Comments on the "Consultation Paper on Standards and Labelling of Fuel Consumption in Cars"

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Bureau of Energy Efficiency
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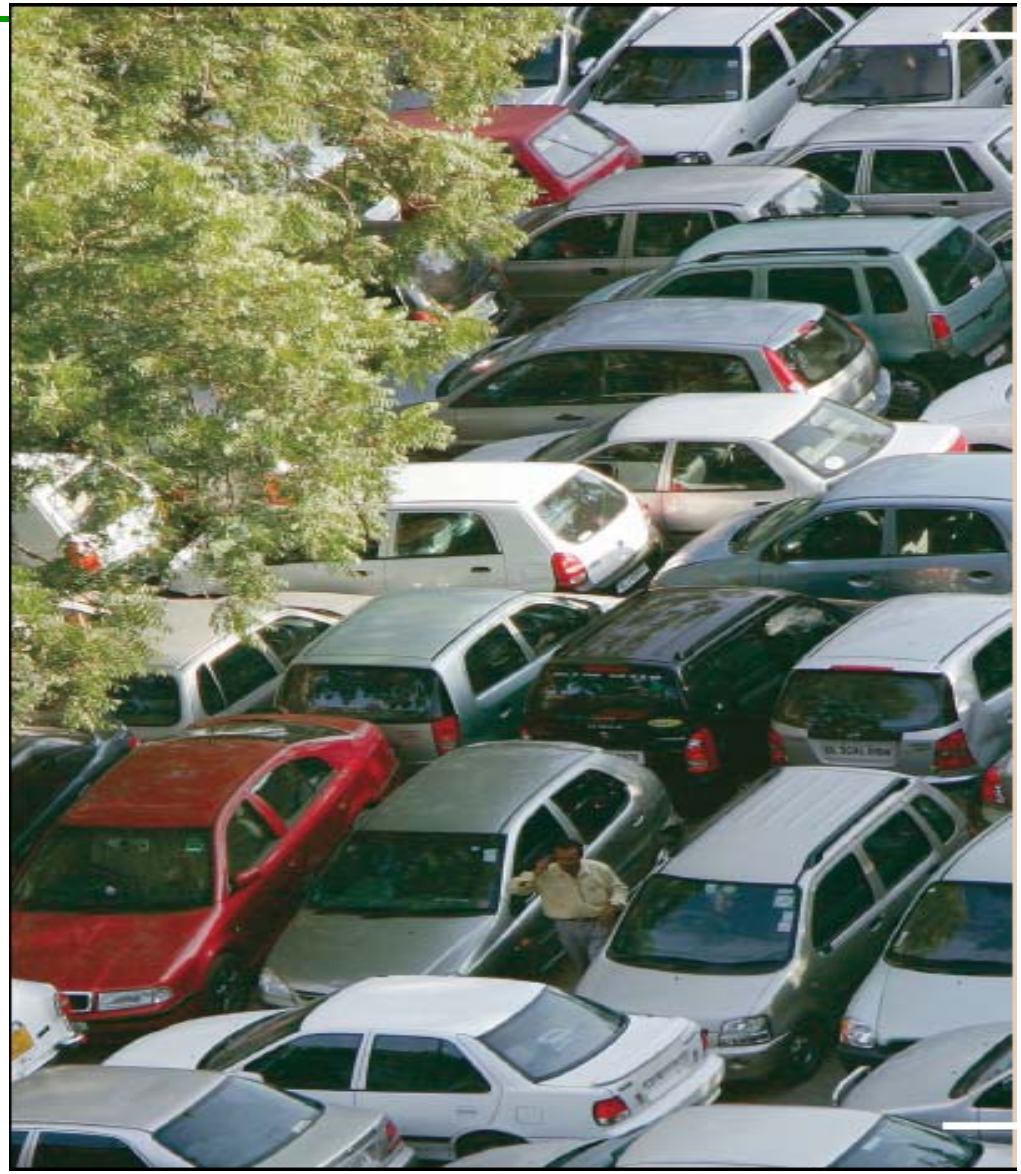


Question 1: What are the goals and targets of this regulation? Not clear

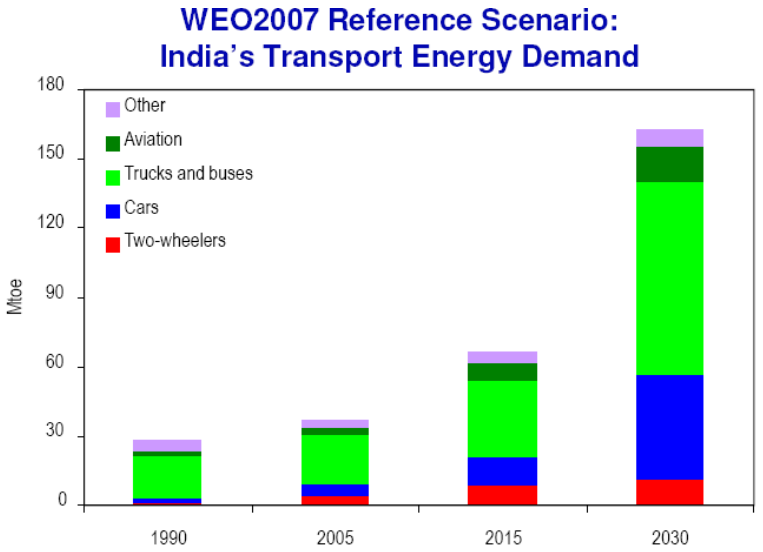
- Proposal mentions the challenge of growing vehicle numbers and its impact on energy demand and the need for strong signals to consumers and manufacturers….
- But….
- Energy security and environmental goals and fuel saving targets of this regulation have not been specified…..

