Royal Mail Group Procurement

Vehicles Environmental Strategy

Tony Shaw Sept 2009
Agenda

- Context
  - Royal Mail
  - Vehicles
- Targets
- Approach to date
- What’s next
- h2 ? – Does it Fit
- Challenges
Context - Royal Mail brands

- The entire UK population is a customer of Royal Mail Group
- The reach / coverage of Royal Mail Group is greater than any other postal operator
- In the UK, Royal Mail Group operates under the brands Royal Mail, Post Office and Parcelforce Worldwide

<table>
<thead>
<tr>
<th>Royal Mail</th>
<th>Post Office Ltd</th>
<th>Parcelforce Worldwide</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD: Mark Higson</td>
<td>MD: Alan Cook</td>
<td>MD: David Smith</td>
</tr>
<tr>
<td>T/O: £6.8bn</td>
<td>T/O: £0.98bn</td>
<td>T/O: £0.4bn</td>
</tr>
</tbody>
</table>

- Letters and packages business
- Duty to deliver a letter to each UK address for a standard price
- Obliged to collect daily from every letter box

- Runs UK post offices
- 94% of UK people live within a mile of a branch
- Visited by 28 million people every week
- The UK’s largest retail and financial services chain

- Express parcels business
- Delivers around 150,000 parcels a day
- Provides access to the world’s largest delivery network
Context – Royal Mail Operations

We deliver to 27 million UK delivery addresses

82 million items of mail per day

33,000 vehicles

650,000,000 miles per year

360,000 tonnes CO$_2$ from fleet alone
Context - Royal Mail CO2

- Scope 1 Business road
- Scope 1 Natural gas and oil
- Scope 2 Grid electricity
- Scope 3 Business air & rail
- Scope 3 Personal travel (on business)
- Scope 3 Commuting to work
- Scope 3 Business mail in privately owned vehicles
## Context - Vehicle Types

<table>
<thead>
<tr>
<th></th>
<th>Car Derived</th>
<th>Small Panel</th>
<th>Medium Panel</th>
<th>Large Panel</th>
<th>Sml People Carrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nos.</td>
<td>15,197</td>
<td>4,538</td>
<td>1,277</td>
<td>1,558</td>
<td>1,253</td>
</tr>
<tr>
<td>Miles p.a.</td>
<td>14,000</td>
<td>17,000</td>
<td>16,500</td>
<td>21,500</td>
<td>13,000</td>
</tr>
<tr>
<td>Lifecycle yrs:</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Crew/Post Bus</th>
<th>Heavy Small</th>
<th>Heavy Medium</th>
<th>Heavy Large</th>
<th>Trailers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nos.</td>
<td>3,257</td>
<td>2,191</td>
<td>345</td>
<td>1,351</td>
<td>2,448</td>
</tr>
<tr>
<td>Miles p.a.</td>
<td>10,500</td>
<td>48,000</td>
<td>54,000</td>
<td>83,000</td>
<td>2,448</td>
</tr>
<tr>
<td>Lifecycle yrs:</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>
Context – Vehicle CO₂

Legend:
- CO₂ %
- Fleet %
Targets

- Carbon neutral London by 2012
  Including 50% CO\textsubscript{2} Tailpipe Reduction

- Carbon neutral business wide by 2015
  50% CO\textsubscript{2} Reduction
Approach - Fleet Trends

2001 – 2008
- 7,000
Ops Efficiencies
\( \text{CO}_2 = - 9.3\% \)

2004 / 2008
+ 1,500
Rail 2 Road
Speed Limiting
\( \text{CO}_2 = + 17.5\% + 11.2\% \)

FUTURE
2009 - 2010
- 1,500
Telemetry
\( \text{CO}_2 = - 2.3\% \)

2009 - 2010
+ 7,000
\( \text{CO}_2 = - 0.4\% \)
Approach - Activity to Date

• Culture
  Telemetry
  Driver Risk Assessment

• Specification
  Aerodynamics
  Speed Limiters

• Technology
  Alternative fuel trials
  Bio diesel
Approach to date

Vehicle Trials
Millbrook

Carbon Board
Direction and Business Focus

Manufacturers
Partnerships

Postal Operator
Alliance
Standard Van

Consultants
Roadmap

DfT
Create demand in marketplace
What’s Next - 2012 Target

- Carbon Neutral – 50% of 2004/05 Tailpipe emissions
- LLEZ & <= 3.5t gvw
- 2100 Vehicles
  - 413 ‘as is’
  - 556 Low Co2
  - 229 Hybrid
  - 884 Electric
What’s Next - 2012 Target

• 2100 Vehicles
What’s Next - 2015 Target (Letters <=3.5t)

2004/05       2009/10      Avoid     Reduce    Low CO₂   Hybrid    Electric/h2    Off-Set

149,804       20,516      6,464      6,464      6,464     16,920    28,573     70,464

47% of 2004/05
h2 - Product Evaluation

- Develop
  - Low volume, short term trial – Vendor to Manage

- Tender
  - Statistically Significant trials – With view to Contract

- Investigate
  - Paper Exercise

- Influence
  - Minimal trial
  - Operational Acceptance

Production Capacity
### Vehicle Technology MAC Curve - WTW

<table>
<thead>
<tr>
<th>Technology</th>
<th>CO2</th>
<th>£/t CO2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trailer Aero Kit</td>
<td>71</td>
<td>-111</td>
</tr>
<tr>
<td>LGV Tractor Methane</td>
<td>898</td>
<td>£1</td>
</tr>
<tr>
<td>LGV Rigid Methane</td>
<td>611</td>
<td>£3</td>
</tr>
<tr>
<td>LGV 7.5t Methane</td>
<td>317</td>
<td>£18</td>
</tr>
<tr>
<td>LGV 7.5t Hybrid</td>
<td>404</td>
<td>£95</td>
</tr>
<tr>
<td>LGV 7.5t e</td>
<td>47</td>
<td>£221</td>
</tr>
<tr>
<td>CDV Methane</td>
<td>76</td>
<td>£274</td>
</tr>
<tr>
<td>CDV e</td>
<td>60</td>
<td>£280</td>
</tr>
<tr>
<td>LGV Rigid Hybrid</td>
<td>147</td>
<td>£327</td>
</tr>
<tr>
<td>CDV Hybrid - Full</td>
<td>11</td>
<td>£651</td>
</tr>
</tbody>
</table>

*Technology not yet in production*
h2 - Opportunities

• Anything Electric Can do…..

• Plus
  
  Speed to recharge
  
  Range

• Universal Postal Union
Challenges

• Infrastructure
• Reliability
• Availability
• Cost