Journey to a Soot-free Johannesburg
## Current Fleet

<table>
<thead>
<tr>
<th>BUS TYPE</th>
<th># of FLEET</th>
<th>AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>M Benz 307</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td>ERF (Euro-1)</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Volvo</td>
<td>201</td>
<td>20</td>
</tr>
<tr>
<td>M Benz 1725</td>
<td>124</td>
<td>9</td>
</tr>
<tr>
<td>Euro-3</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>Euro-5</td>
<td>26</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>419</strong></td>
<td>-</td>
</tr>
</tbody>
</table>
Mayoral Environmental Vision
DDF Conversion
DDF Conversion

- 30 x OH1725 (Euro-2) buses were converted from diesel to Diesel Dual Fuel
- Uses 500ppm diesel
- Uses CNG
Trailer

Compressor
CNG Storage
Conversion Benefits

1. Substitution by cheaper fuel
2. Cleaner source of energy
3. Cost savings
4. Less carbon deposits in the engine
5. Prolongs engine life
6. Lesser noise
7. Less harmful emissions
8. Healthier people
Re-fleeting
SCR engines use a Diesel Exhaust Fluid (AdBlue). It is stored in a separate tank in the system and injected into the exhaust stream. This will cause a chemical reaction, which occurs in the Catalytic Converter. Ultimately the potentially dangerous exhaust gas is converted into harmless nitrogen gas and water vapour.
Euro-5 DDF

• Metrobus procured 150 Euro-5 DDF buses
• The engine uses 50ppm diesel
• The engine will be converted into DDF
• The engine will use the Diesel Exhaust Fluid
Euro-5 DDF Benefits

1. No harmful emissions
2. Development of the bio-gas industry
3. Lessening dependency on fossil fuels
4. Reduction of fuel imports
5. Employment creation
6. Reduction of inequality
Way forward for Metrobus

1. Further conversions of the old fleet to DDF
2. Retirement of Euro-1 buses
3. Investigation of dedicated CNG bus
THE END