We demand

-- Make the goals and targets explicit

-- This will determine the stringency of standards

Cars will drive fuel consumption trends in the in India



Transport demand – mostly oil – grows rapidly as car ownership increases in line with rising incomes

Question 2: Consultation paper proposes Corporate Average Fuel Consumption Standards……. ……..But what are the standards?

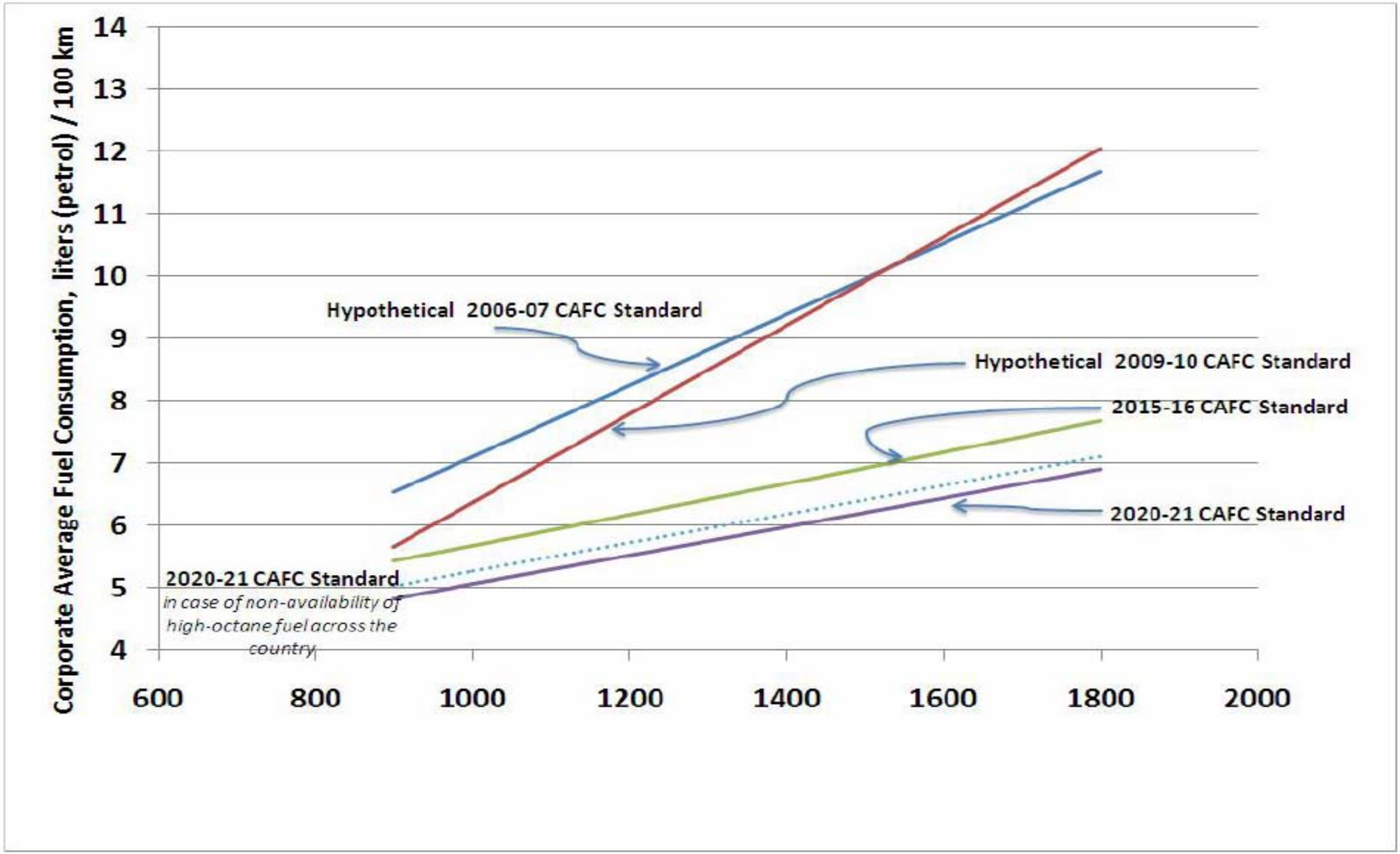
- Proposes two Standard Lines for 2015-16 and 2020-21 and gives a set of equations … But do not mention the actual standard or limit value….
- Nor does it give out the requisite data on sales, fuel economy and weight of car models needed to estimate the standards based on the standard lines and equation..

But other governments do……

- Regulatory document of Europe (Regulations (EC) No 443/2009 of the European Parliament and the Council of 23 April 2009) states – "*This regulation sets the average CO2 emissions for new passenger cars at **130 gCO2/km**…..*".

- Why our government has chosen to state only the formula but not the real target values or the data?

Proposed standards are – “Figure 6 – page 15”
How do we decode this?



Clear the haze:
What are the real targets?

- We have applied the available model-wise fuel economy data and weight of car (SIAM) and sales from market information

This demystifies the targets

- 2015-16: Proposed Corporate Average Fuel Consumption (CAFC) limit value is

  -- 5.7 litres/100km.

- 2020-21 two limit values have been proposed –

  – 5.1 litre/100 km assuming uniform Euro V-compliant fuel quality across the country

  --- 5.4 litre/100 km without it.

Question 3: Is this adequate? No.

