

From: "J J Irani" <jjirani@tata.com>

To: sunita@cseindia.org

Sent: Thursday, 4 November, 2010 4:39:37 PM GMT +05:30 Chennai, Kolkata, Mumbai, New Delhi

Subject: FW: Regarding my interaction with an NGO

Dear Ms Sunita Narain,

You may recall that during our interaction at the Track II Meeting in Delhi just over a month ago, I had mentioned to you that the bias against the use of diesel in automobiles may be unjustified as with cleaner fuels now available and the upgradation in the efficiency of diesel engines, the difference between them and engines which use petroleum may be marginal.

You were not convinced of this view, and maintained that diesel engines, by their very nature, are more polluting than the petroleum engines now available.

I took up this matter with the research laboratory of Tata Motors, and they have pointed out that the most efficient diesel engines now use the "Common Rail" diesel engine technology which improves both emissions and fuel economy. The Tata Vista Quadrajet BS IV diesel engine is a good example of this as can be seen in the comparison made below.

Comparison Parameters

TATA Vista

Maruti Swift

Maruti Ritz

Fiat Punto

Ford Figo

Emission Pollutants

(CO2 g/km)

118.89

122.12

125.59

133.17

132.50

Fuel Economy (kmp/l)

22.29

21.7

21.1

19.9

20

With respect to pollution from diesel engines compared with CNG/Petroleum, I am enclosing a comparison chart. The chart clearly indicates the following -

1. With the evolution of efficient diesel engine technology total emission pollutants have declined markedly & are now either comparable or better than pollutants from CNG/petroleum based engines.
2. New diesel engine technologies have helped bridge the gap between diesel and Gasoline/LPG/CNG emissions limits. In fact for Euro 5 and

Euro 6, the emissions limits are even more stringent and this gap will further close.

3. Sulphur content in diesel has also reduced drastically , which coupled with the advances in diesel technology enables lower emissions.

I hope the evidence given here would be taken in the right spirit.

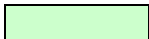
With warm regards,

Jamshed J Irani

Comparison of Emissions from TML Diesel Vehicle Versus Petrol/LPG/CNG Vehicles							
Model / Variants	Engine Model	Fuel	CO (g/km)	HC (g/km)	Nox (g/km)	CO2 (g/km)	Total Emission Pollutants (g/km)
<b>Petrol vs Diesel</b>							
<b>Sedan</b>	<b>1.4L 16V 90PS FIRE</b>	<b>Petrol</b>	<b>0.75</b>	<b>0.07</b>	<b>0.02</b>	<b>165</b>	<b>165.84</b>
	TCIC 70PS	Diesel	0.25	0.03	0.4	157.65	158.33
	1.3L 90PS Quadrajjet	Diesel	0.38	0.04	0.32	126.03	126.77
<b>LPG vs Diesel</b>							
<b>Hatch</b>	<b>1.2L 65PS Xeta LPG</b>	<b>LPG</b>	<b>0.61</b>	<b>0.07</b>	<b>0.05</b>	<b>143.8</b>	<b>144.53</b>
	1.4L 70PS CRAIL	Diesel	0.28	0.06	0.3	134.54	135.18
	1.3L 75PS Quadrajjet	Diesel	0.45	0.06	0.21	126.53	127.25
<b>CNG vs Diesel</b>							
<b>Sedan</b>	<b>1.4L 100PS MPFI CNG</b>	<b>CNG</b>	<b>0.194</b>	<b>0.032</b>	<b>0.018</b>	<b>134.044</b>	<b>134.29</b>
	1.4L 70PS CRAIL	Diesel	0.272	0.045	0.17	114.29	114.78

	1.3L 90PS Quadrajjet	Diesel	0.38	0.04	0.32	126.03	126.77
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 Petroleum Fuel (Petrol,LPG & CNG)

 Diesel engine emission pollutant lower than petrol based engine

**Note:** The Emission pollutant results are based on regulatory test performed by authorized Government test agency.