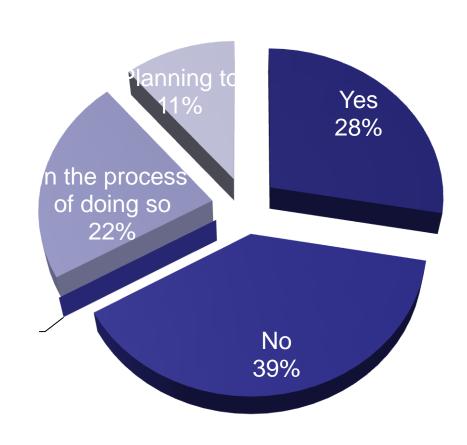
And found additional opportunities for up to 1,300 viable pool vehicles that could reduce grey fleets.

# Since your PIFI Review have you acquired EVs?



61% said they had adopted EVs, are planning to or are in the process of doing so

**100%** of participants said the PIFI review was useful in informing their decision



### Planning for success



#### Costs:

Maintain a total cost of ownership model

#### Drivers:

Train drivers and gain their buy in early on

Business case

#### Operations:

Take a broad view of operations and look for efficiencies

#### CSR:

Quantify the highly visible CSR benefit a PIV provides

#### Investing in the future

Transport for London: rapid chargepoint mapping



Help shape the future of London's electric vehicle rapid chargepoint network:

- Working with 35 operators of commercial vehicles (up to 12.5t)
- Analysing telematics and scheduling data (in partnership with Route Monkey)
- Maximising the benefits of plug-in vehicles
- Mapping the optimal locations for infrastructure

#### Questions to you....



What have you done so far?

What are the barriers to greening your fleet?

Has the current austerity measures slowed down investment?

Is there political 'buy-in' to greening fleet?

Are the perceptions that the technology isn't quite there yet?

#### Thank you



# **Any questions**

# LOCAL SERVICES LOCAL SOLUTIONS



# **Contact details** Mo Baines, Principal Advisor

Email: mbaines@apse.org.uk

#### **Association for Public Service Excellence**

2nd floor Washbrook House, Lancastrian Office Centre, Talbot Road, Old Trafford, Manchester M32 0FP.

> telephone: 0161 772 1810 fax: 0161 772 1811

web:www.apse.org.uk





**GB 11409** 





GB 11132



**GB 14074**