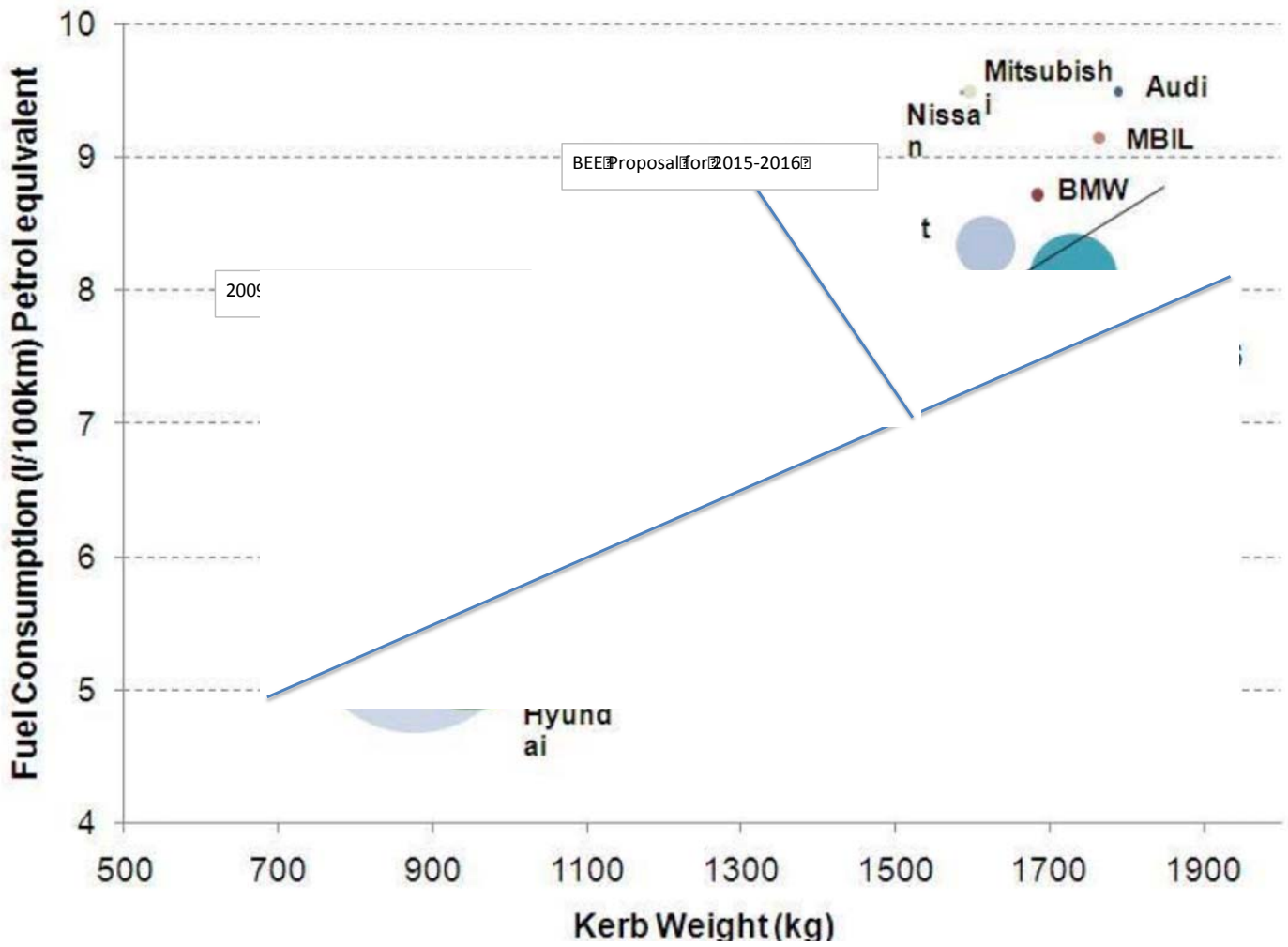
- The consultation paper states -- the actual average fuel consumption of cars has already reduced by 2.8 percent a year since 2006-07 to reach 6 litres/100 km in 2009-10.
- But compared to the 2009-10 level the official proposal is asking for only 0.45 per cent a year reduction until 2015 and by 2.27 per cent a year thereafter.
- This is a mere 14.4 percent reduction in fuel consumption between 2010 and 2020 --- a measly 1.28 per cent a year reduction over 10 years.

Major car makers are already there

Major carmakers will not have to do anything until 2015. For instance, Tata Motors and Hyundai are meeting the proposed standard of 2015-16.

