Cleaner Liquid fuels: Way forward

K.K. Gandhi
Executive Director (Technical)
Society of Indian Automobile Manufacturers (SIAM)
Auto Industry Today

Domestic Sales ~ US $ 34.35 bn
Exports ~ US $ 4.40 bn
Estimated; All figures for 2009-10

- Passenger Vehicles: 47%
- Commercial Vehicles: 25%
- Two Wheelers: 26%
- Three Wheelers: 2%

9.37 million

12.29 million
## Biofuel Blending

<table>
<thead>
<tr>
<th>Biofuel Blending Ratio</th>
<th>Issues to be considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodiesel blending 5%</td>
<td>Fuel quality &amp; Impacts on vehicles</td>
</tr>
<tr>
<td>Ethanol blending 10%</td>
<td>Compatibility of old vehicles particularly 2 wheelers and higher volumetric fuel consumption</td>
</tr>
</tbody>
</table>

- Sustained availability and notified road map required before Implementation of biofuel blending
- Labelling of the fuel pumps
Fuel Quality

- sulphur content < 50 ppm in 13 major cities (BSVI)
- sulphur content up to 350 ppm in other regions (BSIII)

Single fuel & emission norms across the country

Roadmap for further improvement of fuel quality to enable use of advanced exhaust gas after treatment systems:
(Sulphur content < 15 ppm)

- Improve fuel quality national wide
- Road map for emission & fuel
- Increase the use of clean fuels
Further Issues regarding fuel quality in India

<table>
<thead>
<tr>
<th>Issues:</th>
<th>Possible Impact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adulteration of diesel fuel with kerosene</td>
<td>Severe wear damage at high pressure pumps</td>
</tr>
<tr>
<td>Gasoline fuel: Octane and gum components</td>
<td>Severe inlet valve coking</td>
</tr>
</tbody>
</table>

The implementation of a fuel standard requires appropriate control and audit systems to guarantee fuel quality across the country.
Visit us at www.siam.in

Thank you

K.K. Gandhi
Executive Director (Technical)
Society of Indian Automobile Manufacturers
kkgandhi@siam.in