



# COLLABORATIVE PROCUREMENT APPROACHES TO ACHIEVE INNOVATIVE CLEAN VEHICLES

NATALIE EVANS

CLEAN FLEETS PROJECT OFFICER

ICLEI – LOCAL GOVERNMENTS FOR SUSTAINABILITY





- A. Clean Fleets facilitating **exchange & collaboration**
- B. Other sources of **good practice** eco-innovation & GPP
- C. National **Swedish joint procurement**: public - private collaboration to buy EVs and PHEVs
- D. New **Bus4London** diesel-hybrid double deckers ↔ Hybrid articulated buses for **Belfast Rapid Transit**
- E. **Vienna**'s innovative BEVs with pantograph
- F. Monetising emissions for a lease contract in **Bremen**



## CLEAN FLEETS PROJECT FACILITATING COLLABORATION AND EXCHANGE ON ALTERNATIVE FUELS AND TECHNOLOGIES

- **EU workshops** in Bremen, London, Stockholm & Rotterdam
- Romanian, Croatian, German & Dutch **National workshops**
- Clean Buses: **100+ Experiences** on fuels & technologies
- **Helpdesk** – free assistance with queries + tenders
- **Discussion Forum** – share knowledge, experiences, ideas & questions





## OTHER SOURCES OF GOOD PRACTICE ECO-INNOVATION AND GREEN PUBLIC PROCUREMENT

The logo for greenxpo, featuring the word "green" in red and "xpo" in blue, with a stylized "x" connecting them.

**Searchable database of over 150 case studies** on technologies, policies, networks and initiatives to support eco-innovation

<http://www.innovationseeds.eu/>



**Almost 100 examples** of Green Public Procurement (GPP) background to approaches, criteria used, results and lessons learned.

[http://ec.europa.eu/environment/gpp/case\\_en.htm](http://ec.europa.eu/environment/gpp/case_en.htm)



## Joint Procurement of EVs and PHEVs in Sweden

### Clean Fleets case study

- Buyers' group of 296 organisations
- Energy consumption < 0.37 kWh/km and emissions < 50g CO<sub>2</sub>/km
- 34 tonnes CO<sub>2</sub> saved in first 1.5 years (95% reduction)



Backed by strategy & targets

SEA financial support

5000 vehicles over 4 years

LCC used

Private sector were included

### Joint procurement =

Reduced administration costs

Accessibility for smaller municipalities

Strong signal and boost to the EV & PHEV market



## The New Bus for London – Diesel/electric hybrid

### Clean Fleets case study

- First bus specifically designed for London in over 50 years.
- Iconic design combined with modern hybrid technology and expectations.
- Emits less than half the CO<sub>2</sub> and NO<sub>x</sub> than a current London diesel bus in service
- Largest order of hybrid buses ever placed in Europe.



Full roll out of 600 London hybrid buses by May 2016

Multimillion £ TCO savings

Hybrid articulated buses for **Belfast's Rapid Transit System**

Expected **30%** fuel savings

Similar technology to **New Bus for London**

Use of exchange at **Clean Fleets** European workshop and Helpdesk



## Innovative Electric Buses in Vienna

### Clean Fleets case study

- 12 electric microbuses purchased for the city centre
- New technology: batteries charged through tram's overhead power lines at end stations
- Pre-procurement test phase with four buses



Johannes Zinner / Wiener Linien

Historic centre so needed zero emissions minus the infrastructure

Pantograph (extendable arm) used to recharge in 5- 8 minutes

Backed by ambitious targets and strategy

Extensive market dialogue and testing

Vienna loaned the microbuses to Bremen to trial

Purchase price higher, operational and maintenance costs lower



## Monetising emissions for a lease contract in Bremen

### Clean Fleets case study

- Low emission vehicles available for all city staff
- CO<sub>2</sub> emissions between 96 & 139 gCO<sub>2</sub>/km
- CVD operational lifetime cost methodology used to monetise emissions



Stadt Bremen

Target to reduce 40% CO<sub>2</sub> emissions compared to 1990

One of the very few authorities identified in Europe to have:

- used Option 3 of the CVD
- used ILO criteria in a vehicle tender

CO<sub>2</sub> emissions of best offers significantly lower than limit set

Environmental criteria had a limited impact on cost

Only diesel and CNG vehicles offered





## CONCLUSIONS

- Overarching policies, strategies and targets are fundamental
- Engaging with the market is essential – especially where innovation is concerned
- Joint procurement takes time but it can work
- Procurers step out of your comfort zone and use innovative procurement techniques
- There is a wealth of experience in Europe – share it and use it!



## CONTACT

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