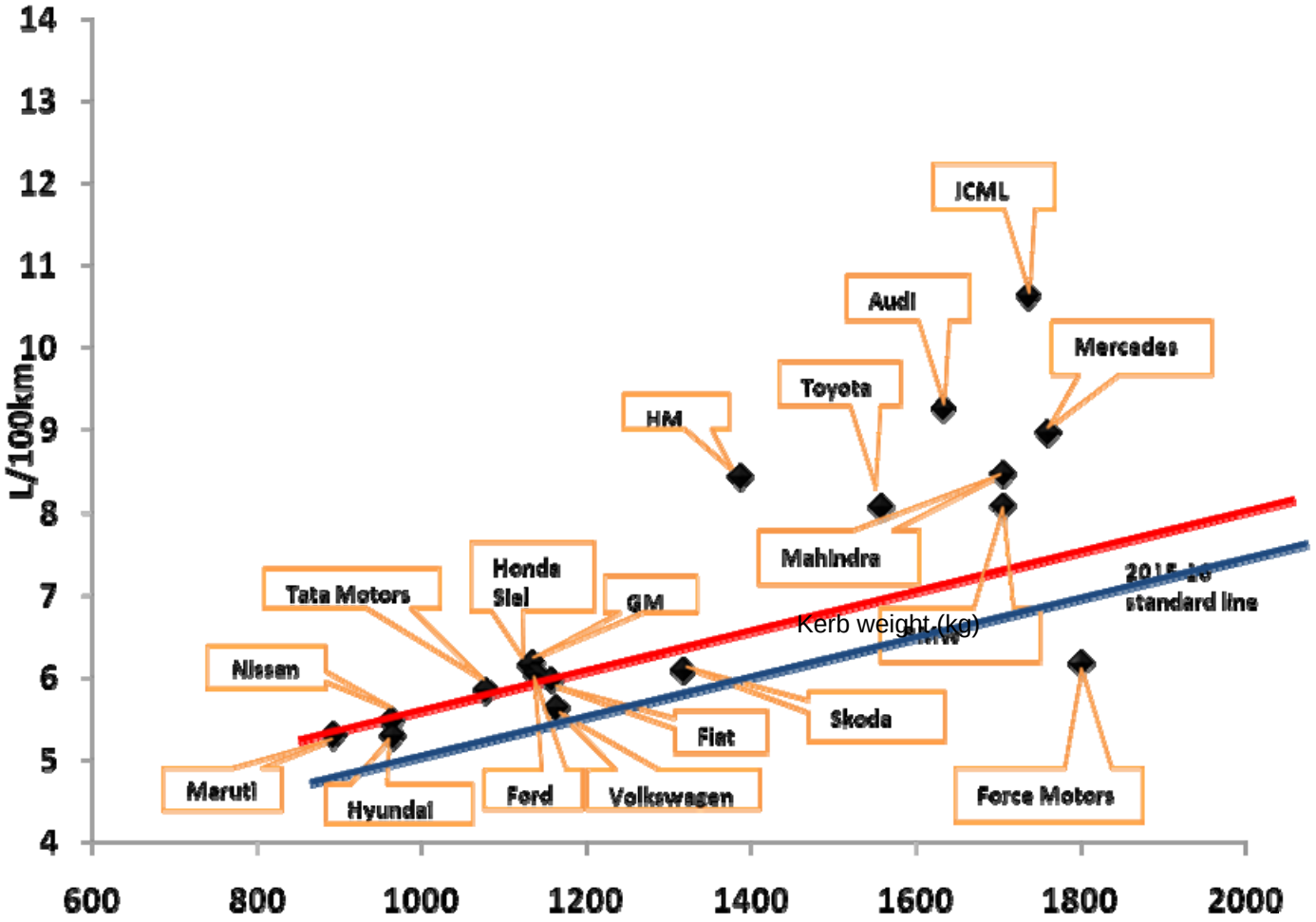
Only after 2015 the limit value gets a little tighter especially for the heavier vehicles, but not stringent enough.

Position of the major car makers vis a vis the proposed standard



Its tighter only for a few in the heavier segments

Position of various car companies in 2010-11 vis-à-vis the standard line of 2015-16 and 2020-21



Question 4: Why weak baselines have been created to make the standard look strict?

To justify the lax targets and make the proposed standards look better in contrast, the proposal has created lenient 'hypothetical' standard lines for 2006-7 and 2009-10 as the average of worst performers in the market

This gives an illusion of the standards lines being tighter.

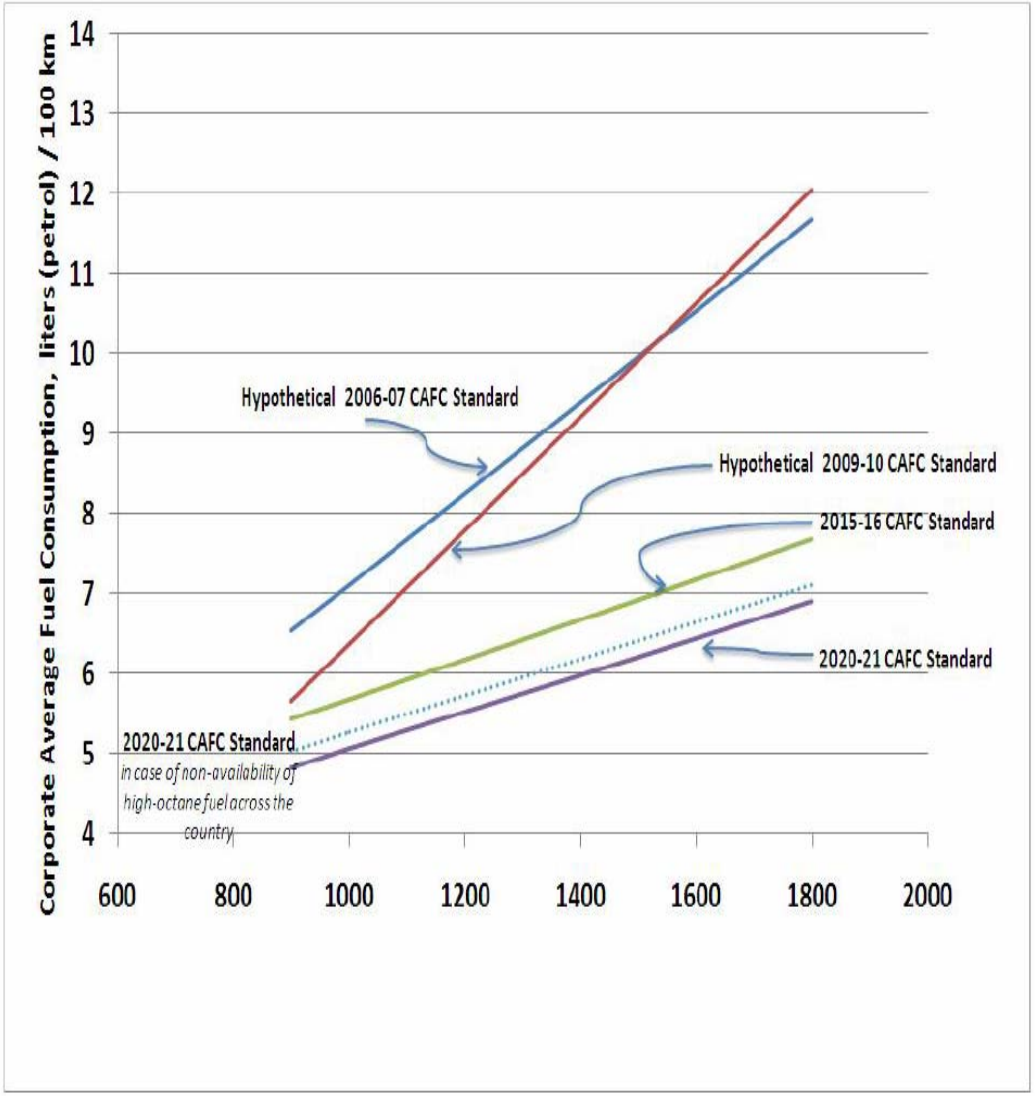
But in reality the actual improvement targeted over the 10 years is a mere 1.2 per cent.

This completely defies logic and is scientifically untenable.

We demand:

Remove the hypothetical lines..

2006-07 should not be treated as baseline in any case



Our demand on the CAFC standards (1)

Significant tightening of the standards based on what the industry has already achieved:

- Car industry has already achieved 2.8 percent reduction in average fuel consumption between 2006-07 and 2009-19. Protect this improvement and further improve in this
- It is reasonable to expect the new standards to aim for 2.5 percent annual improvement until 2015 and subsequently 3 per cent improvement a year.
- **With this it is possible to have the standard of 4.4 litres/100 km or 104 gCO2/km in 2020.**
- This is also in target proposed by the low carbon report of the Planning Commission and is consistent with the stated goal of India to reduce the energy intensity of the economy by 20-25 percent until 2020.
- Only this will help to achieve effective fuel savings that is urgently needed as India imports nearly 80 percent of its crude oil.

Our demand on the CAFC standards (2)

Flatten the slope of the standard line more……

As the standards for different weight categories of cars depend on the slope of the standard line, flatten the slope of the line further for higher fuel savings from the heavier classes while distributing some of the burden to other segments as well.

- Change the slope of the standard line for 2015 from the proposed 0.059 to 0.05 and for 2020 from 0.054 to 0.042.

Our demand on the CAFC standards (3)

Make the equation more straight forward

Europe

- **Specific emissions of CO2 = 130 + a x (M-Mo)**
- **Where 130 is the limit value, M= mass of the vehicle in kg, Mo = 1372,0 the average mass of the industry, a = 0.0457 slope of the standard line**

The Indian formula for 2015-16 reads as:

- **CAFC = 0.0025 x CAKW+3.171 in fuel consumption terms; and, CACP = 0.059 x CACW + 75 in CO2 terms.**
- **If interpreted in the European way the Indian proposal will read as follows.**
- **CACP = 0.059 x CACW – 0.059 x 1037 + 0.059 x 1037 + 75**
- **Therefore, CACP = 136.2 + 0.059 x (CACW – 1037) so that,**
- **136.2 gm/km (proposed limit value) = 0.059 (slope of the standard line) x (Mass of the vehicle – average mass of the industry which is1037 kg)**
- **When put this way the standard and the average mass becomes transparent and intelligible. But more important it immediately brings out the laxity of the Indian standard which is otherwise not obvious to a lay reader from the proposed official formula. The European slope is flatter and that makes the standards for the heavier vehicles tighter.**

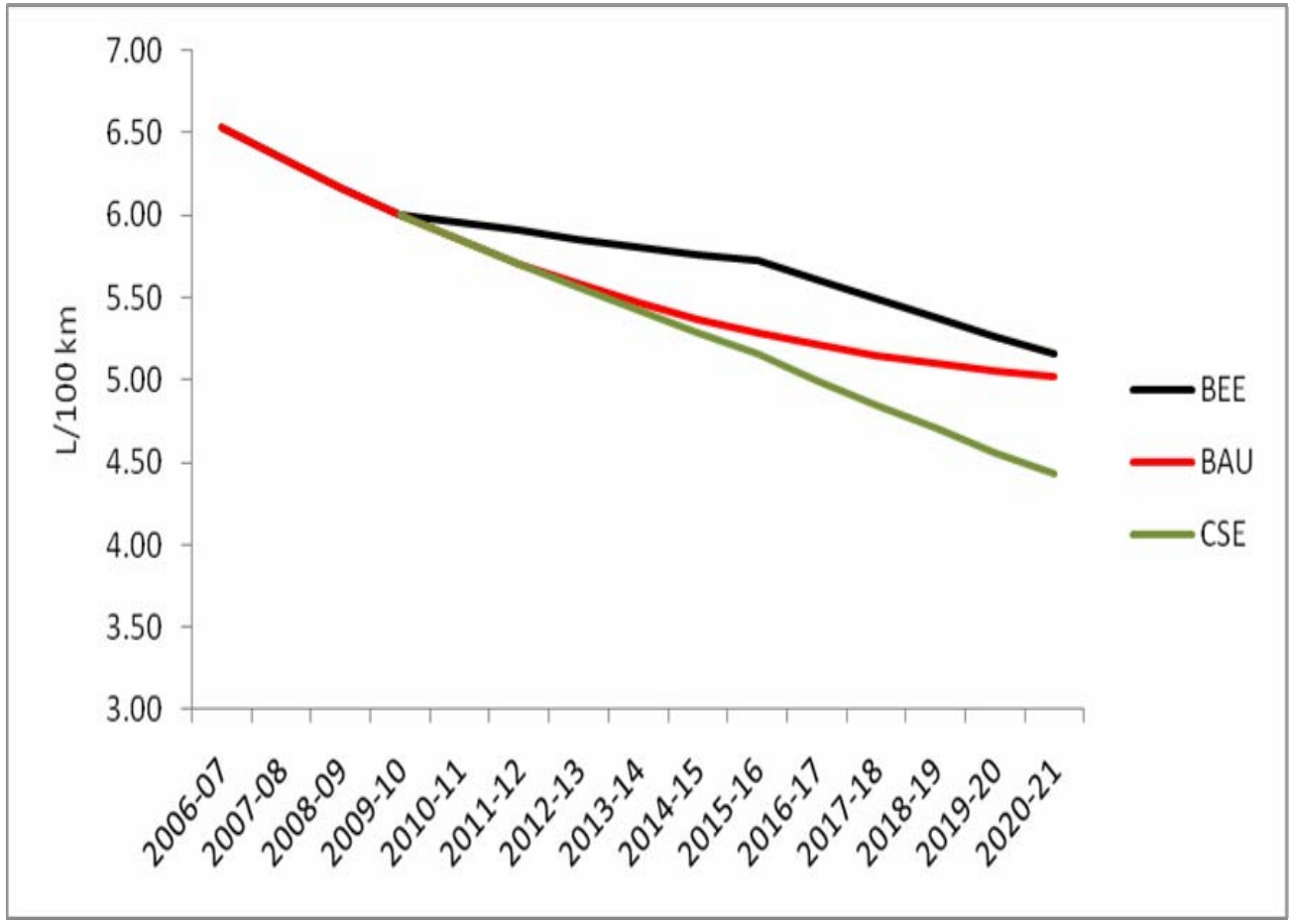
Our reasons for demanding tighter CAFC standards of 4.4 litres/100 km or 104 gCO2/km in 2020.

(1) Proposed official standards **(at 1.2% a year improvement)** allows a margin for increase in average weight of the car fleet, and worsen energy guzzling.

(2) If the natural rate of improvement of industry **(2.8% a year) is not protected** the trend will worsen

(3) If the natural rate of improvement **is protected and further improved -- at 2.5% till 2015 and 3%** thereafter -- country can get real fuel saving benefits.

Comparison of BEE standard line, business as usual, and the limit value improving the natural rate of improvement of the industry



Need effective fuel savings

The proposal says the baseline oil use in 2020 will increase to 25 million tons of oil equivalent.

A review of the global fuel economy targets carried out by the Indian Council of Clean Transportation that has also considered the BEE proposal for 2020 has shown that:

With this the fuel use can be reduced to only 22.9 million tons of oil equivalent -- a small reduction of 1.7 mtoe in 2020. In 2030 fuel use gets further reduced from 80.8 mtoe to 69.8 mtoe or a reduction of 10.9 mtoe.

The cumulative oil savings from 2010 to 2020 will be around 4.8 mtoe, whereas cumulative oil savings from 2010 to 2030 would be around 65 mtoe.

CSE proposal that is asking the car industry to do a little better than what they have already achieved fuel savings in 2020 can be doubled and the cumulative savings can almost triple from this level.

Question 5: Why there is no clear strategy to prevent upweighting of the fleet?

- Target improvement can get lax if the average weight of the fleet increases. The regulation has not made provision for a periodic adjustment of the targets according to the changing mass in the market.

- The average weight of the car fleet is increasing and has increased by more than 5 per cent between 2006-07 and 2009-10. It has continued to increase slowing down the fuel economy improvement. It is this trend that the regulations will have to address.

- Europe has mandated correction for weight increase. The regulation of the Europe on the current CO2 standards had made this provision. The Article 13 (2) of the Regulation (EC) No 443/2009 of the European Parliament and the Council April 23 states that "…. **every three years thereafter, measures shall be adopted to amend Annexe 1 to adjust the figure …. To the average mass of new passenger cars in the previous three calendar years**."

We demand

- **The regulation must mandate correction of the limit values every three years based on the market trends in the average weight of the car fleet.**

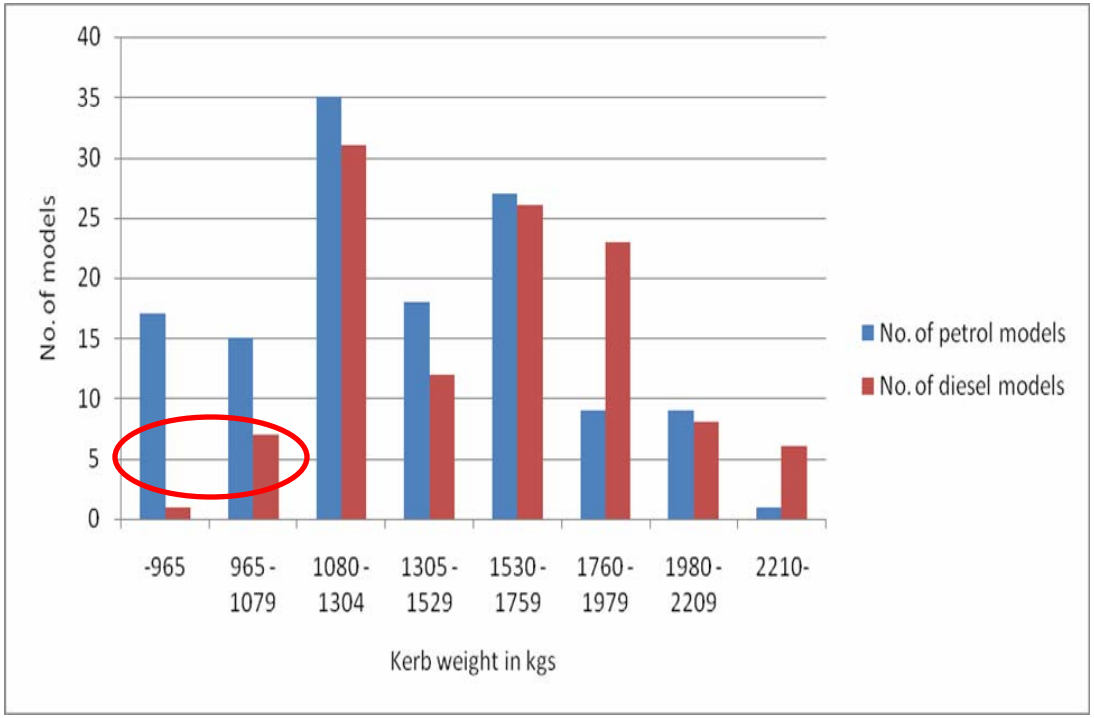
Increased mass and the special problem of diesel cars

In the weight category of 900-1070 kg which corresponds to the average mass of the current fleet (1037 kg) there are fewer diesel car models.

Most of the diesel models are in the heavier weight classes. Increased in diesel cars will push demand to heavier classes – beyond 1079 kg.

While 85 percent of the petrol cars sold in India have less than 1200 cc engines, 64 percent of diesel cars are around 1500 cc, the rest is above.
This defeats the objective of improving India's energy security.

Dieselisation will increase average mass and lead to more oil guzzling



Question 6: Why fuel quality has been made conditional to tightening of fuel economy standards?

- **Proposal mentions - tighter fuel economy standard is possible in 2020 only if Euro V compliant fuel quality is available nationwide**: It has not given any scientific basis or any global review to justify this.

  – Even today as SIAM's own database indicates some of the highest selling car models in the Indian market including Alto, i10, i20, Verna, Spark etc have fuel economy levels better than both the two standards proposed for 2020. These are operating with the current level of fuel quality.

  – Even super efficient electric hybrid can run on currently available fuel in India. The bogey of fuel quality should not be used to derail the standards.

  – Euro V fuel is certainly needed to cut toxic and life threatening emissions but it is not conditional to improving fuel efficiency.

We demand

- **The provision of two targets with and without Euro V fuel quality should be deleted from the proposal. Only one stringent standard should be set for 2020.**

Question 7: How can corporate average fuel consumption standards be enforced without independent and official data in the public domain?

Need independent officially verified data in the public domain

- Compliance with the "corporate average fuel economy consumption standards" depends not only on testing fuel economy of each car model but also on the weight and number of each car unit sold in a year.
- Only with this set of data the corporate average can be calculated to know if the industry and the individual car companies are complying with the standards every year.
- This requires very credible and independent data reporting system to cross check the self reported data of the industry.
- But India does not have official system to collate and verify the actual sales of car models in India.
- The proposal has only asked for self reporting by the car industry.
- It has not stated the stringency of penalty
- It has not demanded independent verification testing of cars by BEE.

- Even in Europe member states have to report annual registration data for new cars to the European commission. Manufacturers are asked to come and check that.

Our demand on Implementation

- A specific section be introduced on monitoring and reporting of the data.
- This should specify the format for the manufacturers to report the data.
- Specify the executive system for independent recording of information on vehicle registration and the requisite parameters in all states
- Central government should create a central registry on the requisite data. This should be publicly available. The central registry of data in Europe is in public domain.
- Detailed rules for reporting and scrutiny should be specified.
- Include independent after market testing by BEE. The BEE is already empowered to carry out *suo moto* tests for all other labeling programme to verify compliance. Any deviation for the cars will compromise the integrity of this provision.
- The penalty should be defined in the regulatory document. This should have adequate stringency to act as an effective deterrent.

Question 8: Fuel economy labelling

We welcome BEE's proposal to introduce both fuel economy labelling targeting the consumers and the corporate fuel consumption standards together

We do not agree -- "there is no lower-end to the one star range" (p4). The proposal justifies this on the ground that "…some car models with high fuel consumption will continue to be in demand to meet specific needs…" and the purpose is not to ban any car.
But this is a deviation from BEE's own practice of labeling of other products.

Without minimum standards for one star a sizeable section of luxury brands will remain unaffected. Even though their overall market share is small, the principle of this technical derogation for luxury brands is not acceptable.

We demand
•Fuel economy labeling programme should also have a minimum standard for the lowest star one class.
•Labelling should be revised every three years to reflect the improvement in the market.

Don’t lose the global race

India, by an act of policy, is aiming to finish the worst in the world despite starting from one of the best baselines in 2010. With the proposed targets, India will finish behind all of them in 2020

This will make a mockery of the National Climate Action Plan of the Prime Minister’s Council.

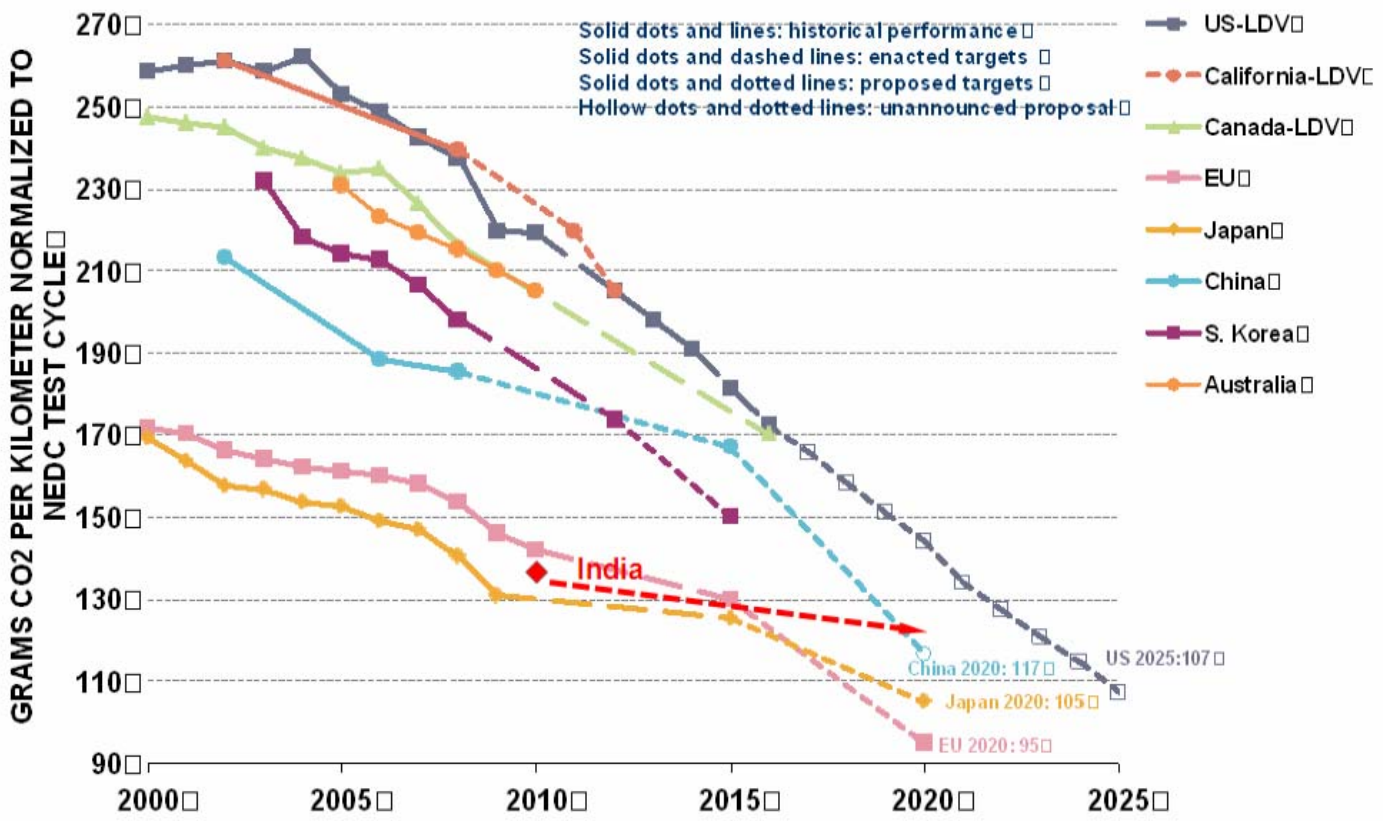
Public policy must now allow slow improvement in fuel savings and CO emissions from the luxury consumption of cars.

Table: Comparison of the CO2/fuel economy improvement target for passenger cars of key vehicle producing regions

Country	Fleet average CO2 emissions (g/km) In 2010 (approx)	Fleet average CO2 emissions (g/km) target proposed for 2020
European Union	145	95
United States	187	121
China	179	117
Japan	130	105
India	140	121-126

Source: Based on the estimates of the International Council of Clean Transportation that has compared the fuel economy/CO2 regulatory targets for the countries US, European Union, Japan and China based on NEDC cycle.

Comparison of passenger vehicle fuel economy standards



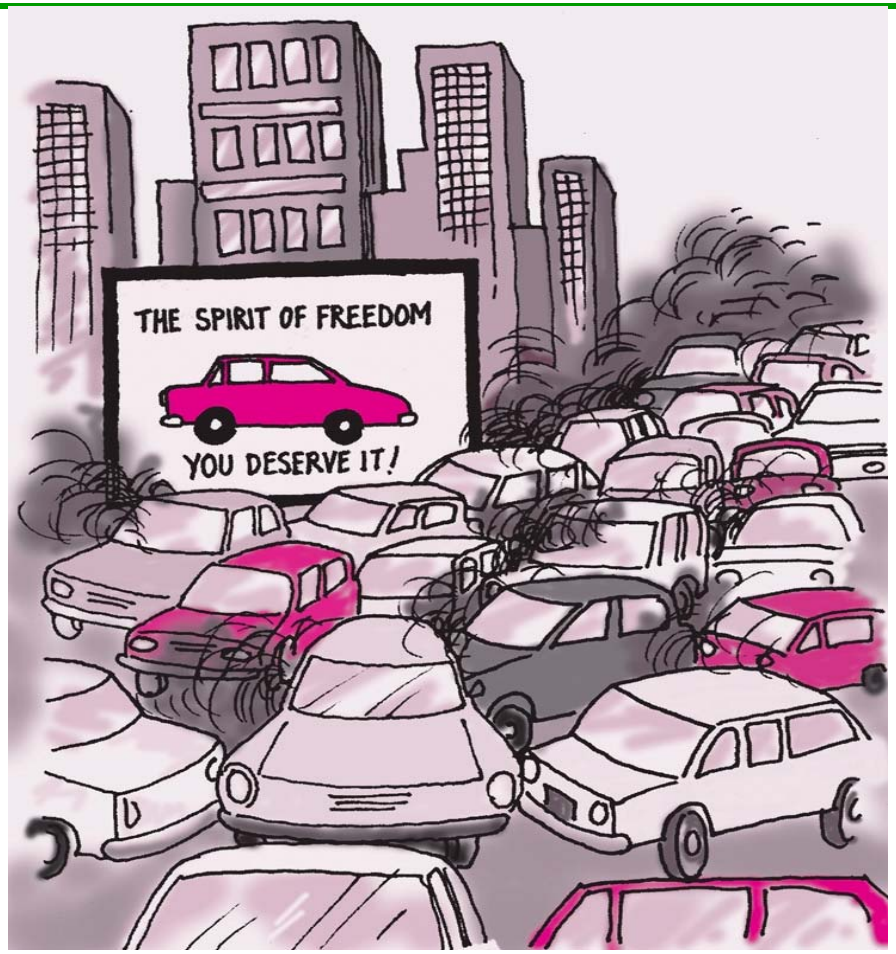
Source: International Council on Clean Transportation

Follow a robust process for robust standards

We welcome this public consultation and multi-stakeholder participation

The standards have been decided based only on deliberations with the automobile industry which is the target of these standards. This is a serious conflict of interest. All emissions regulations for vehicles so far -- including the Auto Fuel Policy Roadmap -- have been decided by well represented bodies and committees and broad-based consultation processes with a range of stakeholders.

Finalise the standards based on multi stakeholder consultation. Take on board and include the key suggestions to make the standards robust and effective



Thank You